312 Maple Street Site
BROOME COUNTY, NEW YORK

Final Engineering Report

NYSDEC Site Number: B00168

Prepared for:

Broome County Department of Planning and Economic Development
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CERTIFICATIONS

I, Daniel J. Troy, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Design was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, Daniel John Troy, of GZA GeoEnvironmental of New York, 535 Washington Street, 11th Floor, Buffalo, New York, am certifying as Owner's Designated Site Representative for the site.

#081139 — NYS Professional Engineer #

01/21/2016 — Date

Signature



TABLE OF CONTENTS

CERTIFICATIONS II
TABLE OF CONTENTS IV
LIST OF ACRONYMS V
FINAL ENGINEERING REPORT 1
1.0 BACKGROUND AND SITE DESCRIPTION 1
2.0 SUMMARY OF SITE REMEDY 1
2.1 REMEDIAL ACTION OBJECTIVES 1
2.1.1 Groundwater RAOs 1
2.1.2 Soil RAOs 2
2.1.3 Soil Vapor RAOs 2
2.2 DESCRIPTION OF SELECTED REMEDY 2
3.0 INTERIM REMEDIAL MEASURES 4
3.1 INTERIM REMEDIAL MEASURES (IRM) 4
3.1.1 On-Site IRM 4
3.1.1.1 Exterior TCE Contaminated Soil Removal 4
3.1.1.2 Drywells No. 1 And No. 2 Closure 6
3.1.1.3 Waste Soil Transportation and Disposal 7
3.1.2 Off-Site IRM 7
3.1.2.1 Waste Characterization 8
3.1.2.2 Disposal Coordination 8
3.1.2.3 Off-Site Soil Delineation and Characterization 9
3.1.2.4 Off-Site IRM Excavation 9
3.1.2.5. Confirmatory Soil Samples 10
3.1.3 Soil Vapor, Indoor Air and Ambient Air Sampling 11
3.1.3.1 Sub Slab Depressurization System Installation 11
4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED 14
4.1 GOVERNING DOCUMENTS 14
4.1.1 Site Specific Health & Safety Plan (HASP) 14
4.1.2 Quality Assurance Project Plan (Qapp) 14
4.2 REMEDIAL PROGRAM ELEMENTS 14
4.2.1 Contractors And Consultants 14
4.2.2 Site Preparation 15
4.2.3 General Site Controls 15
4.2.4 Reporting 15
4.3 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING 16
4.4 CONTAMINATION REMAINING AT THE SITE 18
4.5 OTHER ENGINEERING CONTROLS 19
4.5.1 Sub Slab Depressurization System 19
4.6 INSTITUTIONAL CONTROLS 20

LIST OF ACRONYMS

CAMP	Community Air Monitoring Plan
CFR	Code of Federal Regulation
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
EC	Engineering Control
ECL	Environmental Conservation Law
EPA	United States Environmental Protection Agency
ERP	Environmental Restoration Program
GZA	GZA GeoEnvironmental of New York
HASP	Health and Safety Plan
IC	Institutional Control
IRM	Interim Remedial Measure
NSR	Norfolk Southern Railway
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OVM	Organic Vapor Meter
PCB	Polychlorinated Biphenyl
PPB	Parts Per Billion
PPM	Parts Per Million
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RI/RAR	Remedial Investigation/Remedial Alternatives Report
ROD	Record of Decision
RP	Remedial Party
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Soil Management Plan
SSD	Sub-slab Depressurization
SVI	Soil Vapor Intrusion
SVOC	Semi Volatile Organic Compound
TAL	Target Analyte List
TCE	Trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

The County of Broome entered into a State Assistance Contract (SAC) with the New York State Department of Environmental Conservation (NYSDEC) in June 6, 2005 to investigate and remediate an approximate 0.93-acre property located in the Village of Endicott, Broome County New York (see Figure 1 – Site Location Plan). The property was remediated to restricted residential use.

The site is located in Endicott, Broome County, New York and is identified as tax map ID Numbers 156.12-4-11 and 156.12-4-12 on the Village of Endicott Tax Map. The site is an approximate 0.93-acre area and is bounded by Maple Street to the north, railroad tracks belonging to Norfolk Southern Railroad (NSR) to the south, North Duane Avenue to the east, and Evans Mechanical Inc. to the west (see Figure 2 – Site Plan). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

- Prevent people from drinking groundwater with contaminate levels exceeding drinking water standards.
- Prevent contact with contaminated groundwater.
- Prevent inhalation of contaminates from groundwater.

RAOs for Environmental Protection

- *Restore the groundwater aquifer to meet ambient groundwater quality criteria, to the extent feasible.*

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of contaminants volatilizing from the soil.

RAOs for Environmental Protection

- *Prevent migration of contaminants that would result in groundwater or surface water contamination.*

2.1.3 Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing from exposure, or the potential for, soil vapor intrusion into the indoor air of buildings at or near the Site.

2.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in the ROD dated January day 2011.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. TCE and metals contaminated Site Soil was remediated in accordance with the NYSDEC-approved work plans prepared by GZA including an on-Site IRM Work Plan Revisions letter (dated March 31, 2006), Revised Supplemental Off-Site IRM Work Plan letter (dated September 23, 2010) and Remedial Action Work Plan letter (dated April 10, 2012). The following are the components of the selected remedy:

1. Completion of in-situ groundwater remediation using enhanced anaerobic bioremediation application via injection points at select locations of the Site.

2. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site in 2015.

3. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting in 2015;

4. Periodic certification of the institutional and engineering controls listed above.

On-Site and off-Site IRM activities were competed at the Site on May 2006 and October 2011, respectively, on-Site and off-Site SSD systems were installed in March 2009. Groundwater remedial activities (via in-situ chemical injections) were completed at the site in May 2012 with subsequent annual groundwater monitoring and sampling completed in April 2013 through April 2015.

3.0 INTERIM REMEDIAL MEASURES

3.1 INTERIM REMEDIAL MEASURES (IRM)

3.1.1 On-Site IRM

Based on previously completed site investigations, approximately 250 cubic yards (or approximately 400 tons) of TCE contaminated soil was estimated to be located in the area of monitoring well MW-1 (assumed "source area"). Additionally, a portion of the assumed "source area" contamination was located within the adjacent NSR property located south of the Site (off-Site). The on-Site IRM work plan used to excavate and dispose TCE impacted soil from on-Site location was dictated by the practical restraints of working adjacent to the active NSR property. The following activities were completed as part of the on-Site IRM between May 15 and May 18, 2006.

3.1.1.1 Exterior TCE Contaminated Soil Removal

Excavation efforts of the on-Site IRM were completed in the general area proximate to MW-1 (located east of Building #2) and along the northern side of the NSR property boundary line. However, at the time of the IRM work, excavation on the railroad property was not permitted by NSR due to access constraints.

Soil excavation of the TCE "source area" was removed by Marcor Remediation Services of Rochester, New York (Marcor) using standard excavation methods (using a Komatsu WA250 PT front loader and a Komatsu PC160LC track excavator). Based on soil samples collected during our previous investigations, impacted soil was anticipated to be at relatively shallow depths (less than 4-feet deep).

The excavated "clean soil" was placed adjacent to the excavation and/or placed back in the excavation in a controlled manner (compacting with the excavator

bucket). The excavated TCE impacted soil was stockpiled and secured until disposal to a facility permitted to accept the impacted soil was arranged. Community air monitoring was conducted during these IRM activities which included visual observations for dust and down gradient monitoring with the OVM. The excavated sandy soils were generally observed to be moist and therefore no dust was generated. Additionally, downwind OVM screening did not identify migrating VOC vapors from the excavation activities.

The approximate limits of the on-Site IRM excavation is shown on Figure 3 – On-Site and Off-Site IRM Locations. The limits of the excavation generally ranged from about 30 feet to 40 feet long, about 6 feet to 10 feet wide and about 9 feet below ground surface (bgs). The bottom of the excavation typically extended into a gravel and cobble soil layer. Groundwater was not encountered at the bottom of the excavation. The extents of the excavation were generally limited on the south, west and north due to proximity of the adjacent property and the existing Building 2 foundation.

The limits of the IRM excavation were determined based on visual observations, organic vapor meter (OVM) screening results, and adjacent NSR property boundary limitations. One confirmatory sample was collected from each excavation sidewall and one excavation bottom sample. Confirmatory samples were analyzed for Target Compound List (TCL) VOCs via EPA Method 8260. No compounds were identified as exceeding their respective soil cleanup objectives (SCOs) for unrestricted use as defined in 6 NCYRR Part 375-6 Remedial Programs Soil Cleanup Objectives (Part 375 SCOs).

Clean soil excavated from the Site and imported backfill material was placed and compacted in the excavation up to the ground surface. Repairs to Site pavements were made by Broome County and/or the current Site occupant in 2007.

3.1.1.2 Drywells No. 1 And No. 2 Closure

As part of the on-Site IRM activities, drywell # 1 and #2, located inside Building 2 were opened to access the interior chambers which were apparently constructed from steel 55-gallon drums with several holes punctured into the sidewalls and bottoms to allow accumulated drainage water to flow into the subsurface soils. Marcor removed the sediment in the bottom of each drywell and then broke through and removed the bottom steel portion of each drywell. Approximately 6-inches of soil below each drywell was removed by hand methods (i.e., post-hole digger). VOC screening results, visual and olfactory observations and engineering judgment were employed to determine the extent of soil excavation (about 6-inches below the structure bottom) from each drywell. At the completion of soil removal, confirmatory soil samples were collected from the bottom of each drywell. Samples were tested for TCL VOCs via EPA Method 8260, TCL SVOCs via EPA Method 8270, Target Analyte List (TAL) metals and polychlorinated biphenyl's (PCBs) via EPA Method 8082. The drywells were then closed by backfilling each with concrete up to existing floor grade. In addition to the confirmatory sampling, one soil probe was completed as close as allowable to the outside of each dry well structure for similar laboratory testing.

The volume of soil excavated from the two drywells was small (less than ½-cubic yard), and was placed with the exterior IRM stockpiled soil for off-Site disposal.

Confirmatory samples tested from the bottom of the two drywells had no concentrations exceeding their respective unrestricted use SCOs with exception of cadmium and copper at concentrations of 7.7 and 321 ppm respectively in Drywell #1. Due to the depth below the concrete slab floor and due to dry well closure and filling with concrete, potential exposure to these metals was considered minimal.

3.1.1.3 Waste Soil Transportation and Disposal

The impacted soil excavated as part of the on-Site IRM was sampled and tested for waste characterization analysis required by the Broome County Municipal Landfill where the excavated soil (about 130 tons of TCE impacted soil) was taken for disposal. GZA collected one composite sample from the stockpiled soil (identified as Stockpile-3) and tested for toxicity characteristic leaching procedure (TCLP) VOCs, SVOCs, metals and PCBs. Additionally, the composite sample was tested for pesticides, herbicides, ignitability, reactivity and corrosivity. At the request of the Broome County Landfill, two grab samples were also collected from the stockpiled soil and tested for TCLP VOCs and SVOCs. The results of the waste characteristic analysis identified the excavated soil and non-hazardous soil allowing for disposal at the county landfill.

The stockpiled soil was loaded into seven dump trucks by Marcor on July 27, 2006 for transportation to the Broome County Landfill by Gary Dyer Inc. Excavating and Tank Service of Endicott, NY (a subcontractor to Marcor Environmental). Waste tickets for the 130 tons of disposed soil are included in Appendix D of the RI/RAR.

3.1.2 Off-Site IRM

The off-Site TCE-impacted soils were unable to be excavated during the May 2006 on-Site IRM activities due to access limitations onto the adjacent NSR property, primarily due to the close proximity of the northern most active railroad track. However, in November 2010, GZA was notified that the northern most railroad track was removed by NSR which increased the distance between the proposed excavation area and the centerline of the active railroad track. This increased distance made it possible to

excavate the remaining off-Site TCE impacted soil for off-site disposal. The following activities were completed as part of the off-Site IRM between April and October, 2011.

3.1.2.1 Waste Characterization

GZA visited the Site on April 29, 2011 to collect two representative soil samples of the planned excavation area for waste characterization as required by the BCDSW. Samples included a composite sample from three locations and one grab sample. The composite sample was analyzed for TCLP SVOCs, TCLP metals and total PCBs and the grab sample was tested for TCLP VOCs. The results for these samples identified TCE as hazardous with a concentration of 510 ppb which exceeded the TCLP regulatory limit of 500 ppb. No other compounds or metals were identified exceeding their respective TCLP regulatory values.

3.1.2.2 Disposal Coordination

The Environmental Quality Company of Belleville, Michigan was identified as the facility that could accept the TCE impacted soil. Since the soil would be disposed of as a hazardous waste, an EPA hazardous waste generator number NYD986866101 was assigned to the facility with Broome County listed as the Site owner and generator. Based on historical knowledge of the Site, the waste was considered a characteristic hazardous waste with the waste code D040 (for TCE).

The disposal facility required a single soil sample to be collected and tested for total compound list (TCL) VOCs via EPA method 8260 to evaluate the concentration of TCE relative to its land ban value of 60 parts per million (ppm) as soils with TCE greater than 60 ppm would require pretreatment prior to land disposal. A soil sample was collected from the off-Site location on August 25, 2011 with analytical results indicating a TCE concentration of 280 ppm and therefore pretreatment of the soils was required prior to disposal.

3.1.2.3 Off-Site Soil Delineation and Characterization

GZA revisited the Site on May 12, 2011 to collect additional soil samples adjacent to the April 29, 2011 to further delineate the extent of potential hazardous TCE impacted soils around the previous sample location and were screened using an OVM to evaluate the presence of total organic vapors and were selected and submitted for TCLP VOC analysis. The analytical results for these three samples identified TCE at concentrations ranging from 340 ppb to 730 ppb.

The analytical results indicated that hazardous concentrations of TCE in the soil were more extensive than initially estimated. Based on the findings of the additional soil samples, it was recommended that the entire volume of soil be excavated and treated as a hazardous waste for TCE. As such, GZAs excavation subcontractor contacted various waste disposal facilities to determine disposal facility and specific requirements.

3.1.2.4 Off-Site IRM Excavation

Excavation of the off-Site "source area" was done on October 25, 2011 by Nature's Way Environmental of Elma, New York using standard excavation methods. The extents of the excavation were based on soil sample delineation sampling done in 2008 and waste characterization sampling done in 2011 which indicated TCE impacted soil was generally at depths to about 4 feet bgs. Excavated soil was screened for total VOCs with an OVM. The top 8-12 inches of "clean soil" was removed and placed adjacent to the excavation for eventual reuse as clean backfill soil.

The TCE-impacted soil was excavated and directly loaded into two approximate 25-ton dump trucks for delivery to the disposal facility. Both trucks were observed fitted with plastic bed liners for transportation of the excavated soil. Waste tickets and manifest forms for the 48.95 tons of disposed soil are included in Attachment A of the off-Site IRM letter report dated November 30, 2011.

The limits of the excavation generally ranged from about 19 feet to 23.5 feet long, about 13 feet to 15 feet wide and about 4.5 to 5.5 feet bgs. The bottom of the excavation typically extended through railroad-associated fill soils into an apparent native silt and clay soil layer. Groundwater was not encountered during the excavation. The approximate limits of the Site IRM excavation are shown on Figure 3.

Community air monitoring was conducted by GZA during the excavation which included visual observations for dust and down-wind monitoring for total organic vapors with an OVM. The excavated sandy soils were generally observed to be moist with no visible generation of dust. Additionally, downwind OVM screening did not identify migrating VOC vapors from the excavation activities.

3.1.2.5. Confirmatory Soil Samples

The limits of the off-Site IRM excavation based on visual observations, OVM screening results and the adjacent 312 Maple Street property boundary. GZA collected confirmatory soil samples prior to backfilling to assess the concentrations of TCE remaining in the bottom and sidewalls of the excavation. One confirmatory soil sample was collected from each excavation sidewall and one excavation bottom sample. Confirmatory samples were analyzed for TCL VOCs via EPA Method 8260 although none of the detected compounds were identified exceeding their respective unrestricted soil cleanup objectives (USCOs). The open excavation was backfilled and compacted with clean imported soil.

3.1.3 Soil Vapor, Indoor Air and Ambient Air Sampling

Soil vapor migration sampling was done within the three on-Site buildings and 21 off-Site structures (residential and commercial) to assess for potential exposure to VOC vapors based on soil vapor and groundwater contamination identified from a completed Endicott Area Wide Study investigation by the NYSDEC near the 312 Maple Street Site. Indoor air and subslab vapor samples were collected from various structures and were analyzed for VOCS (specifically chlorinated solvent compounds) via EPA method TO-15 and were done in general accordance with the October 2006 NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion".

The air samples collected were analyzed by GZAs subcontractor, Centek Laboratory, LLC (Centek) of Syracuse, New York.

The three on-Site buildings and three off-Site buildings were identified as requiring remediation in accordance with the Soil Vapor/Indoor Air Matrix 1 Table presented in the October 2006 NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion". Specifically, the identified structures were identified with TCE indoor air concentrations and sub-slab vapor concentrations at values requiring mitigation to minimize the current or potential exposures associated with the soil vapor intrusion. It should be noted that the off-Site SSD systems are not included as part of the Site Management Plan but will be included as part of the New York State Inspection and Maintenance program. As a result, the remaining soil vapor discussions in this report will be limited to on-Site locations only.

3.1.3.1 Sub Slab Depressurization System Installation

Sub slab depressurization (SSD) systems were installed by Enviro Testing of Binghamton, New York at the three on-Site buildings. The installed SSD system generally included sealing of identifiable and accessible preferential pathways

(including floor joints, cracks and installation of Drainjer floor drains) and installation of suction points beneath the basement flooring. The suction points were typically constructed by removal of a small portion of concrete flooring and approximately 1 cubic foot of soils below the slab. A 4-inch diameter PVC pipe was installed into the suction point and the voids between the pipe and concrete floor were sealed with a caulk/grout material. The piping was fastened to accessible columns, wall areas and ceiling joists and connected to either a typical depressurization fan (i.e., Fantech HP22) or a high suction fan (i.e., RadonAway HS3000).

A high suction fan was utilized in locations where tighter, possibly wetter soils tended to reduce the radius of influence of the Fantech fans. The depressurization fans were either mounted with protective covers at exterior locations and the vent stacks extended to a point above the respective roof line. Vacuum readings were collected from locations below the subslab flooring typically at the far corners from each suction point to verify a sufficient radius of influence was met for each building. Vacuum readings were to be greater than -0.004 inches of water column.

The locations of the depressurization fans, associated piping and suction points installed for the on-Site buildings as well as verification vacuum readings showing extent of coverage underneath the respective subslab flooring are shown on Figure 4 – SSD System Locations.

Building 1- One depressurization fan was installed on the southwestern side of the building and was connected to one interior suction point located in the northeast corner of the adhesive/glue room (approximate central portion of the Building 1).

Building 2 – Two depressurization fans were installed on the southern exterior portion of the building. Each fan was connected to two separate suction points located in the interior portion of the building. The locations of the sumps were

generally along the perimeter walls of the building as interior columns were not available to accommodate PVC piping to the respective fans.

Building 3 – Due to good subslab soil air communication, only one fan and one associated sump was constructed for the Building 3 basement. Interior columns located in the basement allowed for the placement of the sump and associated piping in an approximate central location of the building to provide suitable vacuum coverage. However, no sump was able to be installed in the lower subbasement area due to the presence of water (either perched or top of water table) directly below the concrete slab.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Site Remedial Activities Work Plans (RAWP) for the 312 Maple Street Site dated April 2012. Any deviations from the Site RAWP are noted below.

4.1 GOVERNING DOCUMENTS

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was included as Attachment C of the Site RAWP approved by the NYSDEC and was complied with for all remedial and invasive work performed at the Site. Community air monitoring was addressed in the HASP.

4.1.2 Quality Assurance Project Plan (Qapp)

The QAPP was included as Attachment B of the Site RAWP approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors And Consultants

Firms contracted to perform site work included the following:

- GZA GeoEnvironmental of New York (GZA): Oversaw execution of the RA, observed decommissioning and installation of select monitoring wells, conducted all sampling, and performed community air monitoring. GZA performed the oversight from April 2012 until May 2015.

- Nature's Way Environmental Consultants & Contractors (NWE): Decommissioned the one monitoring wells and installed a new monitoring well to replace the decommissioned well in April 2012. Additionally, Nature's Way completed in-situ groundwater remediation using enhanced anaerobic bioremediation application via injection points at select locations of the Site. This work was done in May 2012.
- Spectrum Analytical Laboratory (Spectrum) of Kingstown, Rhode Island: Performed laboratory analysis between 2012 and 2015.
- Data Validation Services of North Creek, New York: Performed data validation between 2012 and 2015.
- Daniel J. Troy of GZA GeoEnvironmental of NY: Engineer of Record responsible for inspection of the work.

4.2.2 Site Preparation

The remedial actions completed at the Site generally did not require any specific Site preparation work as the remediation was limited to in-situ groundwater injections.

A pre-construction meeting was not required for the remedial activities. Site owner, occupant and NYSDEC were notified via telephone and or e-mail notifications of the planned activity start dates prior to mobilization to the Site.

4.2.3 General Site Controls

Remedial Activities did not warrant and site-specific controls.

4.2.4 Reporting

Weekly or monthly reports were not required for the Site. Task or project specific reports (including work plans, off-Site IRM results, pre and post groundwater injection monitoring, etc.) were submitted to NYSDEC electronically upon task or activity completion.

4.3 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

The chosen remedial option defined in the ROD included enhanced anaerobic bioremediation applications to remediate groundwater impacted with VOCs (specifically TCE and hexavalent chromium (Cr^{+6})). As part of the remedial remedy, nine (9) groundwater monitoring wells were sampled and analyzed for VOCs and Cr^{+6} to assess the effectiveness of the bioremediation efforts on the Site groundwater. The assessment included a pre-remedial round of sampling done in 2012 for baseline conditions and annual sampling afterwards for a period of three years; 2013, 2014 and 2015.

The enhanced anaerobic bioremediation application remediation work was completed in May 2012. This work included injections of the enhanced anaerobic bioremediation applications along the western property boundary and within the central portion of the Site. This remedial option was chosen to enhance the anaerobic breakdown of the "parent" chlorinated compounds present (specifically TCE) via reductive dehalogenation into the "daughter" breakdown products (cis-1,2-DCE) and vinyl chloride (VC), which further degrades under aerobic conditions. Additionally, this application was also designed to assist in the remediation of Cr^{+6} into the less hazardous chromium (trivalent chromium) analyte.

As part of the enhanced anerobic bioremediation application, groundwater samples from the nine monitoring wells were to be collected and tested for VOCs and Cr^{+6} annually for three years after injection work was completed. At completion of the third and final annual groundwater sampling event, TCE concentrations were identified with reducing concentrations during the three year post sampling period to values below its Class GA guidance value at 7 of the 9 well locations. The two wells with TCE concentrations remaining above the Class GA criteria (i.e., 5 ppb) after the third year of post injection sampling includes MW-5 (at 29 ppb) and MW-2 (at 52 ppb). MW-2 was also identified with an estimated concentration of cis-1,2DCE (TCE daughter compound) below its 5 ppb Class GA Groundwater Criteria implying the groundwater from this well had some exposure to the enhanced anaerobic bioremediation application. Additionally, cis-1,2 DCE concentration was identified at 15 ppb from MW-5 and 8.8 ppb from MW-1, both

of which at lesser concentrations identified during previous 2014 sampling (although exceeding its 5 ppb Class GA groundwater criteria) suggesting that the concentration reduction for the TCE daughter compound is on-going. Table 4-1 presents a summary of the samples collected and the test results for the pre and post injection sampling events.

A graphical representation of the TCE and cis-1,2-DCE concentration trends between the years 2012 (pre-remediation injection) and 2013 through 2015 (post-remediation injections) is included as Table 4-2. Completion of the remedial injections at the Site is anticipated to result in a decreased TCE and Cr^{+6} impact to Site groundwater which is verified by the general trends observed in a majority of the on-Site wells. The increase in cis-1,2-DCE concentrations between 2012 and 2013 followed by a general decrease in 2014 and 2015 in select well locations are indicative of the enhanced anaerobic bioremediation chemical injections breaking down the TCE into its respective daughter compound.

It should be noted that vinyl chloride was only detected once during the post injection sampling program (from MW-1 during 2013). That single detection was below its respective Class GA criteria and all remaining sample locations were non-detect for vinyl chloride. Additionally several other VOCs were occasionally detected within the groundwater sampling although typically at concentrations below their respective Class GA criteria (with the exception of toluene identified at 8.9 ppb in 2013).

Cr^{+6} has also been observed with concentrations reducing to non-detect over the 3 years of post-injection sampling in all but two of the wells sampled. Wells MW-5 (1,500 ppb in 2015) and MW-8 (60 ppb in 2015) were the only detections remaining as exceeding its Class GA Criteria of 50 ppb. Although there appears to be a rebounding within these two wells over the three year post injection period, the concentrations are below previously identified concentrations for the respective wells which may suggest that remediation for this analyte is on-going.

Data Usability Summary Reports (DUSRs) were prepared for all data generated in this remedial performance evaluation program. These DUSRs and associated raw data are included within the annual Post-Bioremediation Application Groundwater Monitoring reports that are provided electronically in Appendix C.

4.4 CONTAMINATION REMAINING AT THE SITE

Upon completion of the on-Site and off-Site soil excavation IRMs, SSD system installation, and the groundwater remedial effort via enhanced anaerobic bioremediation application and groundwater monitoring, five contaminants (i.e., TCE, Cr+6, copper, chromium and thallium) exceeding their respective SCGs are anticipated to remain at select/sporadic locations of the Site resulting in slight impact to soil, groundwater and/or soil vapor at the Site. Based on the minimal remaining contaminants, continued operation of the SSD system, a limited groundwater monitoring and sampling program, and imposition of land use and groundwater use restrictions will be implemented to protect public health and the environment.

Figure 3 shows remaining soil exceedances of unrestricted use SCOs (Part 375-6). The soil in these locations do however meet the Restricted Residential SCOs. The approximate locations of in-situ bioremediation application consisting of chemical injections using Plant Products Co. Ltd (Plant Products) injection material BioStryke® Electron Reduction Dechlorination (ERD Enhanced™) are shown on Figure 5 – In-Situ Groundwater Treatment Plan. Specific VOCs in groundwater that exceed their respective Class GA criteria before and after the Remedial Action (years 2012 through 2015) are shown on Figure 6 – Groundwater Flow Directions and Contaminant Concentrations. The groundwater concentrations identified after remedial activities area discussed in Section 4.3 above.

Since limited and sporadic locations of contaminated soil, groundwater and soil vapor remains beneath the site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.5 OTHER ENGINEERING CONTROLS

Since remaining contaminated soil groundwater and soil vapor exists beneath the site, Engineering Controls (EC) are required to protect human health and the environment. The site has the following primary Engineering Controls, as described in the following subsections.

4.5.1 Sub Slab Depressurization System

Sub slab depressurizations systems (SSDs) were installed by Enviro Testing of Binghamton, New York at the three on-Site buildings in 2009. The installed SSDS generally included sealing of identifiable and accessible preferential pathways (including floor joints, cracks and installation of Drainjer floor drains) and installation of suction points beneath the basement flooring. The suction points were typically constructed by removal of a small portion of concrete flooring and approximately 1 cubic foot of soils below the slab. A 4-inch diameter PVC pipe was installed into the suction point and the voids between the pipe and concrete floor were sealed with a caulk/grout material. The piping was fastened to accessible columns, wall areas and ceiling joists and connected to either a typical depressurization fan (i.e., Fantech HP22) or a high suction fan (i.e., RadonAway HS3000).

The high suction fans were utilized in locations where tighter, possibly wetter soils tended to reduce the radius of influence of the Fantech fans. The depressurization fans were either mounted with protective covers at exterior locations or within attic/crawlspace areas and the vent stacks extended to a point above the respective roof line. Vacuum readings were collected from locations below the sub-slab flooring typically at the far corners from each suction point to verify a sufficient radius of influence was met for each building. Vacuum readings were to be greater than -0.004 inches of water column.

The locations of the depressurization fans, associated piping and suction points installed for the on-Site buildings as well as verification vacuum readings showing extent of coverage underneath the respective sub-slab flooring are shown on Figure 4.

- *Building 1-* One depressurization fan was installed on the southwestern side of the building and was connected to one interior suction point located in the northeast corner of the adhesive/glue room (approximate central portion of the Building 1).

- *Building 2* – Two depressurization fans were installed on the southern exterior portion of the building. Each fan was connected to two separate suction points located in the interior portion of the building. The locations of the sumps were generally along the perimeter walls of the building as interior columns were not available to accommodate PVC piping to the respective fans.

- *Building 3* – Due to good sub-slab soil air communication, only one fan and one associated sump was constructed for the Building 3 basement. Interior columns located in the basement allowed for the placement of the sump and associated piping in an approximate central location of the building to provide suitable vacuum coverage. However, no sump was able to be installed in the lower subbasement area due to the presence of water (either perched or top of water table) directly below the concrete slab.

Procedures for monitoring, operating and maintaining the SSD system are provided in the Operation and Maintenance Plan in Section 5 of the Site Management Plan (SMP).

4.6 INSTITUTIONAL CONTROLS

The site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to restricted residential uses only.

The environmental easement for the site was executed by the Department on December 29, 2015, and filed with the Broome County Clerk on January 19, 2016. The County Recording Identifier number for this filing is #201600001369. A copy of the easement and proof of filing is provided in Appendix D.

LIST OF FIGURES

Figure 1- Site Location Plan

Figure 2- Site Plan

Figure 3- On-Site and Off-Site IRM Locations

Figure 4- SSD System Locations

Figure 5- In-Situ Groundwater Treatment Plan

Figure 6- Groundwater Flow Directions and Contaminant Concentrations

LIST OF APPENDICES

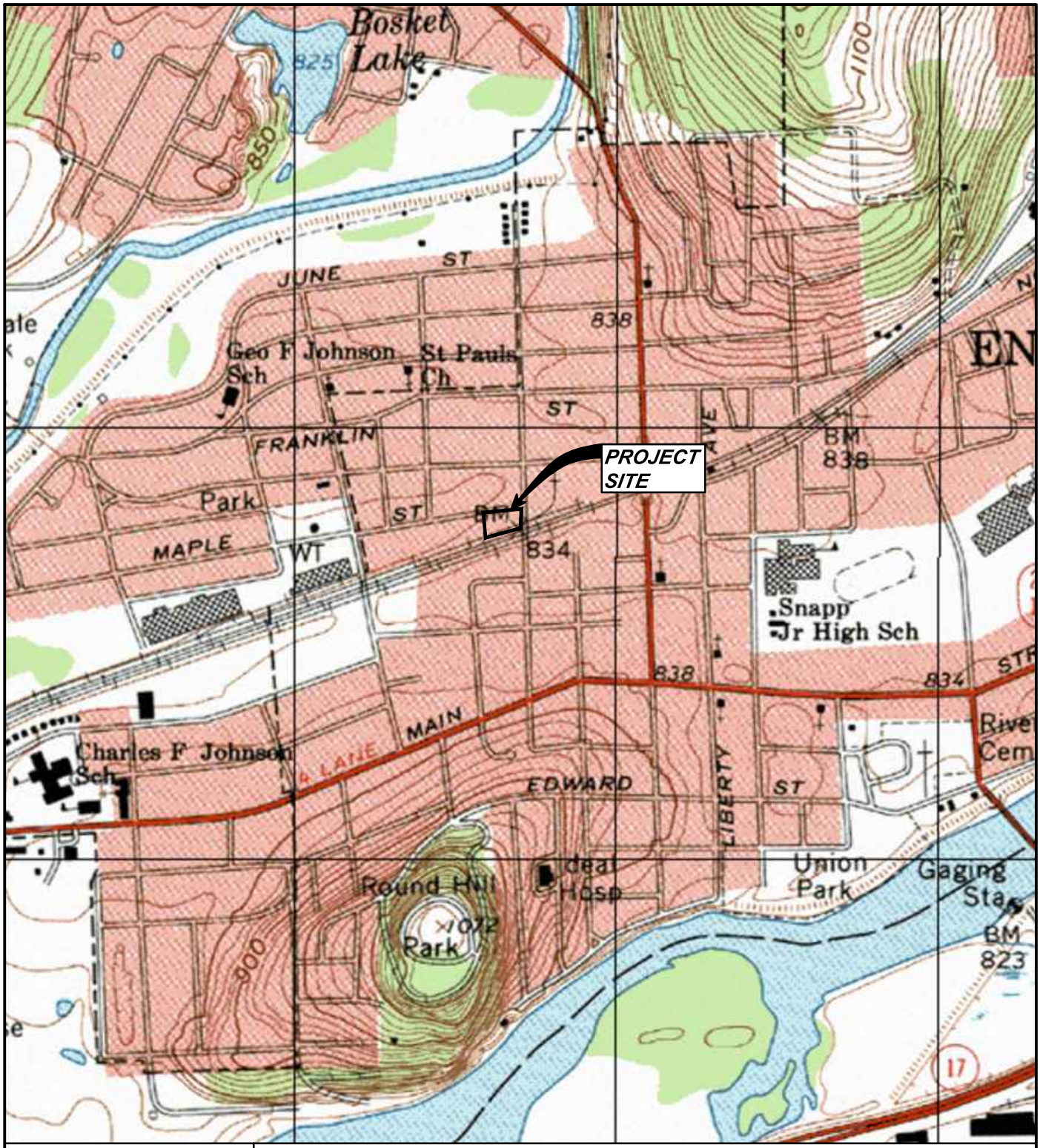
Appendix A- Survey Map, Metes and Bounds

Appendix B- Digital Copy of the FER (CD)

Appendix C- 2012 through 2015 Annual Post-Bioremediation Application Groundwater Monitoring Reports

Appendix D - Environmental Easement

FIGURES





QUADRANGLE LOCATION

SOURCE: USGS QUADRANGLE ENDICOTT, NEW YORK.
PHOTOREVISED 1976.

SCALE IN FEET

0 500 1000 2000

N
W E
S

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
FINAL ENGINEERING REPORT - ERP SITE No. B-00168-7

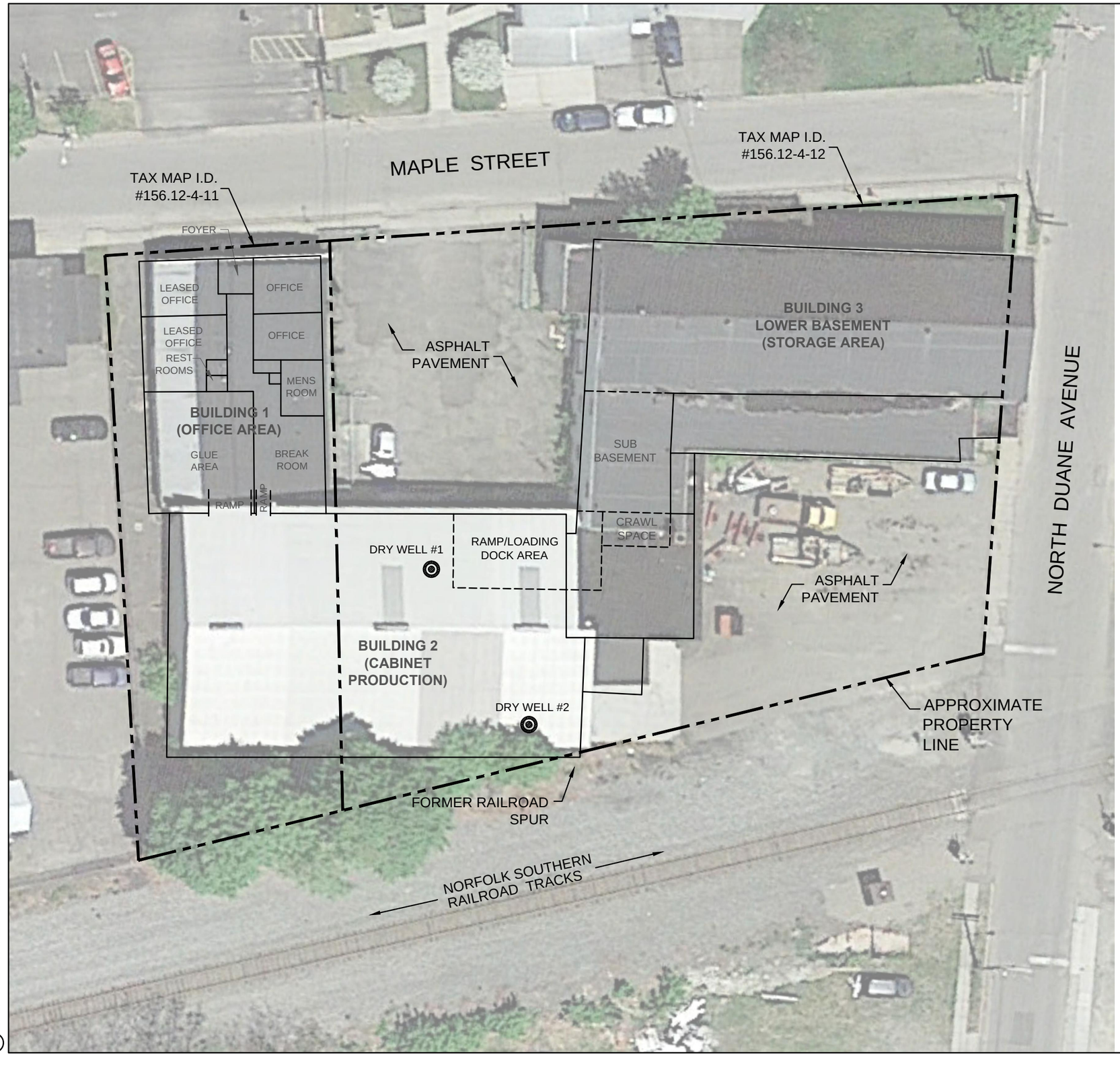
SITE LOCATION PLAN

GZA GeoEnvironmental of NY
Engineers and Scientists
www.gza.com

DRAWN BY: DL
PROJECT NO. 21.0056127.10
DATE: SEPT. 2015

FIGURE 1

© 2015 – GZA GeoEnvironmental, Inc. GZA–J:\56000's\21.0056127.10\Figures\CAD\FER-9-2015\56127.10.FIG1.dwg [FIG-1] September 21, 2015 – 11:15am edward.morris



NORTH

LEGEND:

DRY WELL #1 — APPROXIMATE LOCATION AND DESIGNATION OF EXISTING HISTORIC DRYWELLS.

NOTES:

1. BASE MAP DEVELOPED FROM A GOOGLE PROFESSIONAL ELECTRONIC IMAGE FILE. DIGITAL AERIAL ORTHOPHOTOGRAPHY WAS COLLECTED BY GOOGLE EARTH PRO ON MAY 13, 2015.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: **DL / GB**

DATE: **SEPTEMBER 2015**

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 15 30 60

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
FINAL ENGINEERING REPORT
ERP SITE No. B-00168-7

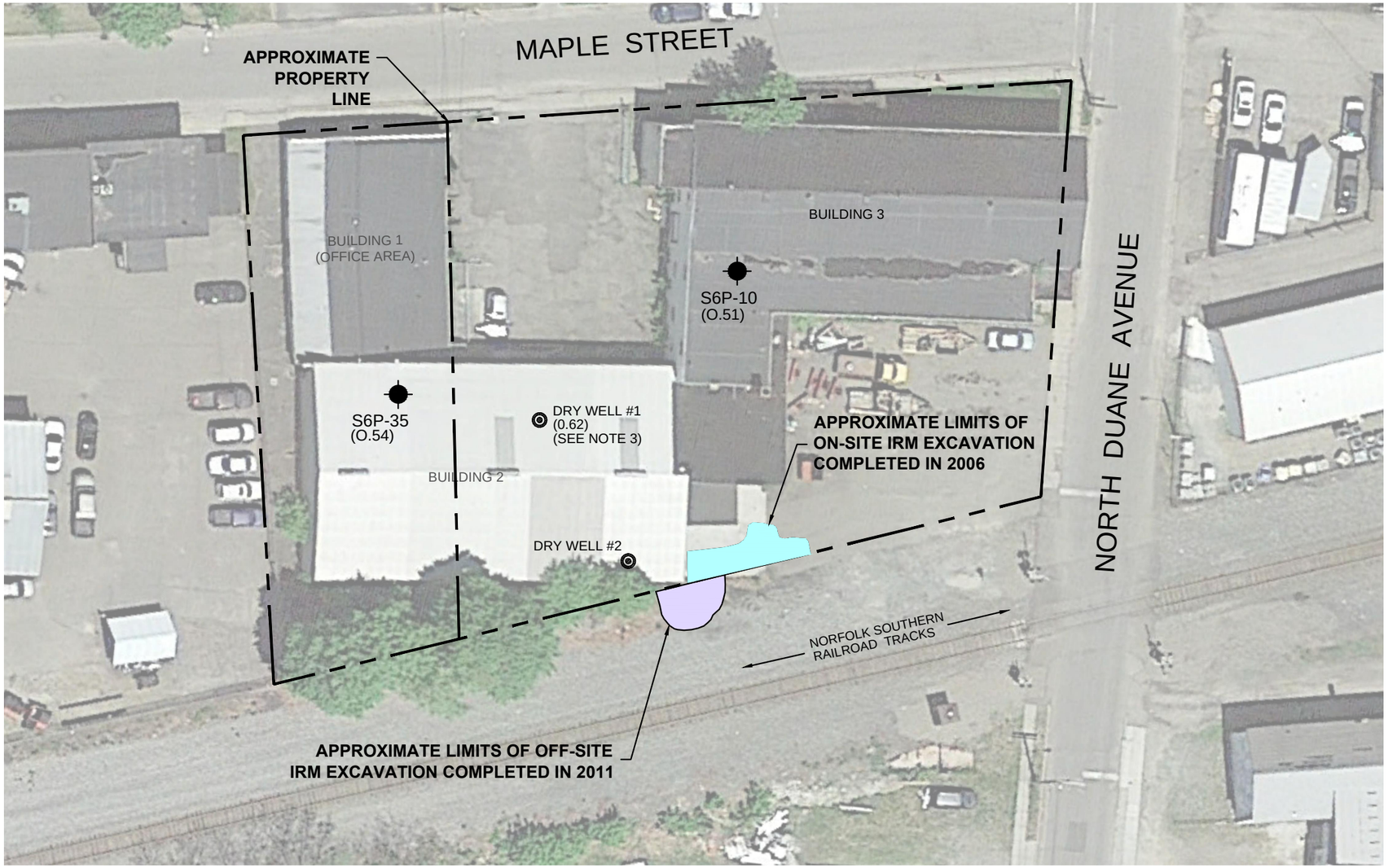
SITE PLAN

PROJECT No.
21.0056127.10

FIGURE No.
2

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G:\21\56000's\21.0056127.10\Figures\CAD\FER-9-2015\56127.10.FIG2.dwg [FIG-2] September 21, 2015 - 11:15am edward.morris



NORTH

SITE PLAN

0 20 40 80

APPROXIMATE SCALE IN FEET

LEGEND:

DRY WELL #1 — APPROXIMATE LOCATION AND DESIGNATION OF DRYWELL CLOSURE (WITH TCE CONCENTRATIONS IN PPM).

S6P-35 (O.54) — APPROXIMATE LOCATION AND DESIGNATION OF SOIL SAMPLE AT SOIL GAS SCREENING POINT (WITH TCE CONCENTRATIONS IN PPM).

NOTES:

1. BASE MAP DEVELOPED FROM A GOOGLE PROFESSIONAL ELECTRONIC IMAGE FILE. DIGITAL AERIAL ORTHOPHOTOGRAPHY WAS COLLECTED BY GOOGLE EARTH PRO ON MAY 13, 2015.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3. REMAINING COPPER AND CADMIUM EXCEEDANCE OF VSCO, LOCATED IN SAMPLE COLLECTED FROM BOTTOM OF DRY WELL #1.

DRAWN BY: DEW / GRB

DATE: SEPTEMBER 2015

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET: AS SHOWN

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
FINAL ENGINEERING REPORT
ERP SITE No. B-00168-7

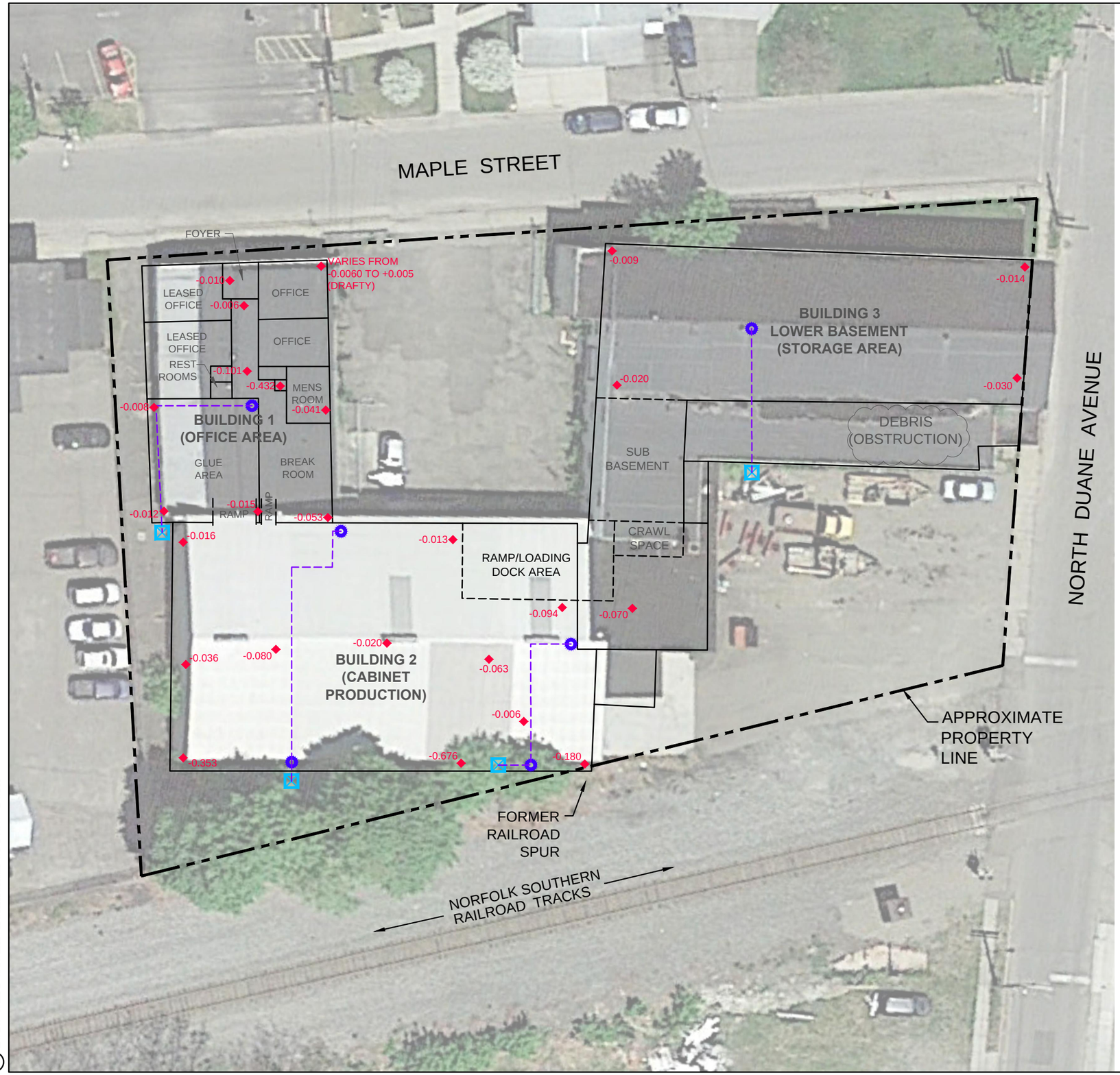
ON-SITE AND OFF-SITE IRM LOCATIONS

PROJECT No.
21.0056127.10

FIGURE No.
3

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GZA-J:\56000's\21.0056127.10\Figures\CAD\FER-9-2015\56127.10 FIG3.dwg [FIG-3] September 21, 2015 - 11:16am edward morris



NORTH

LEGEND:

- APPROXIMATE LOCATION OF EXTERIOR VENTILATION STACK INSTALLATION BY ENVIRO TESTING INC.
- APPROXIMATE LOCATION OF OVERHEAD PIPING INSTALLATION BY ENVIRO TESTING INC.
- APPROXIMATE LOCATION OF SUCTION FAN THROUGH SLAB BY ENVIRO TESTING INC. WITH MANOMETER.
- -0.030 APPROXIMATE LOCATION OF VACUUM MONITORING POINT (WITH ASSOCIATED VACUUM READING IN INCHES OF WATER COLUMN) THROUGH SLAB BY ENVIRO TESTING INC.

NOTES:

1. BASE MAP DEVELOPED FROM A GOOGLE PROFESSIONAL ELECTRONIC IMAGE FILE. DIGITAL AERIAL ORTHOPHOTOGRAPHY WAS COLLECTED BY GOOGLE EARTH PRO ON MAY 13, 2015.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

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DATE: **SEPTEMBER 2015**

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APPROXIMATE SCALE IN FEET

0 15 30 60

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
FINAL ENGINEERING REPORT
ERP SITE No. B-00168-7

SSD SYSTEM LOCATION

PROJECT No.
21.0056127.10

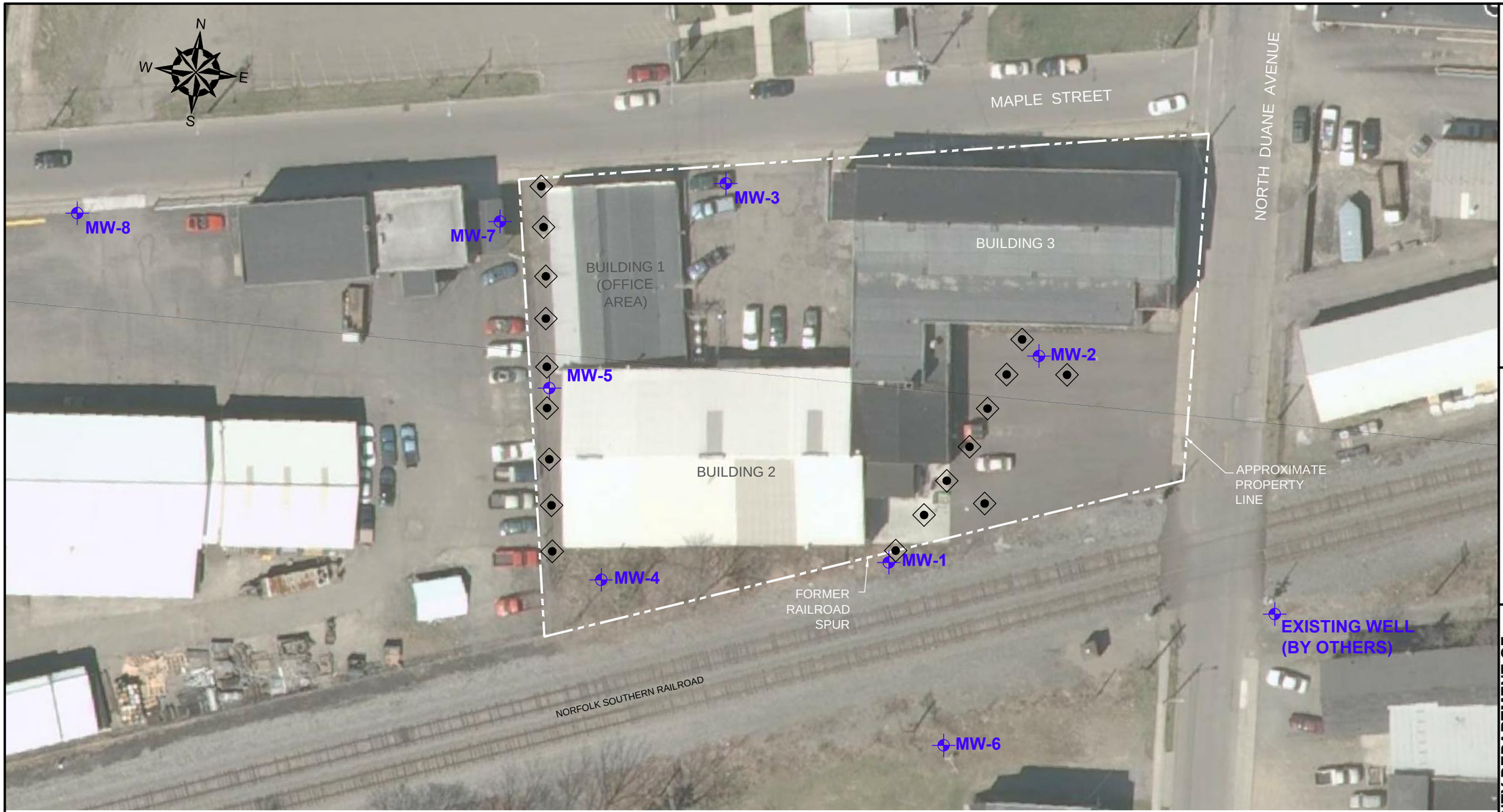
FIGURE No.
4

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GZA-J:\56000's\21.0056127.10\Figures\CAD\FER-9-2015\56127.10-FIG4.dwg [FIG-4] September 21, 2015 - 11:16am edward.morris

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GZA-K:\PROJECTS\56100\56127.1 Broome Co 312 Maple StreetSite Management Plan - Final Eng. Report\Figure 8 In-Situ GW Treatment.dwg [Figure 5 FER] September 29, 2015 - 12:31pm theodore.kletke



LEGEND:

MW-5 APPROXIMATE LOCATION AND DESIGNATION OF EXISTING MONITORING WELL.

APPROXIMATE LOCATION OF PROPOSED IN-SITU ENHANCED ANAEROBIC BIOREMEDIATION APPLICATION INJECTIONS CONSISTING OF BIOSTRYKE ERD ENHANCED (MANUFACTURED BY PLANT PRODUCTS Co.)

NOTES:

1. BASE MAP ADAPTED FROM A 2011 AERIAL PHOTO DOWNLOADED FROM http://www.nysgis.state.ny.us/gateway/mg/index.html AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: SEPTEMBER 2015

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 20 40 80

BROOME COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

312 MAPLE STREET

VILLAGE OF ENDICOTT, NEW YORK

FINAL ENGINEERING REPORT

ERP SITE No. B-00168-7

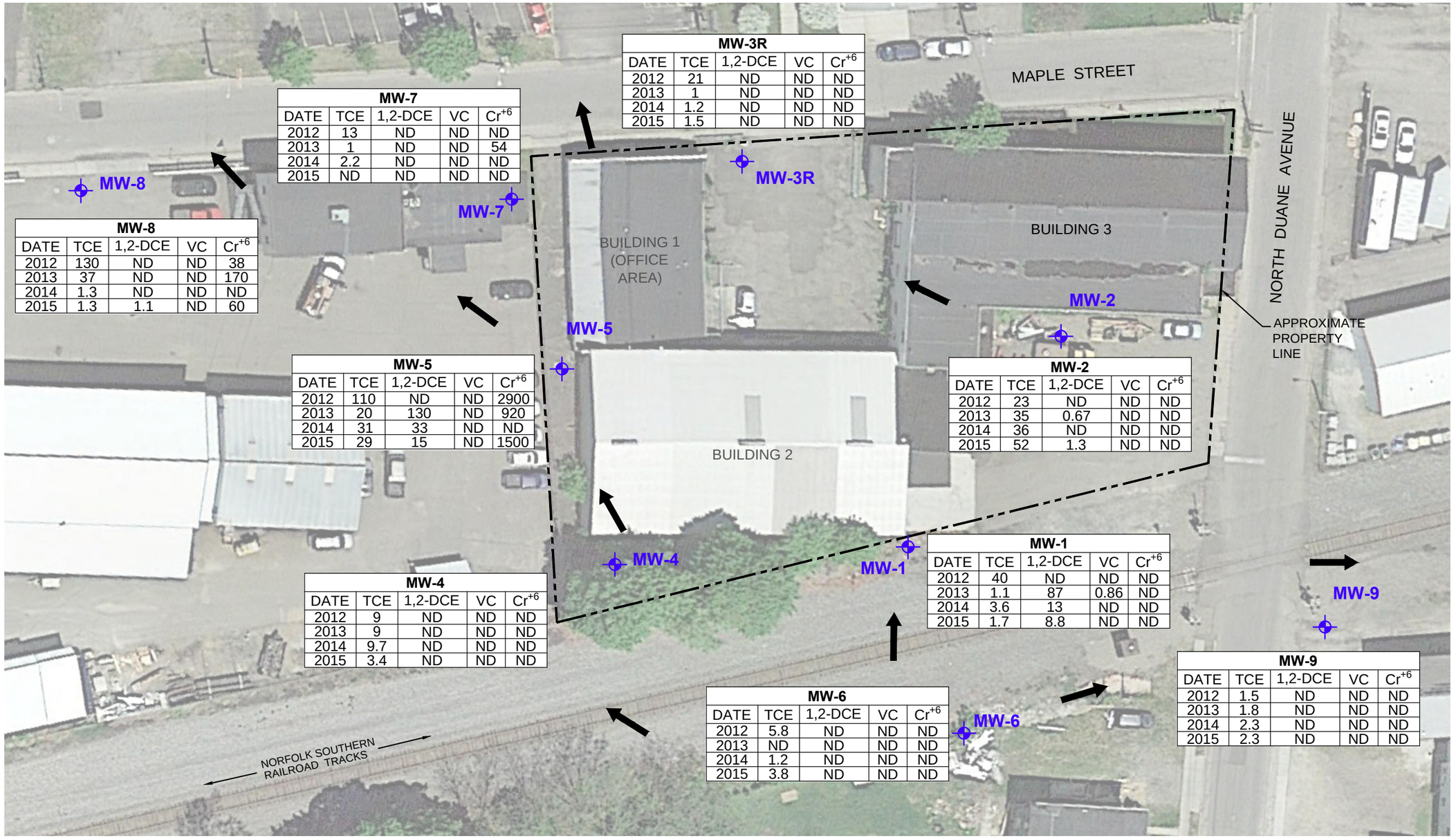
IN-SITU GROUNDWATER TREATMENT PLAN

PROJECT No.

21.0056127.10

FIGURE No.

5



MW-8

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	130	ND	ND	38
2013	37	ND	ND	170
2014	1.3	ND	ND	ND
2015	1.3	1.1	ND	60

MW-7

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	13	ND	ND	ND
2013	1	ND	ND	54
2014	2.2	ND	ND	ND
2015	ND	ND	ND	ND

MW-3R

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	21	ND	ND	ND
2013	1	ND	ND	ND
2014	1.2	ND	ND	ND
2015	1.5	ND	ND	ND

MW-5

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	110	ND	ND	2900
2013	20	130	ND	920
2014	31	33	ND	ND
2015	29	15	ND	1500

MW-2

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	23	ND	ND	ND
2013	35	0.67	ND	ND
2014	36	ND	ND	ND
2015	52	1.3	ND	ND

MW-4

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	9	ND	ND	ND
2013	9	ND	ND	ND
2014	9.7	ND	ND	ND
2015	3.4	ND	ND	ND

MW-1

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	40	ND	ND	ND
2013	1.1	87	0.86	ND
2014	3.6	13	ND	ND
2015	1.7	8.8	ND	ND

MW-6

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	5.8	ND	ND	ND
2013	ND	ND	ND	ND
2014	1.2	ND	ND	ND
2015	3.8	ND	ND	ND

MW-9

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	1.5	ND	ND	ND
2013	1.8	ND	ND	ND
2014	2.3	ND	ND	ND
2015	2.3	ND	ND	ND

LEGEND:

MW-1 — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELL.

PRESUMED GROUNDWATER FLOW DIRECTION

TCE = Trichloroethene
1,2-DCE = cis 1,2 - Dichloroethene
VC = Vinyl Chloride
Cr^{+6} = Hexavalent Chromium

NOTES:

1. BASE MAP DEVELOPED FROM A GOOGLE PROFESSIONAL ELECTRONIC IMAGE FILE. DIGITAL AERIAL ORTHOPHOTOGRAPHY WAS COLLECTED BY GOOGLE EARTH PRO ON MAY 13, 2015.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.
3. UNITS ARE LISTED IN MICROGRAMS PER LITER (µg/l) OR PARTS PER BILLION (ppb). ND INDICATES COMPOUND NOT DETECTED ABOVE METHOD DETECTION LIMIT.
4. TABLES SHOW SPECIFIC VOC AND Cr^{+6} CONCENTRATIONS FOR PRE-REMEDIAL (2012) AND POST-REMEDIAL ACTIVITIES (2013 TO 2015).

NORTH

DRAWN BY: DEW / GRB
DATE: SEPTEMBER 2015

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET
0 20 40 80

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
FINAL ENGINEERING REPORT
ERP SITE No. B-00168-7

GROUNDWATER FLOW DIRECTIONS AND CONTAMINANT CONCENTRATIONS

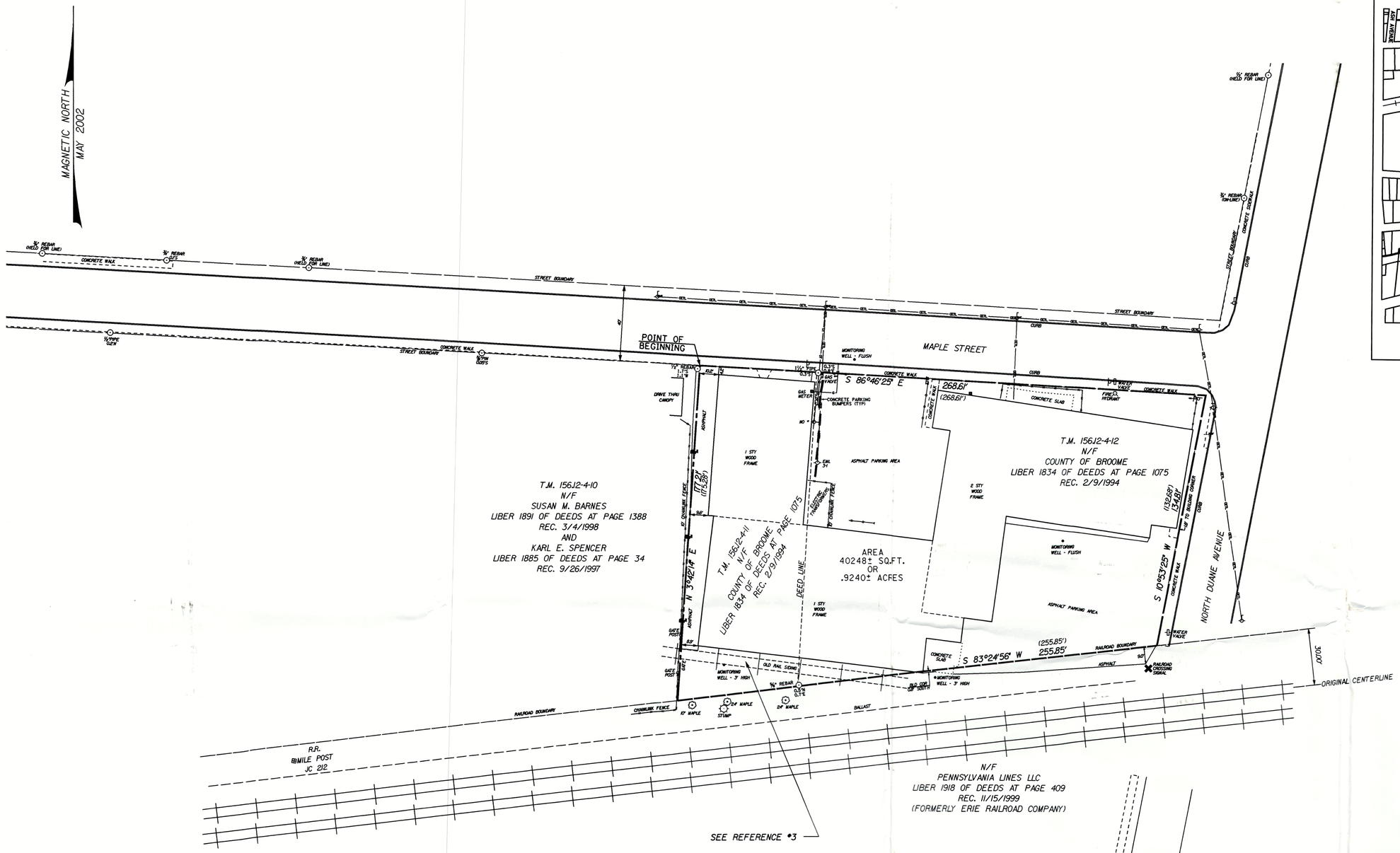
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21.0056127.10

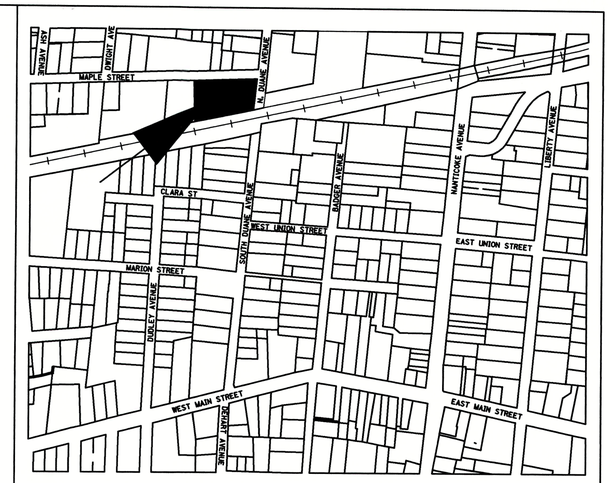
FIGURE No.
6

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G:\ZA-J:\56000\21.0056127.10\Figures\CAD\FER-9-20151\56127.10-FIG6.dwg [FIG-6] September 21, 2015 - 11:18am edward.morris

APPENDIX A

SURVEY MAP, METES AND BOUNDS





LOCATION MAP
(NOT TO SCALE)

LEGEND

	PROPERTY LINE
	STREET BOUNDARY
	RAILROAD BOUNDARY
	RAILROAD TRACKS (MAIN LINE)
	ABANDON RAILROAD SIDING (REFERENCE)
G G G G G	GAS LINE
OEOL OEOL OEOL OEOL	OVERHEAD ELECTRIC LINE
OT OT OT OT OT	OVERHEAD TELEPHONE LINE
	W-BEAM GUIDE RAIL
	FENCELINE (AS NOTED)
	CONCRETE SIDEWALK
	EDGE OF RR BERM
	DEED LINE
	HIDDEN BUILDING LINE
	CONCRETE SLAB
S 86°46'25" E 268.61'	MEASURED BEARING & DISTANCE (2002)
(268.61')	RECORD DISTANCE
T.M. 156J2-4-12	BROOME COUNTY TAX MAP NUMBER
N/F	NOW OR FORMERLY
LIBER 1891 OF DEEDS AT PAGE 1388	DEED BOOK AND PAGE OF RECORD
REC. 2/9/1994	RECORDING DATE OF RECORD DEED
0.3'S 0.4'E	PERPENDICULAR OFFSET OF FOUND MONUMENT
	POWER POLE W/LIGHT
	POWER/TELEPHONE POLE
	GAS METER
	GAS VALVE
	FIRE HYDRANT
	SINGLE SIGN
	DOUBLE SIGN
	PROPERTY IRON (AS NOTED)
	WATER VALVE
	MONITORING WELL

NOTE:

THIS SURVEY WAS CONDUCTED WITHOUT BENEFIT OF AN UPDATED ABSTRACT OF TITLE.

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."

ONLY BOUNDARY SURVEY MAPS BEARING THE SURVEYOR'S EMBOSSED SEAL ARE GENUINE, TRUE AND CORRECT COPIES OF THE SURVEYOR'S ORIGINAL WORK AND OPINION.

I HEREBY CERTIFY THAT THIS IS A MAP MADE FROM A SURVEY, PREPARED UNDER MY DIRECTION.

Paul A. Waters — DATED: JULY 22, 2005

PAUL A. WATERS, LAND SURVEYOR
P L S LICENSE NO. 049966
SHUMAKER CONSULTING ENGINEERING & LAND SURVEYING, P.C.

REFERENCES:

1) MAP REFERENCE:
RIGHT OF WAY AND TRACK MAP - ERIE RAILROAD COMPANY SUSQUEHANNA DIVISION - STATION 11722+60 TO STATION 11775+40; V-8-NY/22

2) DEED REFERENCE:
LMS OF NORTH AMERICA, INC. LIBER 1690 OF DEEDS AT PAGE 269 - REC. 5/6/1988

3) RAILROAD SIDING EASEMENT RECORDED IN LIBER 548 OF DEEDS AT PAGE 36.

REVISIONS:
1. FIELD REVIEW AND LOCATION JULY 22, 2005: NEW CHAIN LINK FENCE AT SOUTHWEST CORNER OF PROPERTY
2. REVISED OWNER INFORMATION FOR ADJACENT PROPERTY ON THE WEST, JULY 22, 2005
3. REVISED REFERENCE NOTE #3, JULY 22, 2005

BOUNDARY SURVEY
OF PROPERTY OF
COUNTY OF BROOME
MAPLE STREET & NORTH DUANE AVENUE
VILLAGE OF ENDICOTT,
TOWN OF UNION, BROOME COUNTY, N.Y.

SCALE: 1"=30'	
DATED: 5/13/02	
DRAWN BY: SEG	
DRAWING NO. 01160601_R1.DGN	

SHUMAKER
CONSULTING ENGINEERING & LAND SURVEYING P.C.
143 COURT STREET, BINGHAMTON, NEW YORK 13901

SURVEY DESCRIPTION OF VILLAGE OF ENDICOTT TAX MAP PARCEL NO.'S 156.12-4-11 AND 156.12-4-12

Being all that Tract or Parcel of Land, situate in Village of Endicott, in the Town of Union, County of Broome, and the State of New York, and described as follows:

Beginning at point at on the southerly boundary Maple Street at its intersection with the division line between the property of Susan M. Barnes and Karl E. Spencer (reputed owners) on the west and the property of the County of Broome on the east;

Thence S 86°46'25" E along the southerly boundary of Maple Street a distance of 268.61 feet to a point at the intersection the southerly boundary of said Maple Street and the westerly boundary of North Duane Avenue;

Thence S 10°53'25" W along the westerly boundary of North Duane Avenue a distance of 134.81 feet to a point at the intersection the westerly boundary of said North Duane Avenue with the northerly Right of Way of Pennsylvania Lines LLC (Formerly Erie Railroad Company);

Thence S 83°24'56" W along the northerly Right of Way of Pennsylvania Lines LLC (Formerly Erie Railroad Company) a distance of 255.85 feet to a point at the intersection with the division line between the property of Susan M. Barnes and Karl E. Spencer (reputed owners) on the west and the property of the County of Broome on the east;

Thence N 03°42'14" E along said division a distance of 177.21 feet to the POINT OF BEGINNING.

The above described parcel contains 40248± sq.ft. or 0.9240± acres.

APPENDIX B

DIGITAL COPY OF FINAL ENGINEERING REPORT (ON COMPACT DISC)

Not Yet Available
To Be Included at Later Date

APPENDIX C

2012 THROUGH 2015 ANNUAL POST BIOREMEDIATION APPLICATION GROUNDWATER MONITORING REPORTS

PRE-BIOREMEDIATION APPLICATION
GROUNDWATER SAMPLING
AND DATA REPORT
312 MAPLE STREET SITE
ENDICOTT, NEW YORK
NYSDEC SITE # B-00168-7

PREPARED FOR:
Broome County Department of Planning
and Economic Development
Binghamton, New York

PREPARED BY:
GZA GeoEnvironmental of New York
Buffalo, New York

December 2013
GZA File No. 21.0056127.10

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GZA
GeoEnvironmental
of New York

*Engineers and
Scientists*

December 4, 2013
File No. 21.0056127.10

Mr. Frank Evangelisti
Chief Planner
Broome Co. Dept. of Planning and Economic Development
44 Hawley Street, 5th Floor
Binghamton, New York 13902

Re: Pre-Bioremediation Application Groundwater Monitoring
ERP#B00168-7
312 Maple St., Endicott, NY

Dear Mr. Evangelisti:

535 Washington Street
11th Floor
Buffalo, New York
14203
716-685-2300
Fax: 716-685-3629
www.gza.com

GZA GeoEnvironmental of New York (GZA) is submitting this report that summarizes the analytical results of the groundwater sampling event conducted in April 2012 at the above referenced Site. The objective of the sampling event was to collect and analyze groundwater samples from the on-site and off-site monitoring wells associated with the 312 Maple Street Site in Endicott, NY (Site) to establish background conditions of groundwater prior to remedial activities planned for the Site as required by New York State Department of Environmental Conservation (NYSDEC), Record of Decision (ROD) dated January 2011.

The Pre-Bioremediation Application sampling event identified trichloroethylene (TCE) as the only volatile organic compound (VOC) detected at concentrations above NYSDEC Class GA criteria[1]. The TCE exceedance concentrations ranged between 5.8 and 130 parts per billion (ppb). Of the monitoring wells sampled, only MW-9 (an upgradient located monitoring well) was identified with a TCE concentration below the NYSDEC Class GA criteria of 5 ppb.

Subsequent annual groundwater sampling events will be completed for three years after the remedial activity work is completed in an effort to monitor the Site groundwater. Should you have any questions or require additional information following your review, please contact Daniel Troy at 716-844-7046.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

John Beninati
Project Manager

Daniel J. Troy, P.E.
Senior Project Manager

Bart A. Klettke, P.E.
Principal

[1] Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

An Equal Opportunity Employer M/F/V/H

TABLE OF CONTENTS

1.00 INTRODUCTION 1
1.10 BACKGROUND AND SITE HISTORY 1
2.00 PURPOSE AND SCOPE OF WORK 1
3.00 FIELD STUDIES 2
3.10 GROUNDWATER SAMPLING PROCEDURES 2
3.20 GROUNDWATER COLLECTION 3
4.00 ANALYTICAL LABORATORY TESTING 4
5.00 ANALYTICAL TEST RESULTS 4
5.00 ANALYTICAL TEST RESULTS 4
6.00 SUMMARY 6

TABLES

TABLE 1 SUMMARY OF PRE-BIOREMEDIATION APPLICATION GROUNDWATER ANALYTICAL TEST RESULTS (2012)

FIGURES

FIGURE 1 SITE PLAN/GROUNDWATER CONTOUR MAP

APPENDICES

APPENDIX A LIMITATIONS

APPENDIX B WELL DEVELOPMENT FORMS

APPENDIX C ANALYTICAL TEST RESULTS AND DATA VALIDATION

1.00 INTRODUCTION

In accordance with the January 2011 Record of Decision (ROD) established by the New York State Department of Environmental Conservation (NYSDEC) for the 312 Maple Street site in Endicott, New York (Site), GZA GeoEnvironmental of New York (GZA) collected groundwater samples at nine (9) monitoring wells associated with the Site. The sampling was done on April 16 and 17, 2012 and was completed prior to implementation of remedial activities at the Site in an effort to establish pre-remediation background groundwater concentrations. A Site Plan is attached as Figure 1.

1.10 BACKGROUND AND SITE HISTORY

As part of the January 2011 Record of Decision (ROD) issued by NYSDEC for the 312 Maple Street Site, the chosen remedial option included enhanced anaerobic bioremediation applications to remediate groundwater impacted with volatile organic compounds (VOCs) (specifically trichloroethylene (TCE)) and hexavalent chromium (Cr^{+6}). As part of the remedial remedy, nine (9) groundwater monitoring wells were to be sampled and analyzed for VOCs and Cr^{+6} to assess the effectiveness of the bioremediation efforts on the Site groundwater. The assessment included a pre-remedial round of sampling for baseline conditions and annual sampling afterwards for a period of three years.

2.00 PURPOSE AND SCOPE OF WORK

The purpose of this sampling event was to collect groundwater samples from the nine (9) groundwater monitoring wells associated with the Site to assess conditions prior to planned remedial activities to establish background conditions regarding volatile organic compound (VOC) concentrations, specifically TCE and Cr^{+6}. To accomplish this, the following activities were done.

- Coordinated with Spectrum Analytical Inc. located in Warwick, Rhode Island prior to the commencement of field activities to obtain the analytical sample containers.

- Collected one (1) groundwater sample from each of the nine (9) monitoring well locations for chemical analysis of VOCs via EPA Method 8260 Target Compound List and Cr^{+6} via Method SM3200D.

- Prepared this report, which summarizes the data collected during this sampling event. This data will be used in future annual groundwater sampling events for comparative purposes to evaluate the effectiveness of planned remedial activities at the Site.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or any other party.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or any other party.

3.00 FIELD STUDIES

This section describes the field activities of GZA's groundwater sampling event.

3.10 GROUNDWATER SAMPLING PROCEDURES

Equipment Cleaning

Prior to GZA's arrival to the Site, the sampling equipment (water level indicator, water quality meter and flow-through cell) was cleaned by rinsing with potable water, washing with a solution of laboratory detergent (alconox) and potable water, and rinsing with de-ionized water.

New, disposable polyethylene tubing (for placement down into the well and connecting to the water quality meter) and silicone tubing (for the peristaltic pump head) was used for groundwater sampling at each location. A variable speed peristaltic pump was used to purge groundwater from most monitoring wells. Groundwater remained within the polyethylene and silicone tubing and did not come in contact with the pump. Therefore, the tubing and pump did not require decontamination between sample locations.

Equipment Calibration

A water quality meter and organic vapor meter (OVM) were used during groundwater monitoring. Prior to use each day, the calibration of the water quality meter and OVM were checked to verify that the equipment was in working order.

Monitoring & Purging Methodologies

An OVM, equipped with photoionization detector (PID) and a 10.6 eV ultraviolet lamp, was used to screen the top of the well riser immediately following the removal of each monitoring well riser cap. OVM readings were recorded on each respective monitoring well field sampling log. OVM readings were non-detect and no odors were noted at the top of the nine (9) monitoring wells.

The purging and water quality measurements were done using at the monitoring well locations as discussed below. The nine (9) monitoring wells had measured water level depths generally less than 20 feet below top of each respective well riser.

Prior to the start of each monitoring and purge event, a static water level was measured from the top of the monitoring well riser and recorded on the monitoring well sampling log. At each monitoring well location, new polyethylene tubing (0.25-inch O.D. by 0.17-inch I.D) was lowered into the monitoring well and positioned at the approximate center of the well screen. Information about the wells was taken from the monitoring well logs previously generated.

The peristaltic pump was started and operated at a flow rate that minimized draw-down of the water column within the well. The first set of water quality readings were collected when the flow-through cell was full and water began to flow out. Once a constant head was established, the pumping flow rate was not altered. Sampling flow rates were kept consistent with purging/monitoring flow rates. Readings were recorded on well development forms in the field, once a constant head had been established. Readings were continuously recorded every five (5) minutes, until water quality readings stabilized for three successive readings, which generally consisted of ± 0.1 for pH, ±3% for conductivity, ± 10 mV for oxidation reduction potential (ORP) and ± 10% for turbidity, temperature and dissolved oxygen (DO). Copies of the well purging forms are included in Appendix B.

Groundwater analytical samples were collected once a constant head was established, the water quality readings had stabilized and/or at least one well volume was removed. The polyethylene tubing from the peristaltic pump to the water quality meter was disconnected and used to fill the appropriate groundwater sample containers provided by the laboratory. Groundwater collected for analysis did not enter the flow-through cell.

After the appropriate sample containers were filled, the pump was shut off and the tubing was removed from the monitoring well and pump head, and disposed of as a solid waste. The flow-through cell and water quality meter were then rinsed with de-ionized water. Water generated during the purging/monitoring and equipment decontamination was placed on the ground in the vicinity of the monitoring well from which it was generated.

3.20 GROUNDWATER DATA COLLECTION

GZA collected groundwater samples from the nine (9) monitoring wells (designated as MW-1 through MW-9). In addition, a duplicate sample (from MW-1), and matrix spike/matrix spike duplicate (MS/MSD) sample (from MW-5) were collected.

Static groundwater level measurements were made, referencing the top of well riser, at the nine (9) monitoring wells listed in the table below prior to sampling. Monitoring point elevation data was available from previous reports completed at the Site. From this data, a groundwater flow direction map was generated as shown on Figure 1. Based on the available information, groundwater flow is generally in a northwesterly direction consistent with previous monitoring events although there does appear to be an easterly flow in the vicinity of monitoring well MW-9, located southeast of the Site across North Duane Avenue.

Monitoring Well Location	Top of Riser Elevation (ft.)	Groundwater Depth (ft.)	Groundwater Elevation (ft.)
MW-1	102.3	18.4	83.9
MW-2	100.0	16.0	84.0
MW-3R	97.5	13.5	84.0
MW-4	100.0	16.0	84.0
MW-5	97.2	13.3	83.9
MW-6	96.4	12.3	84.1
MW-7	97.5	13.5	84.0
MW-8	96.4	12.6	83.8
MW-9	99.2	15.5	83.7

4.00 ANALYTICAL LABORATORY TESTING

Nine (9) groundwater samples, one (1) duplicate sample (MW-1), and one (1) matrix spike/matrix spike duplicate (MW-5), were submitted for analytical testing. The samples were packed in an ice-filled cooler and, following typical chain-of-custody procedures, sent to Spectrum Analytical Laboratories in Warwick, Rhode Island. Table 1 presents a summary of the samples collected and the analyses completed.

5.00 ANALYTICAL TEST RESULTS

Discussion of the laboratory results for the groundwater samples is presented below. The laboratory report is provided in Appendix C and summarized on Table 1.

The analytical test results for the groundwater samples were compared to NYSDEC Class GA criteria presented in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

The analytical data generated as part of this sampling event has also been provided to NYSDEC electronically for their Environmental Information Management System (EIMS). The data was provided in a standardized electronic data deliverable (EDD) format that uses the database software application EQuIS™ (EQuIS) from EarthSoft® Inc. The laboratory data and required information were imported into the EQuIS Data Processor (EDP) and submitted to NYSDEC.

- MW-1: TCE (40 ppb) was the only VOC detected above method detection limits (MDLs) and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-2: Three (3) VOCs; TCE (23 ppb), 1,1,1-trichloroethane (0.97 ppb) and acetone (6.6 ppb) were detected above MDLs of which only TCE was identified at

a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-3R: TCE (21 ppb) was the only VOC detected above MDLs and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-4: TCE (9.6 ppb) was the only VOC detected above MDLs and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-5: Two (2) VOCs; TCE (110 ppb) and 1,1,1-trichloroethane (1.8 ppb), were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was detected at a concentration of 2,900 ppb, which exceeds its NYSDEC Class GA criteria of 50 ppb.

- MW-6: TCE (5.8 ppb) was the only VOC detected above MDLs and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-7: Two (2) VOCs; TCE (13 ppb) and acetone (5.9 ppb), were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-8: Three (3) VOCs; TCE (130 ppb), 1,1,1-trichloroethane (1.2 ppb) and acetone (9.6 ppb), were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was detected at a concentration of 38 ppb at a concentration below its NYSDEC Class GA criteria of 50 ppb.

- MW-9: Two (2) VOCs; TCE (1.5 ppb) and chloroform (0.72 ppb), were detected above MDLs although both detections were identified below their respective Class GA criteria. Cr^{+6} was not detected in this sample.

6.00 SUMMARY

GZA was retained to collect and analyze groundwater samples from nine (9) monitoring wells associated with the 312 Maple Street Site in Endicott New York as required by the January 2011 ROD established for the ERP Site No. B-00168-7. A summary of our findings follows.

- Static groundwater level measurements indicate that groundwater flows in a slight northwesterly direction at the Site, consistent with previous monitoring events.

- TCE was the only VOC detected at concentrations above its respective NYSDEC Class GA criteria value of 5ppb in eight (8) of the nine (9) monitoring wells. Acetone, 1,1,1-trichloroetahane and chloroform were the only other VOCs detected at select monitoring wells at concentrations above the MDLs but at concentraions below their respective Class GA criteria. Additionally, Cr^{+6} was detected at two well locations, MW-5 and MW-8. The detection in MW-5 was the only concentration to exceed its respective Class GA criteria.

The enhanced anaerobic bioremediation application remediation work was scheduled to be completed in May 2012, after completion of the Site groundwater sampling and analysis work discussed in this report. The chosen remedial option for this Site will enhance the anaerobic breakdown of the "parent" chlorinated compounds present (specifically TCE) via reductive dehalogenation to the "daughter" breakdown product (cis-dichloroethene (cis-DCE) and vinyl chloride (VC)), which further degrades under aerobic conditions. Additionally, this application will also assist in the remediation of Cr+6 into the less hazardous chromium (trivalent chromium) analyte.

The next annual monitoring event was scheduled for spring 2013 and was completed about one year after enhanced anaerobic bioremediation application remediation activities were done at the Site. The results of the spring 2013 groundwater monitoring report will be prepared under a separate cover.

TABLES

TABLE 1

Summary Of Pre-Bioremediation Application Groundwater Analytical Test Results (2012)

312 Maple Street

Endicott, New York

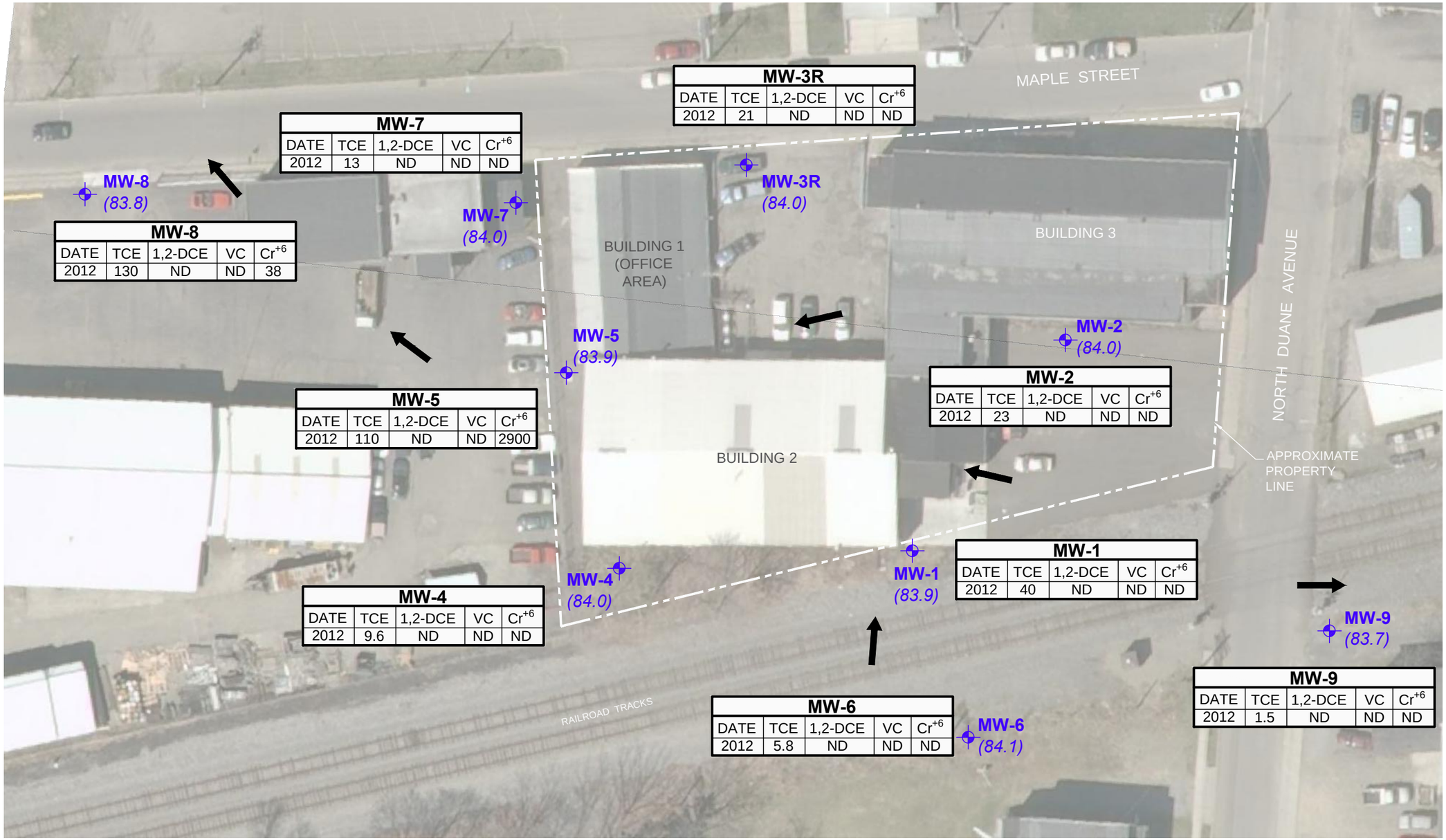
ERP Site No. B-00168-7

Parameter Sample Date	Class GA Criteria	MW-1 Apr-12	MW-2 Apr-12	MW-3R Apr-12	MW-4 Apr-12	MW-5 Apr-12	MW-6 Apr-12	MW-7 Apr-12	MW-8 Apr-12	MW-9 Apr-12
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)										
Acetone	50		6.6 J					5.9 J	9.6 J	
Chloroform	7									0.72
1,1,1-Trichloroethane	5		0.97 NJ			1.8 NJ			1.2	
Trichloroethene	5	40	23	21	9.6	110 J	5.8	13	130	1.5
Hexavalent Chromium - SM 3500D by colorometric method (mg/L)										
Hexavalent Chromium	0.05					2.9			0.038	

Notes:

1. Compounds detected in one or more samples are presented on this table. Refer to attached labortory report for list of all compounds included in analysis.
2. Analytical testing completed by Spectrum AnalyticalLaboratory of Warwick, Rhode Island, data validation completed by Data Validation Services of North Creek, NY.
3. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
4. Results presented for MW-1 are the higher of this sample and its respective duplicate (i.e., DUP-1-041612).
5. ug/L = part per billion, mg/L = part per million, J= estimated concentration of analyte, NJ = detection is tentative in identification and estimated in value.
6. Blank cell indicates compound was not detected.
7. Shaded cell indicates concentration exceeds the respective NYSDEC Groundwater Class GA Criteria.

FIGURES



MW-3R				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	21	ND	ND	ND

MW-7				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	13	ND	ND	ND

MW-8				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	130	ND	ND	38

MW-5				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	110	ND	ND	2900

MW-2				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	23	ND	ND	ND

MW-4				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	9.6	ND	ND	ND

MW-1				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	40	ND	ND	ND

MW-6				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	5.8	ND	ND	ND

MW-9				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	1.5	ND	ND	ND

NORTH

APPROXIMATE SCALE IN FEET
0 20 40 80

LEGEND:

MW-1 (83.9) — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELL, SHOWN WITH GROUNDWATER ELEVATION IN FEET

PRESUMED GROUNDWATER FLOW DIRECTION

TCE = Trichloroethene
1,2-DCE = Trans/cis 1,2 - Dichloroethene
VC = Vinyl Chloride
Cr^{+6} = Hexavalent Chromium

NOTES:

1. BASE MAP ADAPTED FROM AN AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.bing.com AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

3. UNITS ARE LISTED IN MICROGRAMS PER LITER (µg/l) OR PARTS PER BILLION (ppb). ND INDICATES COMPOUND NOT DETECTED ABOVE METHOD DETECTION LIMIT.

DRAWN BY: DEW
DATE: NOVEMBER 2013

GZA GeoEnvironmental of New York

BROOME COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
ERP SITE No. B-00168-7
PRE-REMEDIAL ACTION GROUNDWATER MONITORING (2012)

PROJECT No.
21.0056127.10

FIGURE No.
1

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GZA-T:\PROJECTS\56100s\56127.1 Broome Co 312 Maple StreetGW Monitoring\2012\Figure 1 Concentration plan.dwg [Figure 1] December 03, 2013 - 10:10am daniel.waif

APPENDIX A

LIMITATIONS

LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs.

6. Water level readings have been made in test holes (as described in the Report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge

rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

WELL DEVELOPMENT FORMS

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-1**	Ground Surface Elevation Approx. 100.0 ft.	Riser/Screen Material: PVC
Installation Date:	7/28/1998	Protective Casing Elevation: 102.6 ft.	Top of Screen Depth: 10 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 102.4 ft.	Bottom of Screen Depth: 25 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
16.02	7.2	0.527	17.9	80	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-1-041612
		Conductivity +/- 3%	Sample Time: 16:30
Interior Observations	Bottom of well measured @ approximately 27.6 ft. below top of riser.	Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/16/2013	10:52	18.43	0	8.34	0.441	17.93	234	Clear	-	-	Depth of Water: 18.43 ft. below TOR.
	11:03	19.05	1	7.67	0.425	14.84	69.3	Clear	80	12.09	Length of Water Column: 9.17 ft.
	11:10	19.05	1.5	7.68	0.414	14.48	40.3	Clear	111	8.66	Depth of Well: **27.60**
	11:15	19.05	2	7.7	0.414	14.49	27.8	Clear	110	6.63	Sheen Observed: Y **N**
	11:21	19.05	2.5	7.68	0.416	14.5	25.2	Clear	115	6.63	DNAPL Observed: Y **N**
	11:27	19.05	3	7.64	0.417	14.51	23.7	Clear	112	6.62	Did Well Go Dry: Y **N**
											Other:

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-2**	Ground Surface Elevation: Approx. 100.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/29/1998	Protective Casing Elevation: Not applicable	Top of Screen Depth: 10 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 100.02 ft.	Bottom of Screen Depth: 25 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
14.02	7.07	0.762	17.65	145	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-2-041612
		Conductivity +/- 3%	Sample Time: 16:15
Interior Observations	Bottom of well measured @ approximately 25.55 ft. below top of riser.	Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/16/2013	12:14	16.02	0	7.79	0.558	20.44	33.3	Clear	6.86	106	Depth of Water: 18.43 ft. below TOR.
	12:02	16.02	1	7.42	0.798	15.21	7	Clear	4.94	120	Length of Water Column: 9.53 ft.
	12:07	16.02	1.5	7.42	0.782	15.17	7.3	Clear	4.99	120	Depth of Well: **25.55**
	12:11	16.02	2	7.43	0.781	15.09	8.1	Clear	5	119	Sheen Observed: Y **N**
	12:15	16.02	2.5	7.43	0.782	15.04	0	Clear	5.04	118	DNAPL Observed: Y **N**
	12:20	16.02	3	7.43	0.781	15.17	0	Clear	4.97	118	Did Well Go Dry: Y **N**
											Other:

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-3R**	Ground Surface Elevation: Approx. 97.6 ft.	Riser/Screen Material: PVC
Installation Date:	4/17/2012	Protective Casing Elevation: Not applicable	Top of Screen Depth: 10 ft.
Installed By:	Nature's Way	Monitoring Point Elevation: 97.46 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
no data	no data	no data	no data	no data	no data

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-3R-041712
		Conductivity +/- 3%	Sample Time: 16:00
Interior Observations	Bottom of well measured @ approximately 20.05 ft. below top of riser.	Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/17/2013	14:19	13.51	0	7.57	1.14	14.99	503	Brown	12.07	182	Depth of Water: 18.43 ft. below TOR.
	14:21	13.51	1	7.34	1.03	12.99	511	Brown	5.02	175	Length of Water Column: 9.17 ft.
	14:23	13.51	2	7.27	0.999	12.95	526	Brown	2.31	179	Depth of Well: **25.05**
	14:25	13.51	3	7.4	0.968	12.63	695	Brown	3.57	169	Sheen Observed: Y **N**
	14:28	13.51	4	7.38	0.954	12.66	701	Brown	4.18	162	DNAPL Observed: Y **N**
	14:30	13.51	5	7.64	0.947	12.4	765	Brown	3.24	160	Did Well Go Dry: Y **N**
	14:33	13.51	6	7.48	0.943	12.58	>800	Brown	3.3	150	Other: MW-3R was developed
	14:35	13.51	7	7.48	0.939	12.35	>800	Brown	3.61	145	using a disposable bailer.
	14:38	13.51	8	7.63	0.946	12.19	>800	Brown	2.71	143	
	14:40	13.51	9	7.86	0.952	12.09	>800	Brown	3.57	138	
	14:43	13.51	10	7.67	0.937	12.29	>800	Brown	3.23	132	

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-4**	Ground Surface Elevation: Approx. 97.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/29/1998	Protective Casing Elevation: 100.2 ft.	Top of Screen Depth: 8 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 100.0 ft.	Bottom of Screen Depth: 23 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.97	7.12	0.461	16.2	311	Cloudy

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-4-041712
		Conductivity +/- 3%	Sample Time: 13:30
Interior Observations	Bottom of well measured @ approximately 25.03 ft. below top of riser.	Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/17/2013	7:42	16.1	0	7.83	0.408	15.36	45.5	Clear	4.82	154	Depth of Water: 16.04 ft. below TOR.
	7:50	16.1	1	7.83	0.362	12.35	36.5	Clear	1.69	161	Length of Water Column: 8.99 ft.
	7:55	16.1	1.5	7.71	0.365	12.14	24.1	Clear	1.19	161	Depth of Well: **25.03**
	7:59	16.1	2	7.69	0.367	12	21.9	Clear	0.66	160	Sheen Observed: Y **N**
	8:05	16.1	2.5	7.68	0.368	11.99	12.7	Clear	0.39	157	DNAPL Observed: Y **N**
	8:10	16.1	3	7.58	0.37	11.95	11.5	Clear	0.07	160	Did Well Go Dry: Y **N**
	8:14	16.1	3.5	7.69	0.37	11.88	14.3	Clear	0.06	153	Other:
	8:20	16.1	4	7.7	0.374	11.78	10	Clear	0	152	
	8:27	16.1	4.5	7.71	0.373	11.86	6.4	Clear	0	151	

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-5**	Ground Surface Elevation: Approx. 97.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/25/06	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 97.21 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
11.27	7.2	0.522	19.44	>999	Brown

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-5-041612
		Conductivity +/- 3%	Sample Time: 15:20
Interior Observations	Bottom of well measured @ approximately 19.84 ft. below top of riser.	Temperature +/- 10%	# of Sample Containers: (9) MS/MSD
	Groundwater purged had apparent yellow tint.	Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/16/2012	14:28	13.3	0	7.86	0.414	23.6	285	Clear	6.6	222	Depth of Water: 13.27 ft. below TOR.
	14:40	13.3	1	7.76	0.497	14.89	76	Lt. Yellow	6.63	244	Length of Water Column: 6.77 ft.
	14:47	13.3	1.5	7.64	0.504	14.89	34.8	Lt. Yellow	6.31	249	Depth of Well: **19.84**
	14:52	13.3	2	7.64	0.506	15.12	27.7	Lt. Yellow	6.32	251	Sheen Observed: Y **N**
	15:01	13.3	2.5	7.63	0.506	15.32	18.9	Lt. Yellow	6.02	253	DNAPL Observed: Y **N**
	15:06	13.3	3	7.63	0.497	15.48	19.6	Lt. Yellow	6.05	261	Did Well Go Dry: Y **N**
	15:12	13.3	3.5	7.57	0.506	15.22	18.8	Lt. Yellow	6.08	260	Other:

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-6**	Ground Surface Elevation: Approx. 96.5 ft.	Riser/Screen Material: PVC
Installation Date:	4/28/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 96.43 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
10.61	7.68	0.686	15.63	13	Clear

Notes:

Field Observations				Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.			pH +/- 0.1	Sample ID: MW-6-041612
				Conductivity +/- 3%	Sample Time: 16:00
Interior Observations	Bottom of well measured @ approximately 19.2 ft. below top of riser.			Temperature +/- 10%	# of Sample Containers: 3
				Turbidity +/- 10%	Duplicate Sample ID:
				ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:				DO +/- 10%	
Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.	

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/16/2012	13:21	12.36	0	7.64	0.992	19.89	714	Lt. Brown	5.57	153	Depth of Water: 12.34 ft. below TOR.
	13:32	12.36	0.5	7.69	0.633	14.8	111	Clear	5.37	221	Length of Water Column: 6.86 ft.
	13:38	12.36	1	7.68	0.623	14.47	66.2	Clear	5.68	236	Depth of Well: **19.2**
	13:44	12.36	1.5	7.66	0.63	14.26	11.9	Clear	5.1	245	Sheen Observed: Y **N**
	13:50	12.36	2	7.65	0.63	14.25	50.5	Clear	5.15	256	DNAPL Observed: Y **N**
	13:56	12.36	2.5	7.64	0.629	14.11	1.8	Clear	5.02	262	Did Well Go Dry: Y **N**
	14:01	12.36	3	7.64	0.631	14.09	14.1	Clear	5.06	265	Other:
	14:06	12.36	3.5	7.63	0.632	14.33	3	Clear	5.14	268	

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-7**	Ground Surface Elevation: Approx. 98.0 ft.	Riser/Screen Material: PVC
Installation Date:	4/28/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 97.47 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
11.71	8.23	0.317	16.63	23	Clear

Notes:

Field Observations				Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.			pH +/- 0.1	Sample ID: MW-7-041712
				Conductivity +/- 3%	Sample Time: 14:00
Interior Observations	Bottom of well measured @ approximately 19.2 ft. below top of riser.			Temperature +/- 10%	# of Sample Containers: 3
				Turbidity +/- 10%	Duplicate Sample ID:
				ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:				DO +/- 10%	
Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.	

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/17/2012	9:00	13.52	0	7.72	0.357	13.27	133	Clear	6.64	154	Depth of Water: 13.52 ft. below TOR.
	9:08	13.52	1	8.16	0.314	13.73	59.4	Clear	7.25	158	Length of Water Column: 5.68 ft.
	9:14	13.52	1.5	8.18	0.312	14.06	41.2	Clear	7.01	160	Depth of Well: **19.2**
	9:20	13.52	2	8.18	0.31	14.39	34.5	Clear	6.55	161	Sheen Observed: Y **N**
	9:33	13.52	2.5	8.17	0.307	15.25	29.6	Clear	6.79	164	DNAPL Observed: Y **N**
	9:39	13.52	3	8.19	0.309	15.3	29.2	Clear	6.54	165	Did Well Go Dry: Y **N**
											Other:

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-8**	Ground Surface Elevation: Approx. 96.5 ft.	Riser/Screen Material: PVC
Installation Date:	4/29/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 96.4 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
10.82	7.43	0.685	15.6	12.3	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-8-041712
		Conductivity +/- 3%	Sample Time: 14:30
Interior Observations	Bottom of well measured @ approximately 18.38 ft. below top of riser.	Temperature +/- 10%	# of Sample Containers: 3
	Approx. 4" of sediment accumulated in bottom of well.	Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/17/2012	10:01	12.61	0	7.99	0.745	14.81	19.2	Clear	5.4	187	Depth of Water: 12.59 ft. below TOR.
	10:10	12.61	1	7.62	0.807	14.21	18.6	Clear	4.16	179	Length of Water Column: 5.79 ft.
	10:17	12.61	1.5	7.6	0.795	14.35	15.8	Clear	3.66	175	Depth of Well: **18.38**
	10:21	12.61	2	7.59	0.794	14.38	14.5	Clear	3.57	173	Sheen Observed: Y **N**
	10:25	12.61	2.5	7.58	0.788	14.34	14.3	Clear	3.37	173	DNAPL Observed: Y **N**
	10:30	12.61	3	7.58	0.787	14.3	14.3	Clear	3.6	174	Did Well Go Dry: Y **N**
											Other:

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-9**	Ground Surface Elevation: Approx. 99.4 ft.	Riser/Screen Material: PVC
Installation Date:	9/7/07	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Nature's Way	Monitoring Point Elevation: 99.22 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
no data	no data	no data	no data	no data	no data

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH	+/- 0.1	Sample ID: MW-9-041612
		Conductivity	+/- 3%	Sample Time: 15:45
Interior Observations	Bottom of 1" dia. well measured @ approximately 19.53 ft. below top of riser.	Temperature	+/- 10%	# of Sample Containers: 3
	Annulus too small to monitor groundwater depth while purging.	Turbidity	+/- 10%	Duplicate Sample ID:
		ORP	+/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: non-detect	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/16/2012	12:40	15.46	0	7.36	0.798	19.28	750	Lt. brown	5.09	128	Depth of Water: 15.46 ft. below TOR.
	12:45	-	0.4	7.47	0.942	14.21	517	Cloudy	4.65	131	Length of Water Column: 4.07 ft.
	12:50	-	0.8	7.47	0.845	13.85	458	Cloudy	4.63	131	Depth of Well: **19.53**
	12:53	-	1.2	7.48	0.846	13.72	222	Clear	4.6	130	Sheen Observed: Y **N**
	12:56	-	1.6	7.5	0.844	13.83	127	Clear	4.48	129	DNAPL Observed: Y **N**
	13:02	-	2	7.51	0.84	14.22	38	Clear	4.41	128	Did Well Go Dry: Y **N**
											Other:

APPENDIX C

ANALYTICAL TEST RESULTS AND DATA VALIDATION

Report Date:
03-May-12 17:39

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: L0731
Project : Maple Street
Project #:

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L0731-01	MW-1-041612	Aqueous	16-Apr-12 16:30	17-Apr-12 09:48
L0731-02	MW-2-041612	Aqueous	16-Apr-12 16:15	17-Apr-12 09:48
L0731-03	MW-5-041612	Aqueous	16-Apr-12 15:20	17-Apr-12 09:48
L0731-04	MW-6-041612	Aqueous	16-Apr-12 16:00	17-Apr-12 09:48
L0731-05	MW-9-041612	Aqueous	16-Apr-12 15:45	17-Apr-12 09:48
L0731-06	DUP-1-041612	Aqueous	16-Apr-12 00:00	17-Apr-12 09:48
L0731-07	TB041612	Aqueous	16-Apr-12 00:00	17-Apr-12 09:48
L0731-08	MW-4-041712	Aqueous	17-Apr-12 13:30	18-Apr-12 10:03
L0731-09	MW-7-041712	Aqueous	17-Apr-12 14:00	18-Apr-12 10:03
L0731-10	MW-8-041712	Aqueous	17-Apr-12 14:30	18-Apr-12 10:03
L0731-11	MW-3R-041712	Aqueous	17-Apr-12 16:00	18-Apr-12 10:03
L0731-12	TB041712	Aqueous	17-Apr-12 00:00	18-Apr-12 10:03

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.

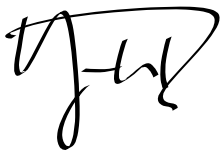
Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

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

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

Project Name : Maple Street **SDG :** L0731

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-1-041612	L0731-01	SW8260_W				SEE DATA
MW-2-041612	L0731-02	SW8260_W				SEE DATA
MW-5-041612	L0731-03	SW8260_W				SEE DATA
MW-6-041612	L0731-04	SW8260_W				SEE DATA
MW-9-041612	L0731-05	SW8260_W				SEE DATA
DUP-1-041612	L0731-06	SW8260_W				SEE DATA
TB041612	L0731-07	SW8260_W				
MW-4-041712	L0731-08	SW8260_W				SEE DATA
MW-7-041712	L0731-09	SW8260_W				SEE DATA
MW-8-041712	L0731-10	SW8260_W				SEE DATA
MW-3R-041712	L0731-11	SW8260_W				SEE DATA
TB041712	L0731-12	SW8260_W				

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

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

Project Name : Maple Street **SDG :** L0731

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L0731-01A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-02A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-03A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-03AMS	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-03AMSD	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-04A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-05A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-06A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-07A	AQ	4/16/2012	4/17/2012	NA	4/19/2012
L0731-08A	AQ	4/17/2012	4/18/2012	NA	4/19/2012
L0731-09A	AQ	4/17/2012	4/18/2012	NA	4/19/2012
L0731-10A	AQ	4/17/2012	4/18/2012	NA	4/19/2012
L0731-11A	AQ	4/17/2012	4/18/2012	NA	4/19/2012
L0731-12A	AQ	4/17/2012	4/18/2012	NA	4/19/2012

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

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

Project Name : Maple Street **SDG :** L0731

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L0731-01A	AQ	SW8260_W	NA	LOW	1
L0731-02A	AQ	SW8260_W	NA	LOW	1
L0731-03A	AQ	SW8260_W	NA	LOW	1
L0731-03AMS	AQ	SW8260_W	NA	LOW	1
L0731-03AMSD	AQ	SW8260_W	NA	LOW	1
L0731-04A	AQ	SW8260_W	NA	LOW	1
L0731-05A	AQ	SW8260_W	NA	LOW	1
L0731-06A	AQ	SW8260_W	NA	LOW	1
L0731-07A	AQ	SW8260_W	NA	LOW	1
L0731-08A	AQ	SW8260_W	NA	LOW	1
L0731-09A	AQ	SW8260_W	NA	LOW	1
L0731-10A	AQ	SW8260_W	NA	LOW	1
L0731-11A	AQ	SW8260_W	NA	LOW	1
L0731-12A	AQ	SW8260_W	NA	LOW	1

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

WorkOrder: L0731

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE,
Comments: MDLs UPDATED and > PQL --

Case:
SDG:
PO: 21.0056127.00

HC Due: 05/09/12
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0731-01A	MW-1-041612	04/16/2012 16:30	04/17/2012	Aqueous	SW8260_W	/					VOA
L0731-01B	MW-1-041612	04/16/2012 16:30	04/17/2012	Aqueous	SM3500_CR+	/					J3
L0731-02A	MW-2-041612	04/16/2012 16:15	04/17/2012	Aqueous	SW8260_W	/					VOA
L0731-02B	MW-2-041612	04/16/2012 16:15	04/17/2012	Aqueous	SM3500_CR+	/					J3
L0731-03A	MW-5-041612	04/16/2012 15:20	04/17/2012	Aqueous	SW8260_W	/			Y		VOA
L0731-03B	MW-5-041612	04/16/2012 15:20	04/17/2012	Aqueous	SM3500_CR+	/			Y		J3
L0731-04A	MW-6-041612	04/16/2012 16:00	04/17/2012	Aqueous	SW8260_W	/					VOA
L0731-04B	MW-6-041612	04/16/2012 16:00	04/17/2012	Aqueous	SM3500_CR+	/					J3
L0731-05A	MW-9-041612	04/16/2012 15:45	04/17/2012	Aqueous	SW8260_W	/					VOA
L0731-05B	MW-9-041612	04/16/2012 15:45	04/17/2012	Aqueous	SM3500_CR+	/					J3
L0731-06A	DUP-1-041612	04/16/2012 00:00	04/17/2012	Aqueous	SW8260_W	/					VOA
L0731-06B	DUP-1-041612	04/16/2012 00:00	04/17/2012	Aqueous	SM3500_CR+	/					J3
L0731-07A	TB041612	04/16/2012 00:00	04/17/2012	Aqueous	SW8260_W	/					VOA
L0731-08A	MW-4-041712	04/17/2012 13:30	04/18/2012	Aqueous	SW8260_W	/					VOA
L0731-08B	MW-4-041712	04/17/2012 13:30	04/18/2012	Aqueous	SM3500_CR+	/					J3
L0731-09A	MW-7-041712	04/17/2012 14:00	04/18/2012	Aqueous	SW8260_W	/					VOA
L0731-09B	MW-7-041712	04/17/2012 14:00	04/18/2012	Aqueous	SM3500_CR+	/					J3
L0731-10A	MW-8-041712	04/17/2012 14:30	04/18/2012	Aqueous	SW8260_W	/					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. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0731

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE,
Comments: MDLs UPDATED and > PQL --

Case:
SDG:
PO: 21.0056127.00

HC Due: 05/09/12
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0731-10B	MW-8-041712	04/17/2012 14:30	04/18/2012	Aqueous	SM3500_CR+	/					J3
L0731-11A	MW-3R-041712	04/17/2012 16:00	04/18/2012	Aqueous	SW8260_W	/					VOA
L0731-11B	MW-3R-041712	04/17/2012 16:00	04/18/2012	Aqueous	SM3500_CR+	/					J3
L0731-12A	TB041712	04/17/2012 00:00	04/18/2012	Aqueous	SW8260_W	/					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

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

Report To: GZA GEOENVIRONMENTAL OF NY
535 WASHINGTON ST 11TH FLOR
BUFFALO, NY 14223

Project Mgr.: DANIEL TROY

Invoice To: GZA

P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: ENDICOTT State: NY
Sampler(s): JMB/TAK

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= COOL 10=_____ 11=_____

List preservative code below: 2

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: VOC's 8260	Cr+6	QA/QC Reporting Level
LO731												☐ Level I ☐ Level II ☐ Level III ☐ Level IV ☐ Other ASP CAT B
01	MW-1-041612	4/16/12	16:30		GW	2			1	X	X	State specific reporting standards:
02	MW-2-041612	"	16:15		"	2			1	X	X	
03	MW-5-041612	"	15:20		"	2			1	X	X	MS/MSD
04	MW-6-041612	"	16:00		"	2			1	X	X	
05	MW-9-041612	"	15:45		"	2			1	X	X	
06	DUP-1-041612	"			"	2			1	X	X	
LO731 07	TRIP BLANK					2				X		

☒ E-mail to DANIEL.TROY@GZA.COM
EDD Format EQUIS NYSDEC

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 2

Relinquished by:	Received by:	Date:	Time:
		4/16/12	9:48

4

IK

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

Report To: GZA GEOENVIRONMENTAL OF NY
535 WASHINGTON ST, 11TH FLOOR
BUFFALO, NY 14203
Project Mgr.: DANIEL TROY

Invoice To: GZA
P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE ST.
Location: ENDICOTT State: NY
Sampler(s): JMB / TAK

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=_____ 10=_____ 11=_____

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	List preservative code below: 2	Analyses: VOCs 8260	Cr+6	
L0731-08	MW-4-041712	041712	1330		GW	2			1		X	X	
-09	MW-7-041712	"	1400		GW	2			1		X	X	
-10	MW-8-041712	"	1430		GW	2			1		X	X	
-11	MW-3R-041712	"	1600		GW	2			1		X	X	
L0731-12	TRIP BLANK	"			GW	2					X		

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards: AGP CAT B

☑ E-mail to DANIEL.TROY@GZA.COM
EDD Format EQUIS NYSDEC

Condition upon receipt: ☐ Iced ☐ Ambient ☒ °C 6°

Relinquished by:	Received by:	Date:	Time:
	UPS	4/16/12	1700
UPS	Verer Bryl	4/18/12	10:03

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

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

Received By:	Page 01 of 00
Reviewed By:	Log-in Date 04/17/2012
Work Order: L0731	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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. — UPS 1Z 75R 4V2 01 9599
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	2.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	04/17/2012
12. Time Received	09:48

Sample Transfer

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

IR Temp Gun ID:MT-1

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"
L0731-01						H	
L0731-02						H	
L0731-03						H	
L0731-04						H	
L0731-05						H	
L0731-06						H	
L0731-07						H	

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

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

Received By:	Page 01 of 00
Reviewed By:	Log-in Date 04/18/2012
Work Order: L0731	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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. — UPS 1Z75R4V20197987486
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 — 6 °C
10. Does information on TR/COCs and sample tags agree? — Yes / No
11. Date Received at Laboratory — 04/18/2012
12. Time Received — 10:03

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
L0731-08						H	
L0731-09						H	
L0731-10						H	
L0731-11						H	
L0731-12						H	

Sample Transfer

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

IR Temp Gun ID:MT-1

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 : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: L0731

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

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

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V6
Instrument Type: GCMS-VOA
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 5973

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on samples: MW-5-041612 (L0731-03AMS) and MW-5-041612 (L0731-03AMSD).

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

MW-5-041612 (L0731-03AMS)Percent Recovery is outside QC Limits, recovery is below criteria for 1,1,1,2-Tetrachloroethane at 77% with criteria of (80-130), 1,2,4-Trimethylbenzene at 74% with criteria of (75-130), 1,3,5-Trimethylbenzene at 75% with criteria of (75-130), 2,2-Dichloropropane at 69% with criteria of (70-135), 2-Chlorotoluene at 72% with criteria of (75-125), 4-Chlorotoluene at 73% with criteria of (75-130), 4-Isopropyltoluene at 72% with criteria of (75-130), Bromobenzene at 75% with criteria of (75-125), Chlorobenzene at 75% with criteria of (80-120), Ethylbenzene at

73% with criteria of (75-125), m,p-Xylene at 74% with criteria of (75-130), n-Butylbenzene at 70% with criteria of (70-135), o-Xylene at 74% with criteria of (80-120), Trichloroethene at 62% with criteria of (70-125) and Xylene (Total) at 74% with criteria of (81-121).

MW-5-041612 (L0731-03AMSD)Percent Recovery is outside QC Limits, recovery is below criteria for Trichloroethene at 68% with criteria of (70-125).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

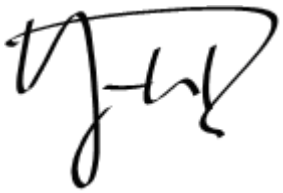
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

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

Signed:____  _____

Date:_____5/3/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

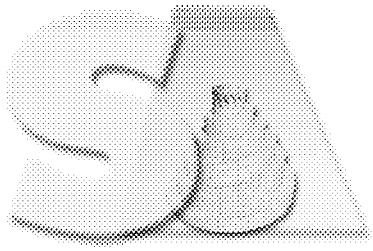
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-65685	101	101	98	101				0
02	MB-65685	99	98	97	99				0
03	TB041612	100	100	96	99				0
04	TB041712	101	104	96	98				0
05	MW-1-041612	100	100	96	98				0
06	MW-2-041612	101	100	97	97				0
07	MW-5-041612	100	100	97	97				0
08	MW-6-041612	101	101	97	96				0
09	MW-9-041612	103	100	98	97				0
10	DUP-1-041612	100	103	98	97				0
11	MW-4-041712	101	100	96	97				0
12	MW-7-041712	102	102	96	96				0
13	MW-8-041712	99	99	98	97				0
14	MW-3R-041712	101	97	96	97				0
15	MW-5-041612MS	102	102	97	100				0
16	MW-5-041612MSD	101	100	97	100				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

som111.10.27.A

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix Spike - EPA Sample No.: MW-5-041612 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	28.7605	58		30-155
Chloromethane	50.0000	0.0000	35.1733	70		40-125
Vinyl chloride	50.0000	0.0000	36.7175	73		50-145
Bromomethane	50.0000	0.0000	33.8545	68		30-145
Chloroethane	50.0000	0.0000	38.1615	76		60-135
Trichlorofluoromethane	50.0000	0.0000	38.9936	78		60-145
1,1-Dichloroethene	50.0000	0.0000	38.5768	77		70-130
Acetone	50.0000	0.0000	23.7404	47		40-140
Iodomethane	50.0000	0.0000	37.6718	75		72-121
Carbon disulfide	50.0000	0.0000	37.5767	75		35-160
Methylene chloride	50.0000	0.0000	39.6785	79		55-140
trans-1,2-Dichloroethene	50.0000	0.0000	39.8522	80		60-140
Methyl tert-butyl ether	50.0000	0.0000	42.5685	85		65-125
1,1-Dichloroethane	50.0000	0.0000	39.4558	79		70-135
Vinyl acetate	50.0000	0.0000	39.4196	79		38-163
2-Butanone	50.0000	0.0000	31.6457	63		30-150
cis-1,2-Dichloroethene	50.0000	0.0000	39.5364	79		70-125
2,2-Dichloropropane	50.0000	0.0000	34.7133	69	*	70-135
Bromochloromethane	50.0000	0.0000	41.6978	83		65-130
Chloroform	50.0000	0.0000	40.5253	81		65-135
1,1,1-Trichloroethane	50.0000	1.7872	39.8191	76		65-130
1,1-Dichloropropene	50.0000	0.0000	38.2095	76		75-130
Carbon tetrachloride	50.0000	0.0000	39.0730	78		65-140
1,2-Dichloroethane	50.0000	0.0000	40.4778	81		70-130
Benzene	50.0000	0.0000	40.6713	81		80-120
Trichloroethene	50.0000	106.8892	137.8744	62	*	70-125
1,2-Dichloropropane	50.0000	0.0000	41.3831	83		75-125
Dibromomethane	50.0000	0.0000	43.2890	87		75-125
Bromodichloromethane	50.0000	0.0000	41.5852	83		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	40.1779	80		70-130
4-Methyl-2-pentanone	50.0000	0.0000	42.9080	86		60-135
Toluene	50.0000	0.0000	39.8201	80		75-120
trans-1,3-Dichloropropene	50.0000	0.0000	41.3311	83		55-140
1,1,2-Trichloroethane	50.0000	0.0000	43.9813	88		75-125
1,3-Dichloropropane	50.0000	0.0000	39.4764	79		75-125
Tetrachloroethene	50.0000	0.0000	37.3084	75		45-150
2-Hexanone	50.0000	0.0000	33.1605	66		55-130
Dibromochloromethane	50.0000	0.0000	39.0650	78		60-135
1,2-Dibromoethane	50.0000	0.0000	40.2828	81		80-120
Chlorobenzene	50.0000	0.0000	37.4852	75	*	80-120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	38.4487	77	*	80-130
Ethylbenzene	50.0000	0.0000	36.5426	73	*	75-125
m,p-Xylene	100.0000	0.0000	73.5434	74	*	75-130
o-Xylene	50.0000	0.0000	37.2153	74	*	80-120

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix Spike - EPA Sample No.: MW-5-041612 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	110.7588	74	*	81-121
Styrene	50.0000	0.0000	37.1820	74		65-135
Bromoform	50.0000	0.0000	41.0543	82		70-130
Isopropylbenzene	50.0000	0.0000	37.9092	76		75-125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	40.3762	81		65-130
Bromobenzene	50.0000	0.0000	37.3532	75	*	75-125
1,2,3-Trichloropropane	50.0000	0.0000	38.0731	76		75-125
n-Propylbenzene	50.0000	0.0000	35.5232	71		70-130
2-Chlorotoluene	50.0000	0.0000	36.2403	72	*	75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	37.2897	75	*	75-130
4-Chlorotoluene	50.0000	0.0000	36.6200	73	*	75-130
tert-Butylbenzene	50.0000	0.0000	36.9610	74		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	37.0060	74	*	75-130
sec-Butylbenzene	50.0000	0.0000	37.0627	74		70-125
4-Isopropyltoluene	50.0000	0.0000	36.2197	72	*	75-130
1,3-Dichlorobenzene	50.0000	0.0000	37.7342	75		75-125
1,4-Dichlorobenzene	50.0000	0.0000	37.7279	75		75-125
n-Butylbenzene	50.0000	0.0000	34.9375	70	*	70-135
1,2-Dichlorobenzene	50.0000	0.0000	37.7800	76		70-120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	37.2957	75		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	33.6304	67		65-135
Hexachlorobutadiene	50.0000	0.0000	31.6005	63		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	31.7814	64		55-140
Naphthalene	50.0000	0.0000	31.8785	64		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	32.1595	64		11		0-40	30-155
Chloromethane	50.0000	41.4949	83		16		0-40	40-125
Vinyl chloride	50.0000	44.2090	88		19		0-40	50-145
Bromomethane	50.0000	40.9847	82		19		0-40	30-145
Chloroethane	50.0000	45.1593	90		17		0-40	60-135
Trichlorofluoromethane	50.0000	46.4098	93		17		0-40	60-145
1,1-Dichloroethene	50.0000	45.4788	91		16		0-40	70-130
Acetone	50.0000	22.3908	45		6		0-40	40-140
Iodomethane	50.0000	46.3442	93		21		0-40	72-121
Carbon disulfide	50.0000	44.6588	89		17		0-40	35-160
Methylene chloride	50.0000	44.6660	89		12		0-40	55-140
trans-1,2-Dichloroethene	50.0000	47.1554	94		17		0-40	60-140
Methyl tert-butyl ether	50.0000	46.1186	92		8		0-40	65-125
1,1-Dichloroethane	50.0000	45.6537	91		15		0-40	70-135
Vinyl acetate	50.0000	40.1227	80		2		0-40	38-163
2-Butanone	50.0000	37.0588	74		16		0-40	30-150
cis-1,2-Dichloroethene	50.0000	46.1767	92		15		0-40	70-125
2,2-Dichloropropane	50.0000	41.0485	82		17		0-40	70-135
Bromochloromethane	50.0000	46.3507	93		11		0-40	65-130

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix Spike - EPA Sample No.: MW-5-041612 Level: (TRACE or LOW) LOW

Chloroform	50.0000	45.9096	92		12		0-40	65-135
1,1,1-Trichloroethane	50.0000	47.2370	91		18		0-40	65-130
1,1-Dichloropropene	50.0000	46.8104	94		20		0-40	75-130
Carbon tetrachloride	50.0000	46.6702	93		18		0-40	65-140
1,2-Dichloroethane	50.0000	44.6567	89		10		0-40	70-130
Benzene	50.0000	46.9060	94		14		0-40	80-120
Trichloroethene	50.0000	140.9456	68	*	9		0-40	70-125
1,2-Dichloropropane	50.0000	45.8621	92		10		0-40	75-125
Dibromomethane	50.0000	46.6126	93		7		0-40	75-125
Bromodichloromethane	50.0000	46.4812	93		11		0-40	75-120
cis-1,3-Dichloropropene	50.0000	44.9098	90		11		0-40	70-130
4-Methyl-2-pentanone	50.0000	43.6042	87		2		0-40	60-135
Toluene	50.0000	46.3875	93		15		0-40	75-120
trans-1,3-Dichloropropene	50.0000	44.2011	88		7		0-40	55-140
1,1,2-Trichloroethane	50.0000	45.3648	91		3		0-40	75-125
1,3-Dichloropropane	50.0000	42.3195	85		7		0-40	75-125
Tetrachloroethene	50.0000	44.3518	89		17		0-40	45-150
2-Hexanone	50.0000	34.2403	68		3		0-40	55-130
Dibromochloromethane	50.0000	42.9432	86		9		0-40	60-135
1,2-Dibromoethane	50.0000	43.3320	87		7		0-40	80-120
Chlorobenzene	50.0000	42.8270	86		13		0-40	80-120
1,1,1,2-Tetrachloroethane	50.0000	43.1039	86		11		0-40	80-130
Ethylbenzene	50.0000	42.9324	86		16		0-40	75-125
m,p-Xylene	100.0000	86.2030	86		16		0-40	75-130
o-Xylene	50.0000	43.3169	87		15		0-40	80-120
Xylene (Total)	150.0000	129.5199	86		16		0-40	81-121
Styrene	50.0000	43.0713	86		15		0-40	65-135
Bromoform	50.0000	42.5197	85		4		0-40	70-130
Isopropylbenzene	50.0000	44.3610	89		16		0-40	75-125
1,1,2,2-Tetrachloroethane	50.0000	42.8705	86		6		0-40	65-130
Bromobenzene	50.0000	43.2046	86		15		0-40	75-125
1,2,3-Trichloropropane	50.0000	40.1895	80		5		0-40	75-125
n-Propylbenzene	50.0000	43.7329	87		21		0-40	70-130
2-Chlorotoluene	50.0000	43.0727	86		17		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	44.0788	88		17		0-40	75-130
4-Chlorotoluene	50.0000	43.0884	86		16		0-40	75-130
tert-Butylbenzene	50.0000	44.3526	89		18		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	43.6168	87		16		0-40	75-130
sec-Butylbenzene	50.0000	44.7667	90		19		0-40	70-125
4-Isopropyltoluene	50.0000	43.9441	88		19		0-40	75-130
1,3-Dichlorobenzene	50.0000	43.8001	88		15		0-40	75-125
1,4-Dichlorobenzene	50.0000	43.2152	86		14		0-40	75-125
n-Butylbenzene	50.0000	42.2012	84		19		0-40	70-135
1,2-Dichlorobenzene	50.0000	44.1430	88		16		0-40	70-120
1,2-Dibromo-3-chloropropan	50.0000	39.9957	80		7		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	39.4057	79		16		0-40	65-135
Hexachlorobutadiene	50.0000	39.4496	79		22		0-40	50-140

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix Spike - EPA Sample No.: MW-5-041612 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	38.0366	76		18		0-40	55-140
Naphthalene	50.0000	37.6200	75		17		0-40	55-140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 16 out of 136 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Lab Sample ID: LCS-65685 LCS Lot No.:

Date Extracted: 04/19/2012 Date Analyzed (1): 04/19/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	33.1264	66		30 - 155
Chloromethane	50.0000	0.0000	42.2810	85		40 - 125
Vinyl chloride	50.0000	0.0000	45.1533	90		50 - 145
Bromomethane	50.0000	0.0000	42.7407	85		30 - 145
Chloroethane	50.0000	0.0000	47.0957	94		60 - 135
Trichlorofluoromethane	50.0000	0.0000	47.7224	95		60 - 145
1,1-Dichloroethene	50.0000	0.0000	48.0804	96		70 - 130
Acetone	50.0000	0.0000	25.6949	51		40 - 140
Iodomethane	50.0000	0.0000	47.3704	95		72 - 121
Carbon disulfide	50.0000	0.0000	47.6137	95		35 - 160
Methylene chloride	50.0000	0.0000	47.7883	96		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	49.5298	99		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	46.4431	93		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.3886	99		70 - 135
Vinyl acetate	50.0000	0.0000	47.1105	94		38 - 163
2-Butanone	50.0000	0.0000	38.2056	76		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	48.8008	98		70 - 125
2,2-Dichloropropane	50.0000	0.0000	48.7927	98		70 - 135
Bromochloromethane	50.0000	0.0000	49.7248	99		65 - 130
Chloroform	50.0000	0.0000	48.6753	97		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	48.2655	97		65 - 130
1,1-Dichloropropene	50.0000	0.0000	49.8484	100		75 - 130
Carbon tetrachloride	50.0000	0.0000	49.0144	98		65 - 140
1,2-Dichloroethane	50.0000	0.0000	46.1779	92		70 - 130
Benzene	50.0000	0.0000	48.7427	97		80 - 120
Trichloroethene	50.0000	0.0000	48.2970	97		70 - 125
1,2-Dichloropropane	50.0000	0.0000	48.0059	96		75 - 125
Dibromomethane	50.0000	0.0000	46.8308	94		75 - 125
Bromodichloromethane	50.0000	0.0000	48.5596	97		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	48.8163	98		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	44.0015	88		60 - 135
Toluene	50.0000	0.0000	48.5483	97		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	47.0738	94		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	47.5451	95		75 - 125
1,3-Dichloropropane	50.0000	0.0000	44.4148	89		75 - 125
Tetrachloroethene	50.0000	0.0000	46.1118	92		45 - 150
2-Hexanone	50.0000	0.0000	35.6137	71		55 - 130
Dibromochloromethane	50.0000	0.0000	44.3838	89		60 - 135
1,2-Dibromoethane	50.0000	0.0000	44.0325	88		80 - 120
Chlorobenzene	50.0000	0.0000	45.5735	91		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	46.3455	93		80 - 130
Ethylbenzene	50.0000	0.0000	46.7217	93		75 - 125
m,p-Xylene	100.0000	0.0000	92.9662	93		75 - 130
o-Xylene	50.0000	0.0000	45.5071	91		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Lab Sample ID: LCS-65685 LCS Lot No.:

Date Extracted: 04/19/2012 Date Analyzed (1): 04/19/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	138.4733	92		81 - 121
Styrene	50.0000	0.0000	46.4442	93		65 - 135
Bromoform	50.0000	0.0000	45.4156	91		70 - 130
Isopropylbenzene	50.0000	0.0000	47.2254	94		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	43.6025	87		65 - 130
Bromobenzene	50.0000	0.0000	45.3582	91		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	43.9311	88		75 - 125
n-Propylbenzene	50.0000	0.0000	45.5502	91		70 - 130
2-Chlorotoluene	50.0000	0.0000	45.5146	91		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	45.9721	92		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.0961	92		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.5460	93		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	46.2706	93		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.7416	93		70 - 125
4-Isopropyltoluene	50.0000	0.0000	45.9904	92		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	45.8814	92		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	45.8258	92		75 - 125
n-Butylbenzene	50.0000	0.0000	44.0702	88		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	45.3688	91		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	40.3168	81		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	41.0605	82		65 - 135
Hexachlorobutadiene	50.0000	0.0000	41.6867	83		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	38.4200	77		55 - 140
Naphthalene	50.0000	0.0000	38.0095	76		55 - 140

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Lab File ID: V6I6125.D Lab Sample ID: MB-65685

Instrument ID: V6

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/19/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:19

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-65685	LCS-65685	V6I6122.D	10:48
02	TB041612	L0731-07A	V6I6126.D	12:44
03	TB041712	L0731-12A	V6I6127.D	13:08
04	MW-1-041612	L0731-01A	V6I6128.D	13:32
05	MW-2-041612	L0731-02A	V6I6129.D	13:56
06	MW-5-041612	L0731-03A	V6I6130.D	14:20
07	MW-6-041612	L0731-04A	V6I6131.D	14:45
08	MW-9-041612	L0731-05A	V6I6132.D	15:09
09	DUP-1-041612	L0731-06A	V6I6133.D	15:33
10	MW-4-041712	L0731-08A	V6I6134.D	15:57
11	MW-7-041712	L0731-09A	V6I6135.D	16:21
12	MW-8-041712	L0731-10A	V6I6136.D	16:46
13	MW-3R-041712	L0731-11A	V6I6137.D	17:10
14	MW-5-041612MS	L0731-03AMS	V6I6138.D	17:34
15	MW-5-041612MSD	L0731-03AMSD	V6I6139.D	17:58

COMMENTS:

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6L

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Lab File ID: V6I6060.D BFB Injection Date: 04/13/2012

Instrument ID: V6 BFB Injection Time: 8:07

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.2
75	30.0 - 80.0% of mass 95	46.7
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	50.0 -120% of mass 95	88.0
175	5.0 - 9.0% of mass 174	6.6 (7.5)1
176	95.0 - 101% of mass 174	84.4 (95.9)1
177	5.0 - 9.0% of mass 176	6.4 (7.6)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506L	VSTD0506L	V6I6062.D	04/13/2012	8:57
02	VSTD0206L	VSTD0206L	V6I6063.D	04/13/2012	9:34
03	VSTD0056L	VSTD0056L	V6I6064.D	04/13/2012	9:58
04	VSTD2006L	VSTD2006L	V6I6069.D	04/13/2012	12:21
05	VSTD1006L	VSTD1006L	V6I6070.D	04/13/2012	12:45

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6O

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Lab File ID: V6I6120.D BFB Injection Date: 04/19/2012

Instrument ID: V6 BFB Injection Time: 9:34

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 60.0% of mass 95	46.6
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	0.4 (0.5)1
174	Greater than 50.0% of mass 95	82.8
175	5.0 - 9.0% of mass 174	6.0 (7.3)1
176	95.0 - 101.0% of mass 174	81.3 (98.1)1
177	5.0 - 9.0% of mass 176	6.0 (7.4)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	VSTD0506O	VSTD0506O	V6I6121.D	04/19/2012	10:04
02	LCS-65685	LCS-65685	V6I6122.D	04/19/2012	10:48
03	MB-65685	MB-65685	V6I6125.D	04/19/2012	12:19
04	TB041612	L0731-07A	V6I6126.D	04/19/2012	12:44
05	TB041712	L0731-12A	V6I6127.D	04/19/2012	13:08
06	MW-1-041612	L0731-01A	V6I6128.D	04/19/2012	13:32
07	MW-2-041612	L0731-02A	V6I6129.D	04/19/2012	13:56
08	MW-5-041612	L0731-03A	V6I6130.D	04/19/2012	14:20
09	MW-6-041612	L0731-04A	V6I6131.D	04/19/2012	14:45
10	MW-9-041612	L0731-05A	V6I6132.D	04/19/2012	15:09
11	DUP-1-041612	L0731-06A	V6I6133.D	04/19/2012	15:33
12	MW-4-041712	L0731-08A	V6I6134.D	04/19/2012	15:57
13	MW-7-041712	L0731-09A	V6I6135.D	04/19/2012	16:21
14	MW-8-041712	L0731-10A	V6I6136.D	04/19/2012	16:46
15	MW-3R-041712	L0731-11A	V6I6137.D	04/19/2012	17:10
16	MW-5-041612MS	L0731-03AMS	V6I6138.D	04/19/2012	17:34
17	MW-5-041612MSD	L0731-03AMSD	V6I6139.D	04/19/2012	17:58

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/13/2012 04/13/2012

EPA Sample No.(VSTD#####): VSTD05060 Date Analyzed: 04/19/2012

Lab File ID (Standard): V6I6121.D Time Analyzed: 10:04

Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	421287		5.376		366462		8.37		200800		10.855	
	UPPER LIMIT	842574		5.876		732924		8.87		401600		11.355	
	LOWER LIMIT	210644		4.876		183231		7.87		100400		10.355	
	EPA SAMPLE NO.												
01	LCS-65685	448298		5.368		388918		8.362		214936		10.859	
02	MB-65685	429485		5.378		377781		8.371		197409		10.856	
03	TB041612	422958		5.378		370691		8.372		192760		10.857	
04	TB041712	417603		5.377		370374		8.371		192422		10.856	
05	MW-1-041612	420219		5.377		368754		8.371		189156		10.856	
06	MW-2-041612	417254		5.377		369079		8.371		191960		10.856	
07	MW-5-041612	421045		5.376		369965		8.370		191945		10.855	
08	MW-6-041612	417590		5.379		370583		8.360		191547		10.857	
09	MW-9-041612	418226		5.378		371012		8.372		191920		10.857	
10	DUP-1-041612	422577		5.376		369483		8.370		189694		10.855	
11	MW-4-041712	420709		5.376		372390		8.370		190201		10.855	
12	MW-7-041712	418104		5.378		372962		8.372		189014		10.857	
13	MW-8-041712	423118		5.376		370225		8.370		190083		10.855	
14	MW-3R-041712	419075		5.377		368772		8.370		190347		10.855	
15	MW-5-041612MS	426969		5.377		377317		8.371		209366		10.856	

IS1 () = Fluorobenzene
IS2 () = Chlorobenzene-d5
IS3 () = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

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

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/13/2012 04/13/2012

EPA Sample No.(VSTD#####): VSTD05060 Date Analyzed: 04/19/2012

Lab File ID (Standard): V6I6121.D Time Analyzed: 10:04

Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	421287		5.376		366462		8.37		200800		10.855	
	UPPER LIMIT	842574		5.876		732924		8.87		401600		11.355	
	LOWER LIMIT	210644		4.876		183231		7.87		100400		10.355	
	EPA SAMPLE NO.												
16	MW-5-041612MSD	436058		5.378		384066		8.371		208685		10.856	

IS1 () = Fluorobenzene
IS2 () = Chlorobenzene-d5
IS3 () = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6128.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	40	
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

EPA SAMPLE NO.

MW-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6128.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6128.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

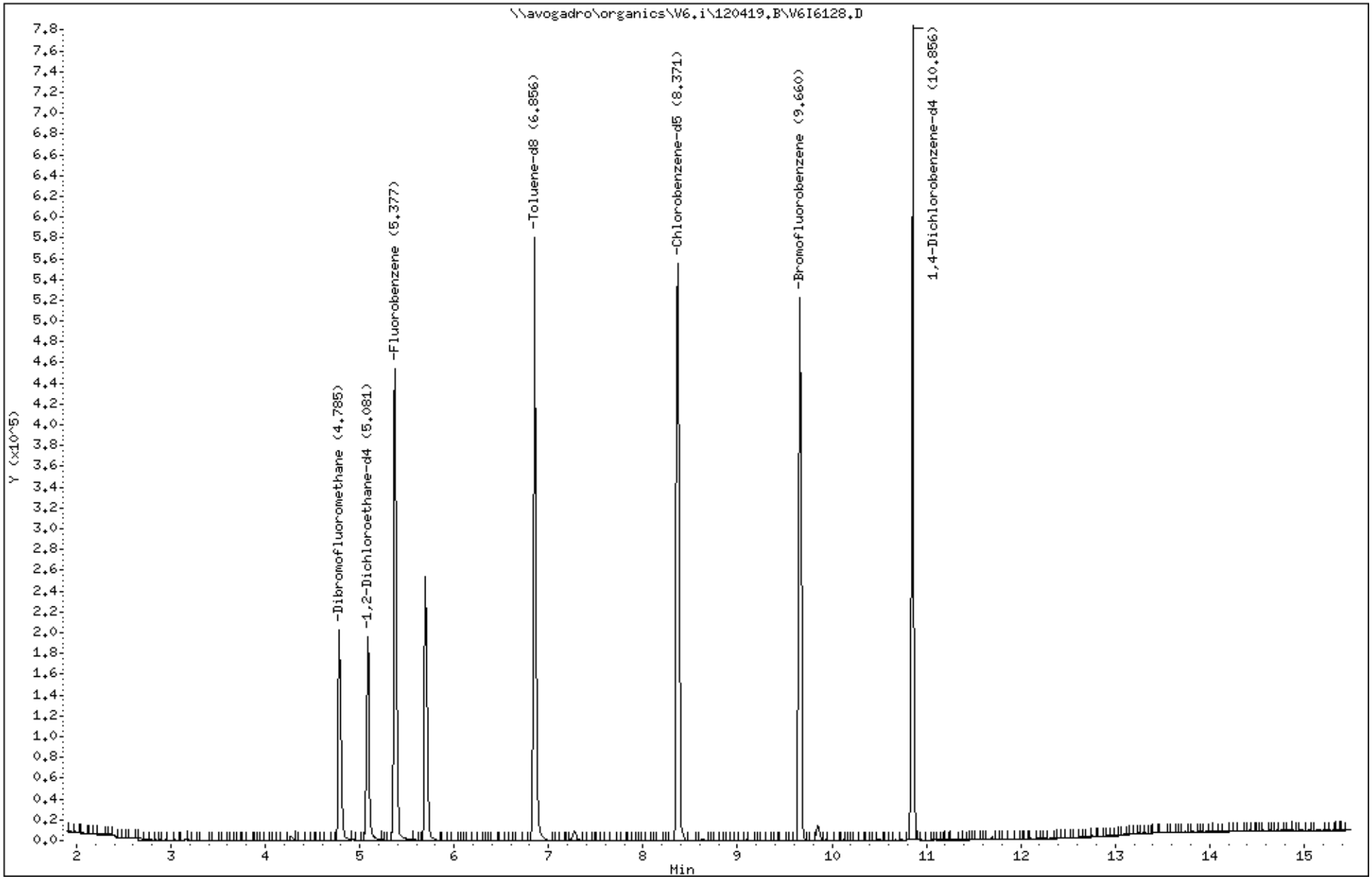
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Inj Date : 19-APR-2012 13:32
Operator : AM   SRC: LIMS Inst ID: V6.i
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Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 32
Dil Factor: 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	4.785	4.785	(0.890)	121363	50.2457	50
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	26120	49.7630	50
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	420219	50.0000	
	47 Trichloroethene	130	5.696	5.697	(1.059)	84189	39.5407	40
$	58 Toluene-d8	98	6.856	6.856	(0.819)	415237	48.0563	48
*	68 Chlorobenzene-d5	117	8.370	8.370	(1.000)	368754	50.0000	
$	79 Bromofluorobenzene	95	9.660	9.660	(1.154)	185744	48.9995	49
*	92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	189156	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6128.D
Date : 19-APR-2012 13:32
Client ID: MW-1-041612
Instrument: V6.i
Sample Info: 5ML,L0731-01A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6128.D

Date : 19-APR-2012 13:32

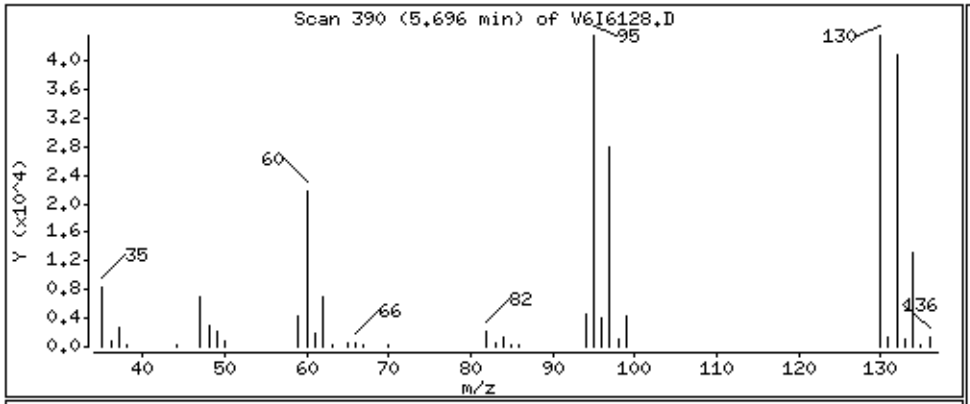
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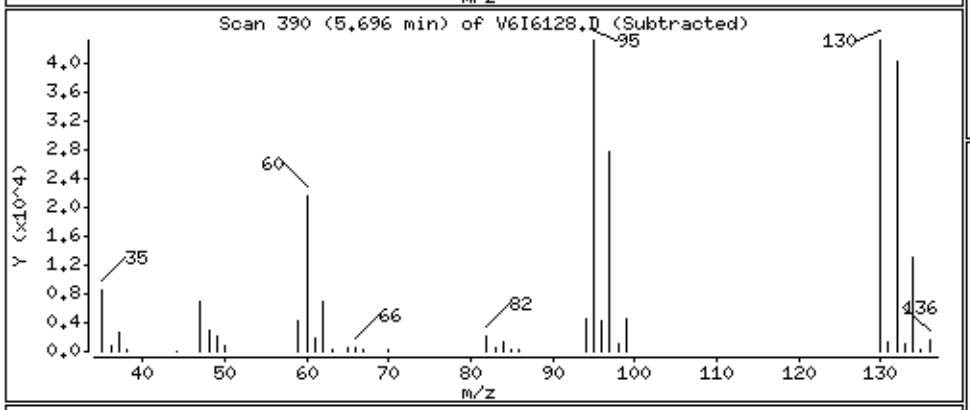
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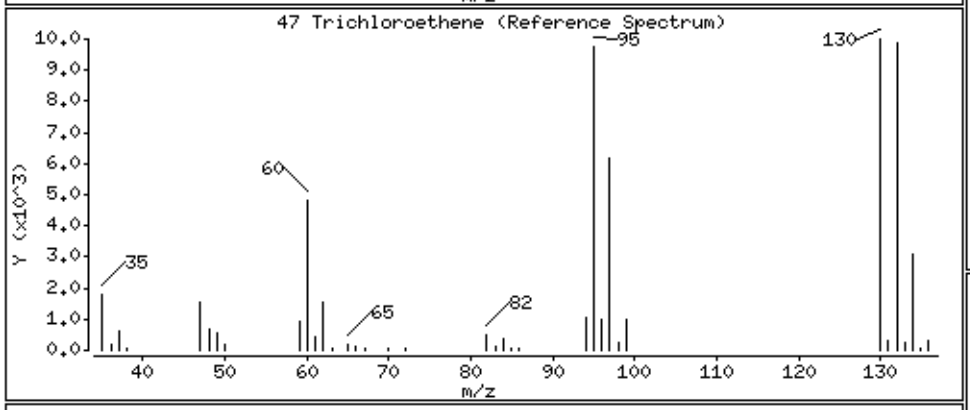
Purge Volume: 5.0 Operator: AM SRC: LIMS

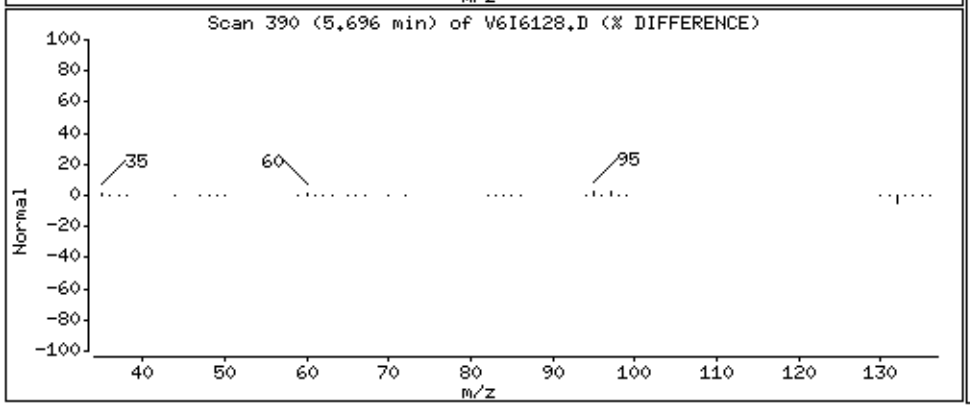
Column phase: DB-624 Column diameter: 0.25

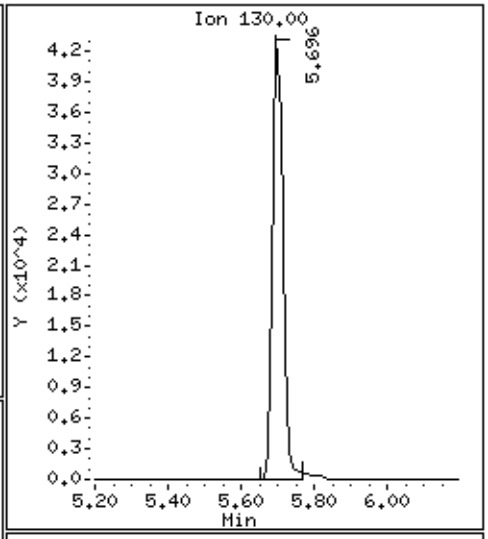
47 Trichloroethene Concentration: 40 ug/L

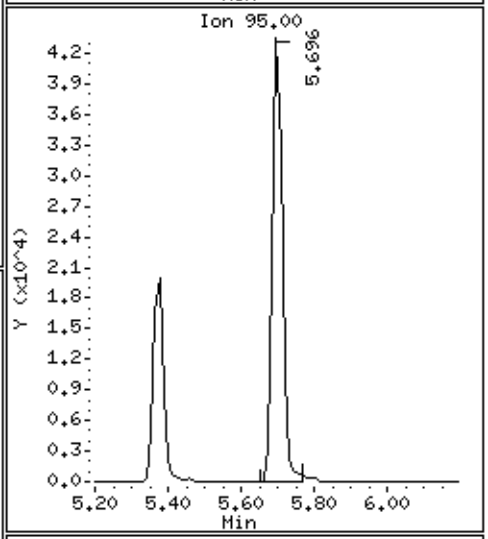


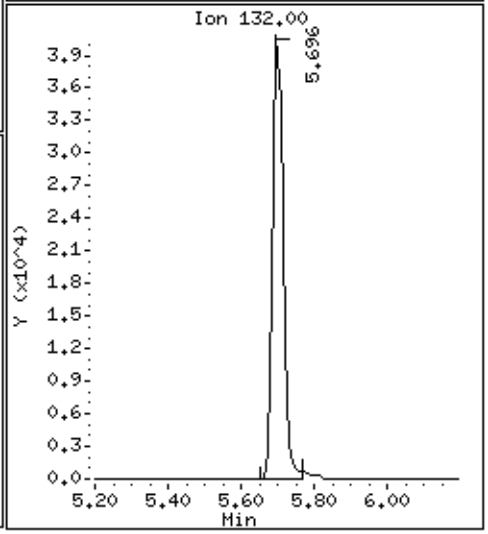












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6129.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	6.6	
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	0.97	J
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	23	
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

EPA SAMPLE NO.

MW-2-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6129.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6129.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120419.B\V6I6129.D
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Inj Date : 19-APR-2012 13:56
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-02A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

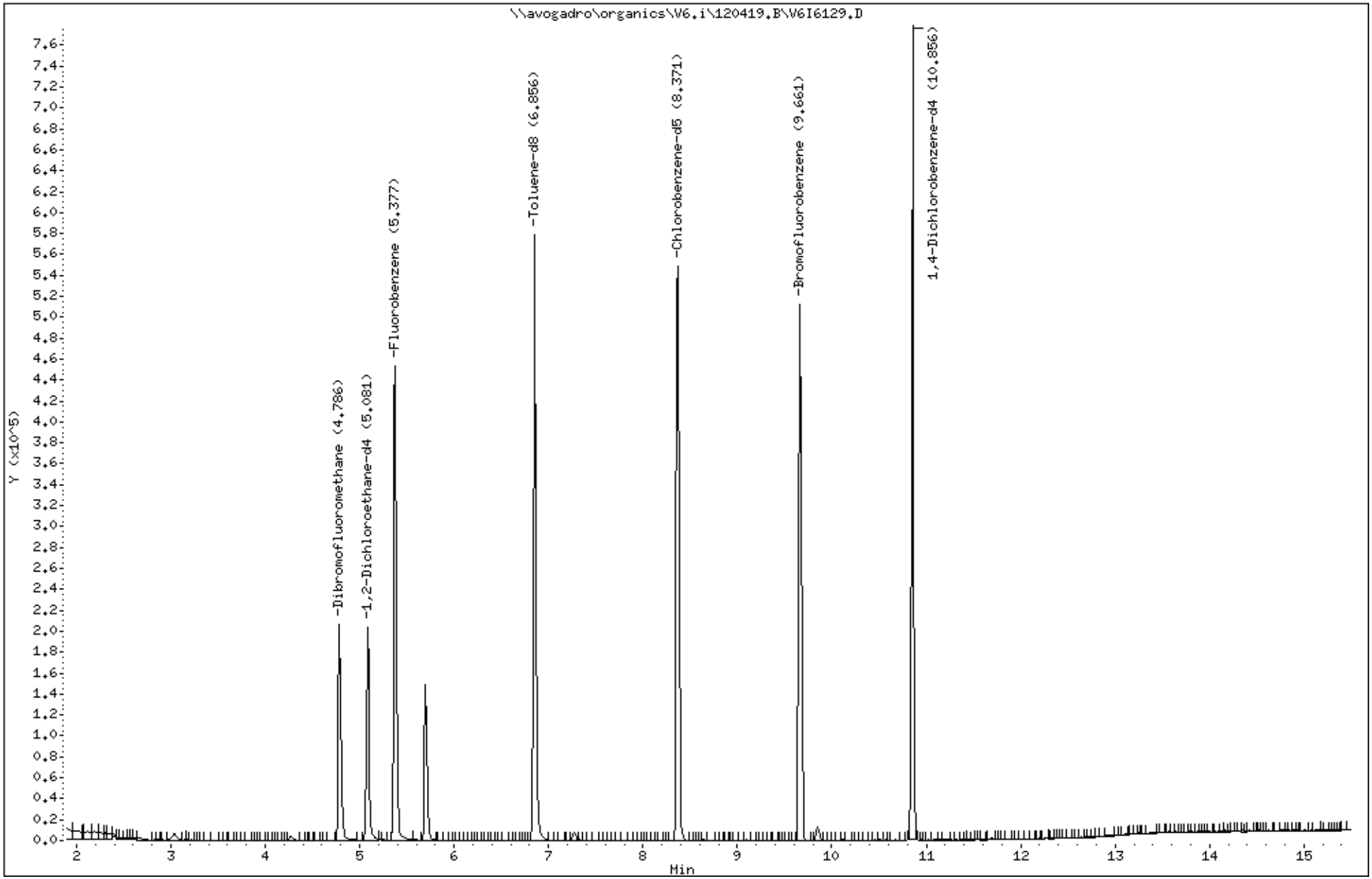
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	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	3.010	3.010	(0.560)	2820	1.34148	1
	12 Acetone	58	3.034	3.034	(0.564)	1956	6.59322	6(Q)
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	121545	50.6786	51
	37 1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	2727	0.97465	1.0
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	25998	49.8825	50
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	417254	50.0000	
	47 Trichloroethene	130	5.696	5.697	(1.059)	48292	22.8423	23
$	58 Toluene-d8	98	6.856	6.856	(0.819)	419759	48.5369	48
*	68 Chlorobenzene-d5	117	8.370	8.370	(1.000)	369079	50.0000	
$	79 Bromofluorobenzene	95	9.660	9.660	(1.154)	184256	48.5642	48
*	92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	191960	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120419.B\V6I6129.D
Date : 19-APR-2012 13:56
Client ID: MW-2-041612
Instrument: V6.i
Sample Info: 5ML,L0731-02A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6129.D

Date : 19-APR-2012 13:56

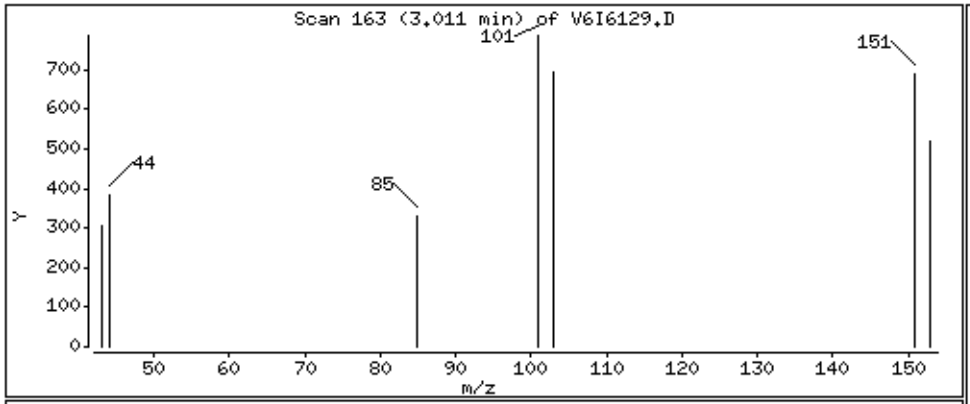
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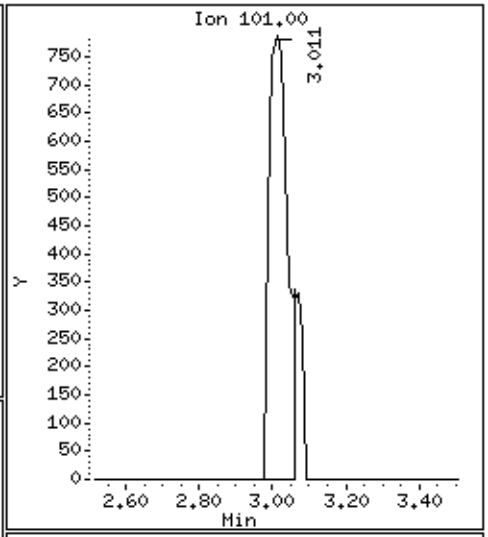
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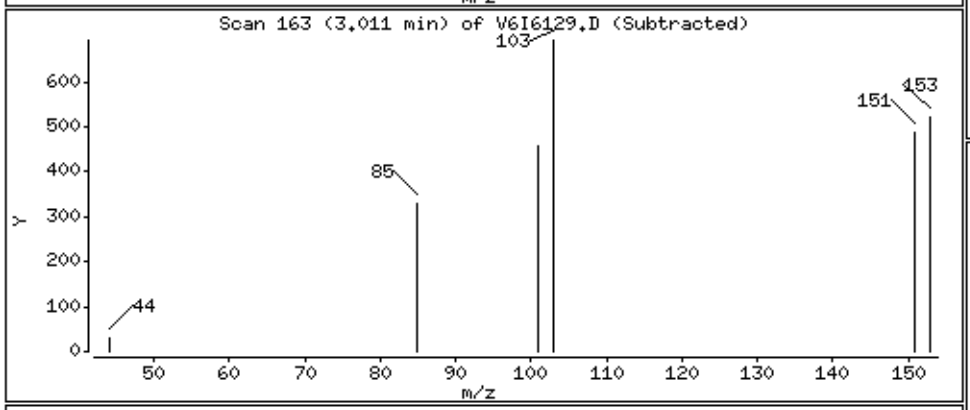
Purge Volume: 5.0 Operator: AM SRC: LIMS

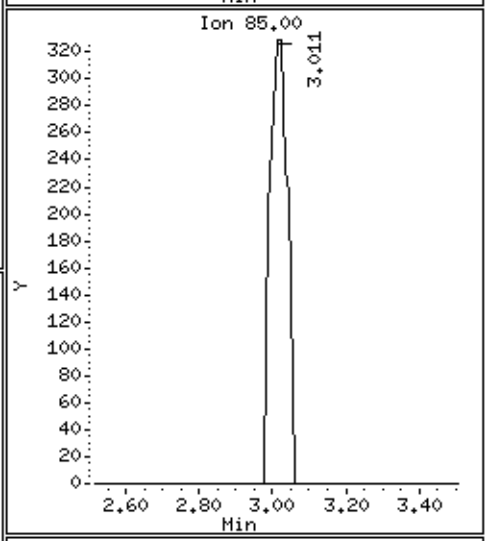
Column phase: DB-624 Column diameter: 0.25

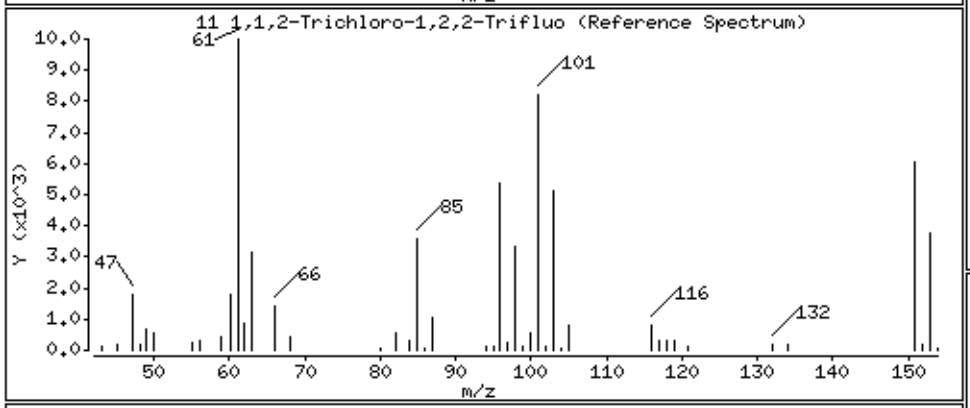
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 1 ug/L

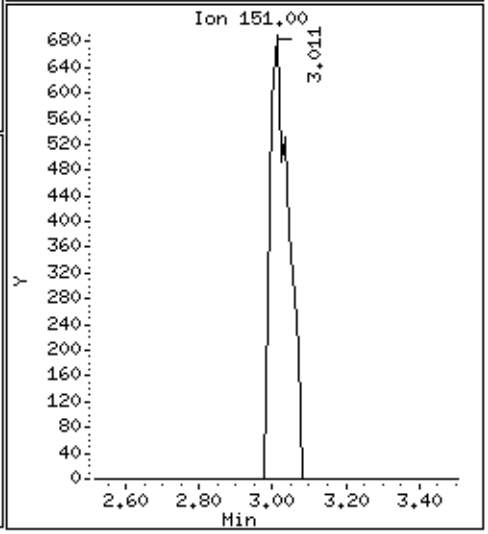


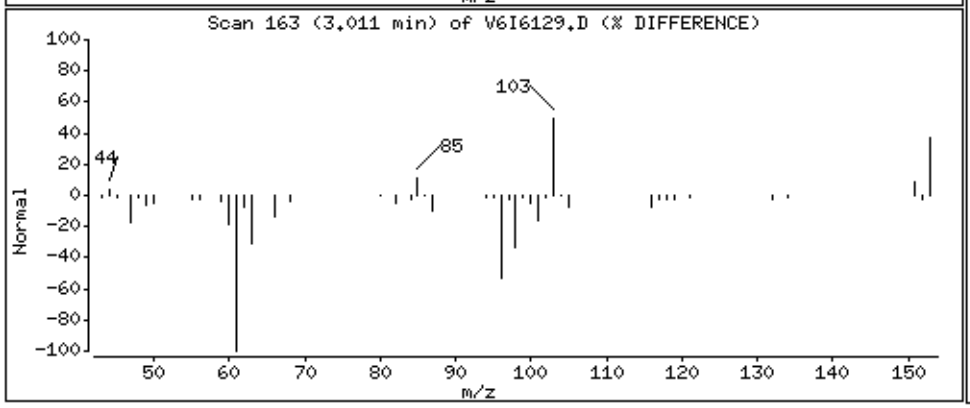












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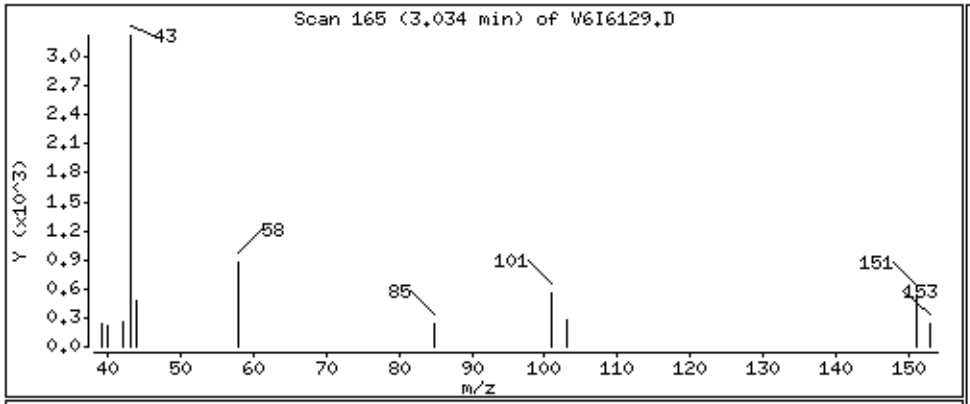
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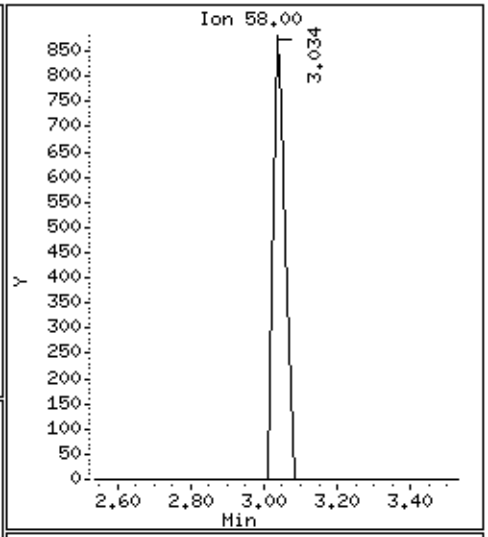
Sample Info: 5ML,L0731-02A,,65685

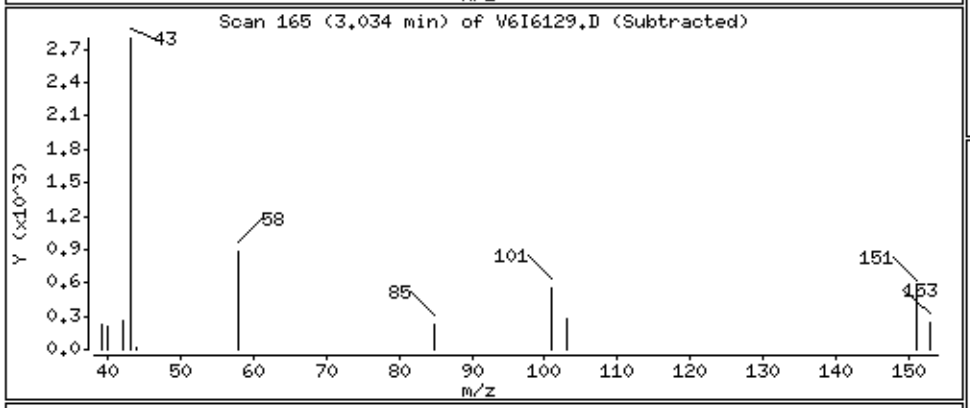
Purge Volume: 5.0 Operator: AM SRC: LIMS

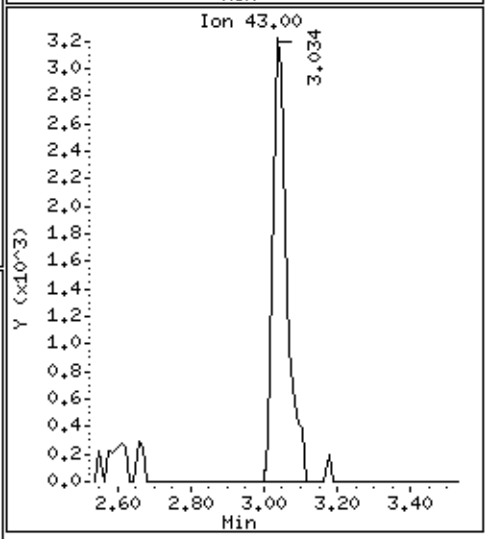
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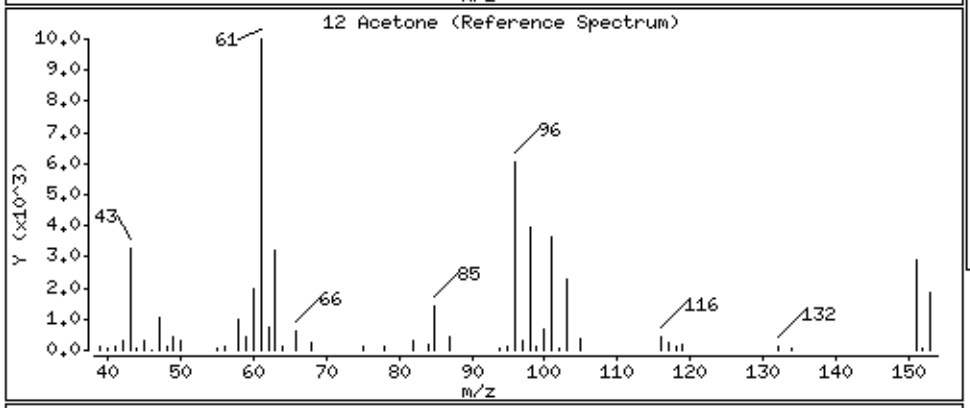
12 Acetone Concentration: 6 ug/L

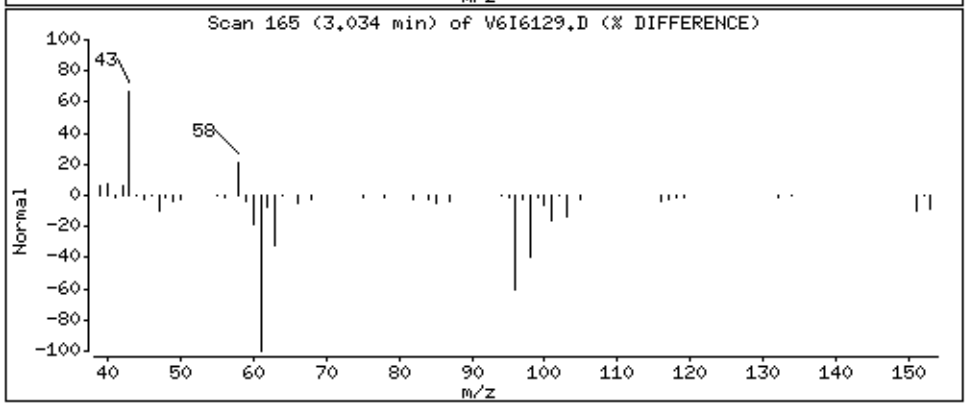












Data File: \\avogadro\organics\V6.i\120419.B\V6I6129.D

Date : 19-APR-2012 13:56

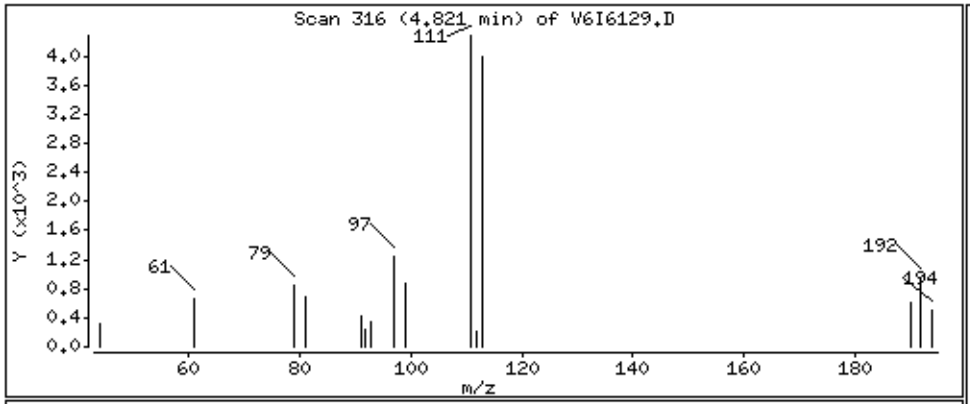
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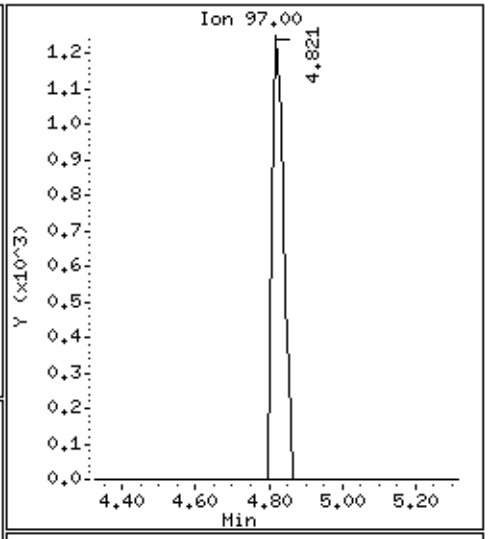
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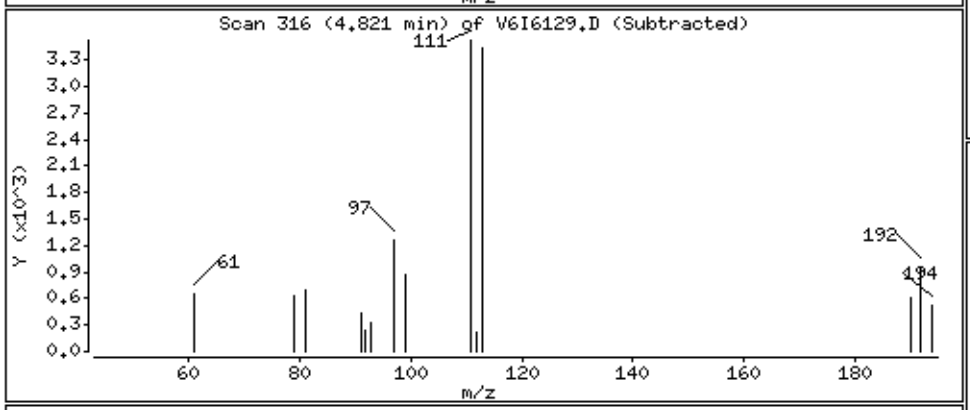
Purge Volume: 5.0 Operator: AM SRC: LIMS

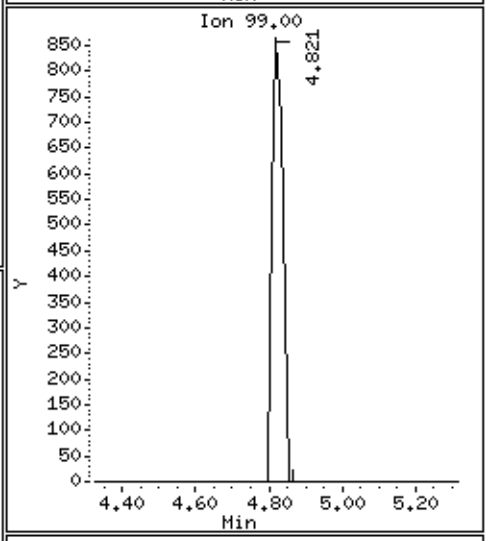
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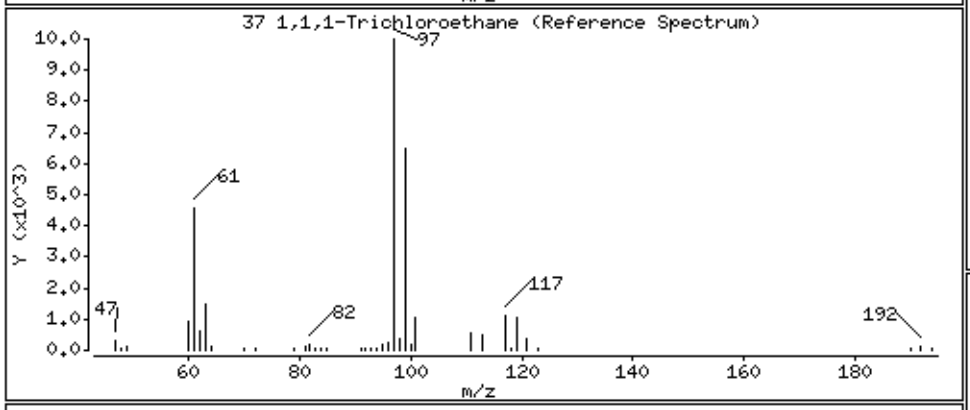
37 1,1,1-Trichloroethane Concentration: 1.0 ug/L

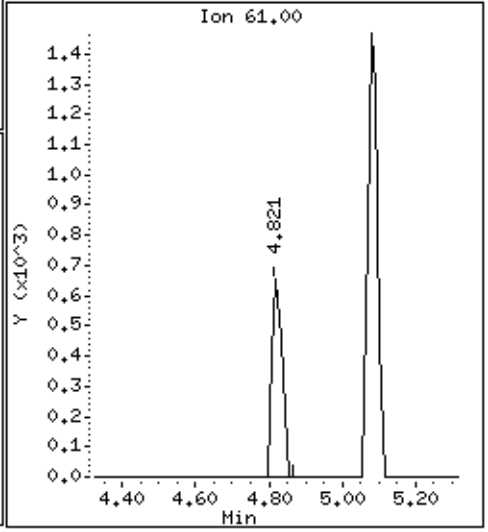


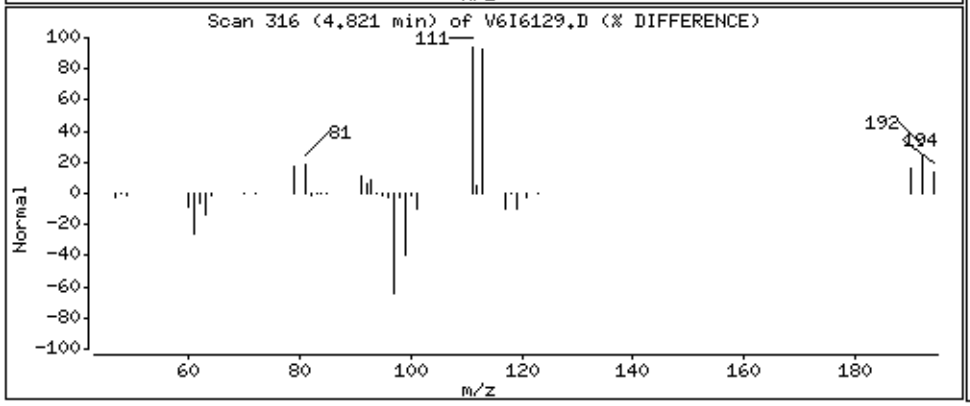












Data File: \\avogadro\organics\V6.i\120419.B\V6I6129.D

Date : 19-APR-2012 13:56

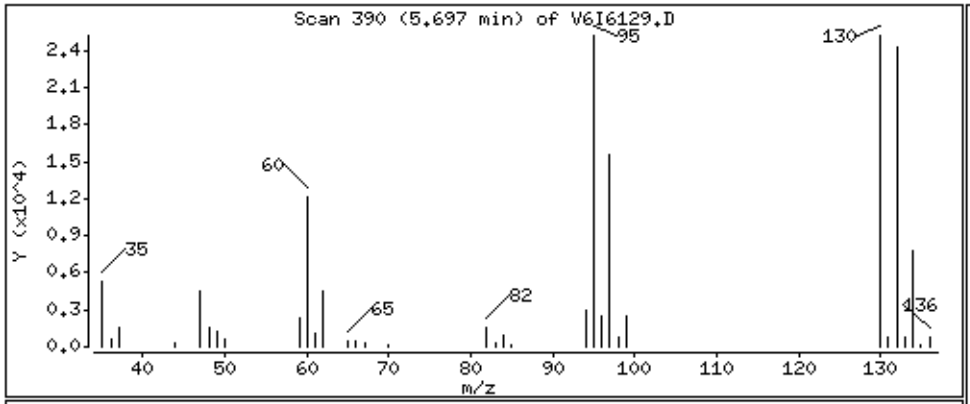
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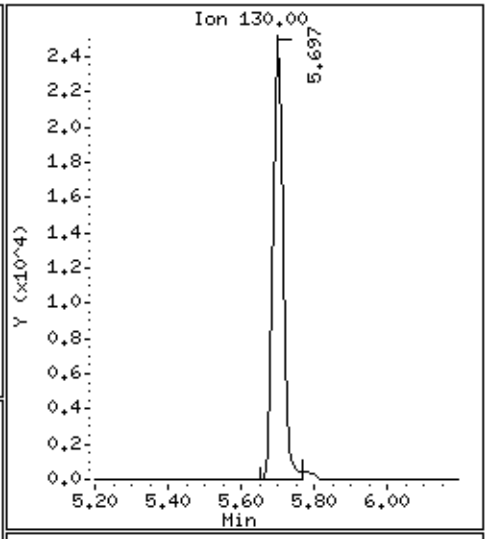
Sample Info: 5ML,L0731-02A,,65685

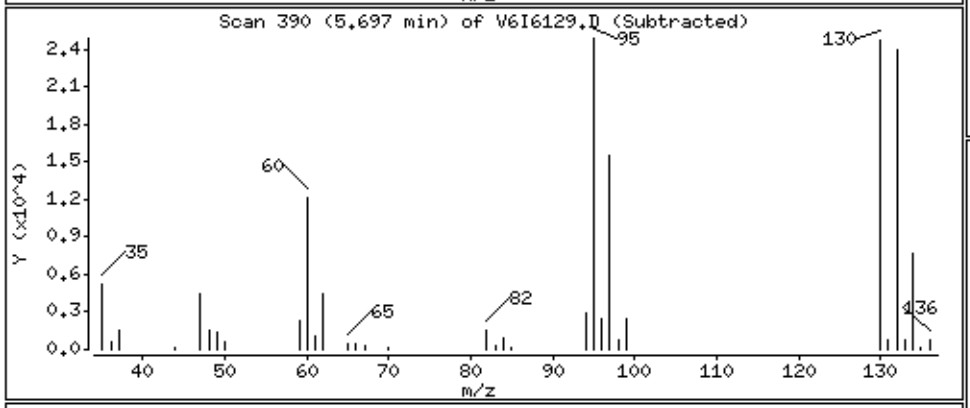
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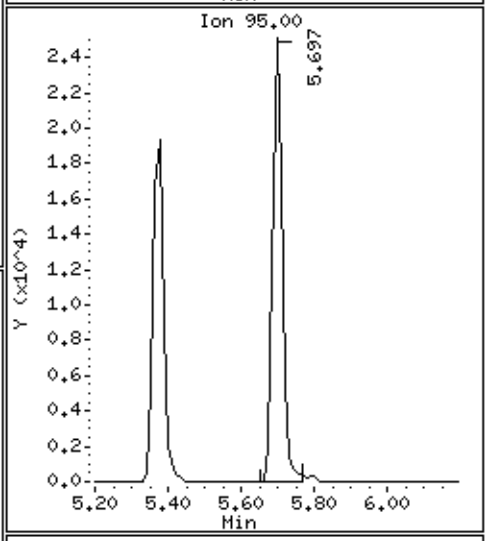
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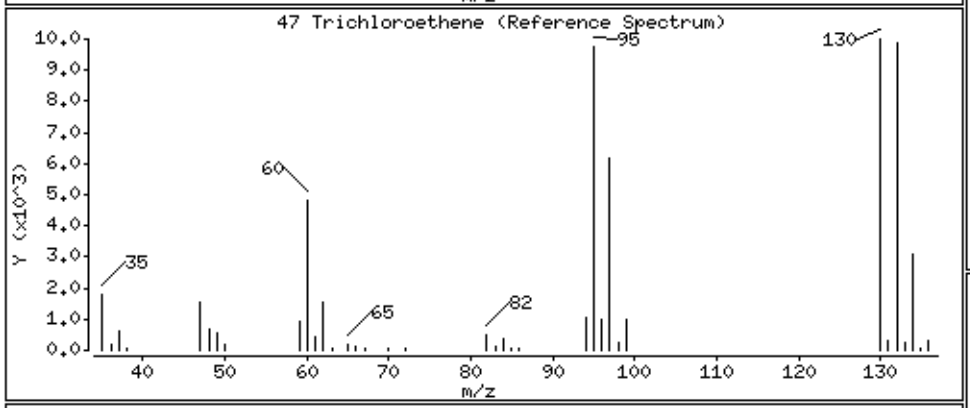
47 Trichloroethene Concentration: 23 ug/L

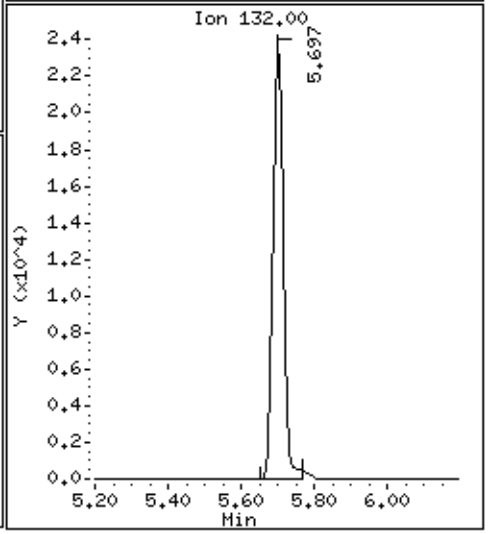


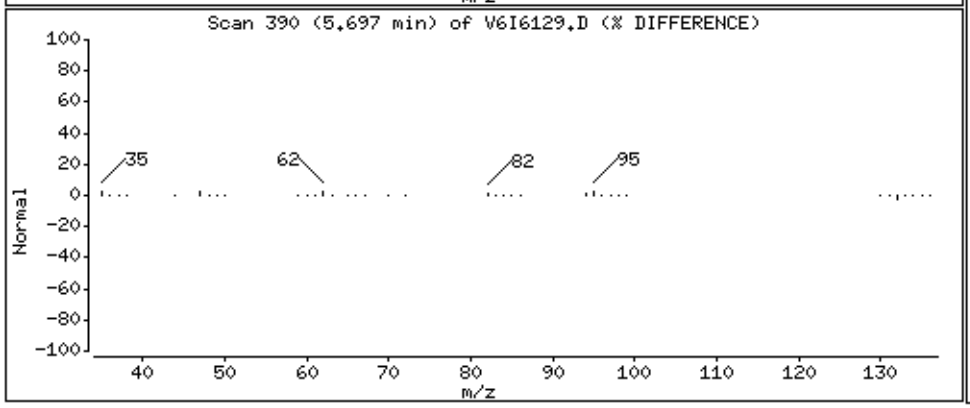












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6130.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.8	J
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	110	
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

EPA SAMPLE NO.

MW-5-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6130.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6130.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

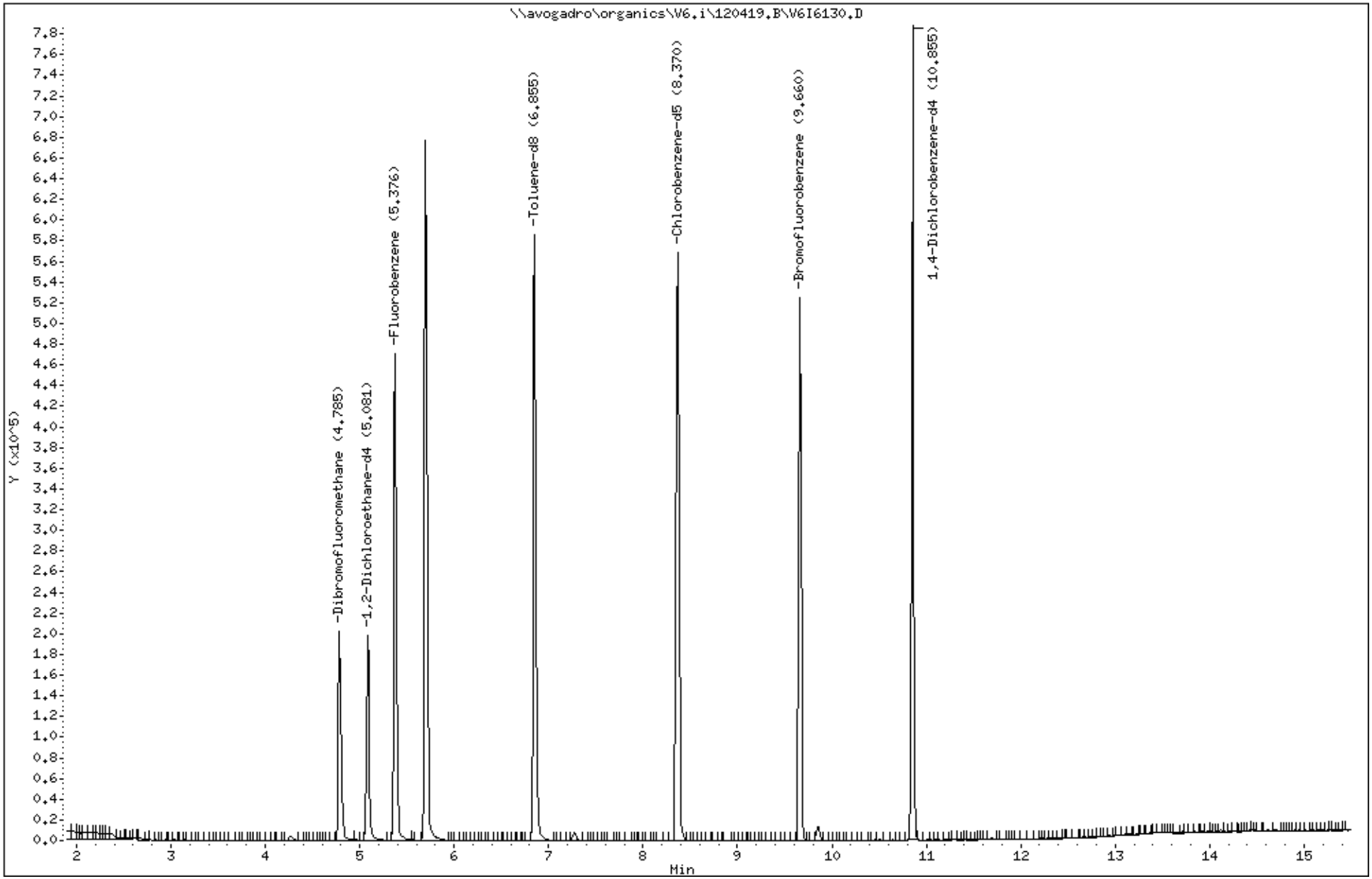
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Lab Smp Id: L0731-03A Client Smp ID: MW-5-041612
Inj Date : 19-APR-2012 14:20
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-03A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 34
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	4.784	4.785	(0.890)	120561	49.8158	50
	37 1,1,1-Trichloroethane	97	4.820	4.821	(0.897)	5046	1.78724	2
$	42 1,2-Dichloroethane-d4	102	5.092	5.081	(0.947)	26290	49.9886	50
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	421045	50.0000	
	47 Trichloroethene	130	5.695	5.697	(1.059)	228033	106.889	110
$	58 Toluene-d8	98	6.855	6.856	(0.819)	422247	48.7077	49
*	68 Chlorobenzene-d5	117	8.370	8.370	(1.000)	369965	50.0000	
$	79 Bromofluorobenzene	95	9.659	9.660	(1.154)	184551	48.5255	48
*	92 1,4-Dichlorobenzene-d4	152	10.854	10.855	(1.000)	191945	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6130.D
Date : 19-APR-2012 14:20
Client ID: MW-5-041612
Instrument: V6.i
Sample Info: 5ML,L0731-03A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6130.D

Date : 19-APR-2012 14:20

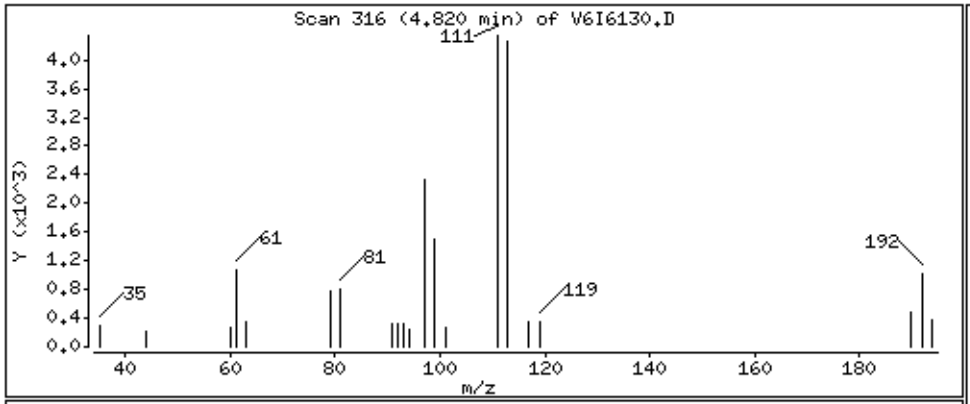
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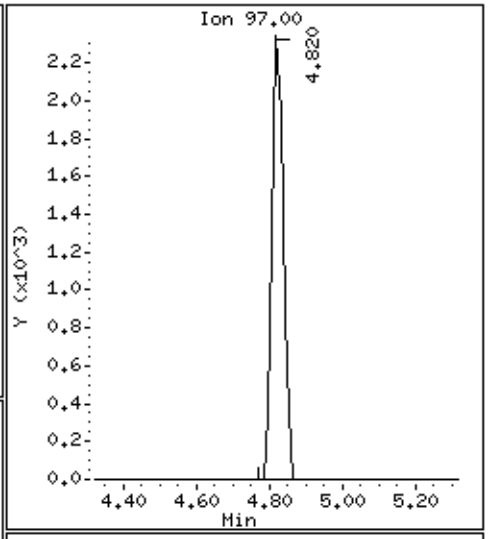
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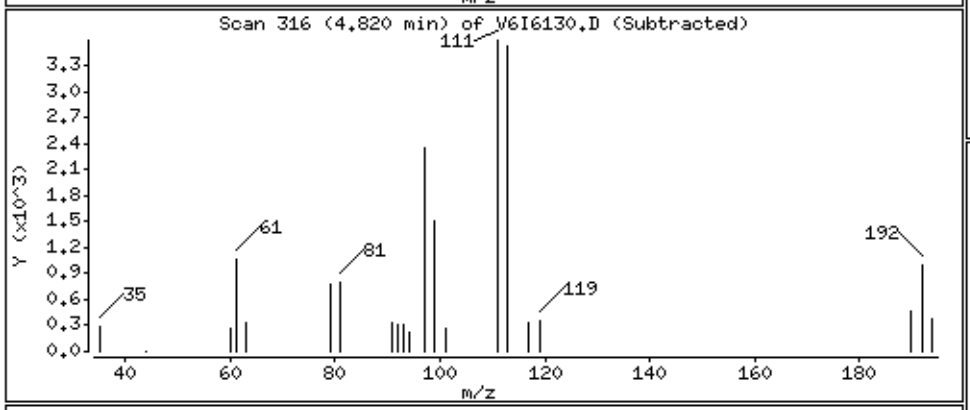
Purge Volume: 5.0 Operator: AM SRC: LIMS

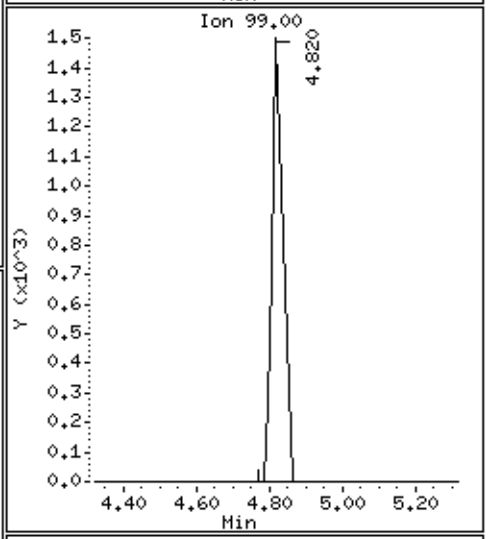
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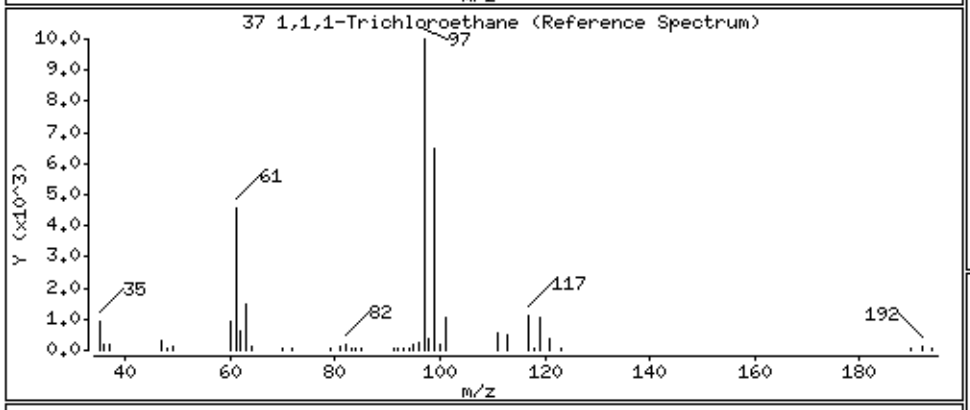
37 1,1,1-Trichloroethane Concentration: 2 ug/L

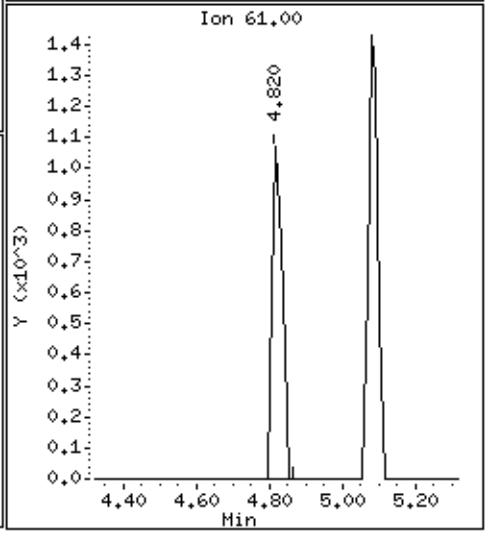


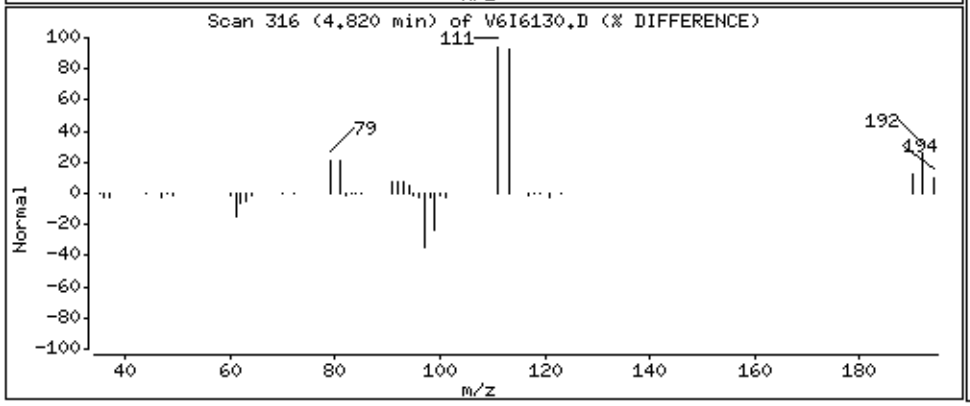












Data File: \\avogadro\organics\V6.i\120419.B\V6I6130.D

Date : 19-APR-2012 14:20

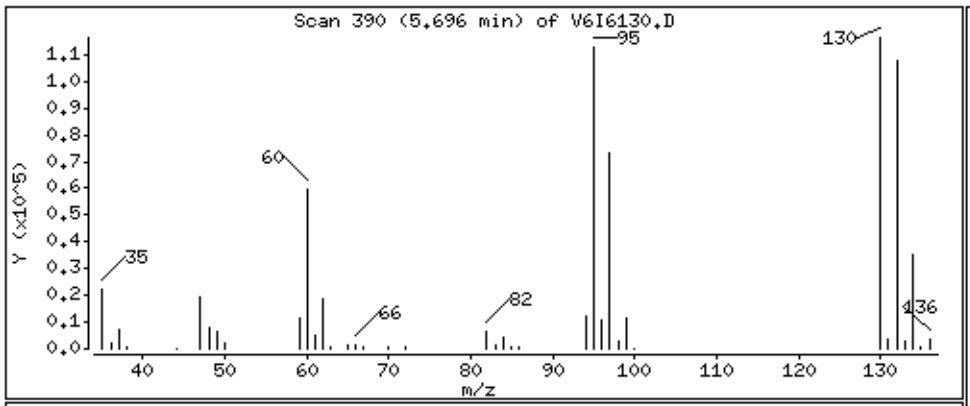
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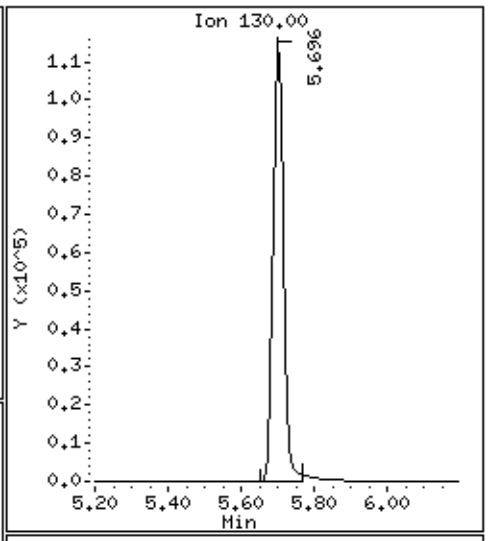
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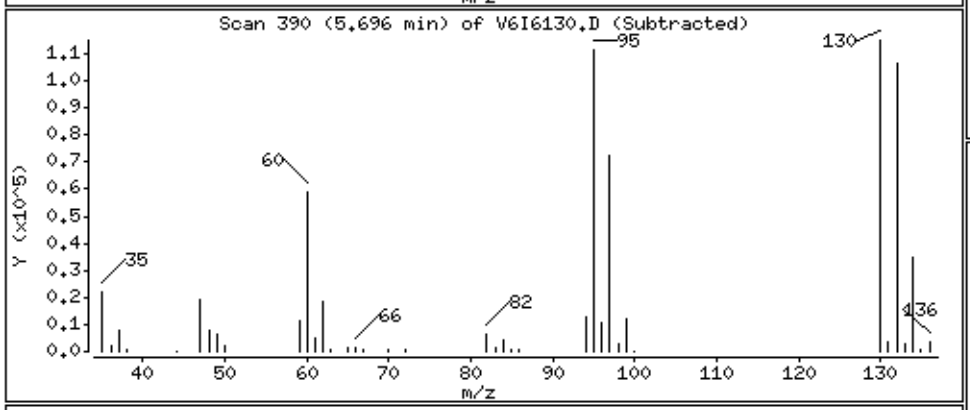
Purge Volume: 5.0 Operator: AM SRC: LIMS

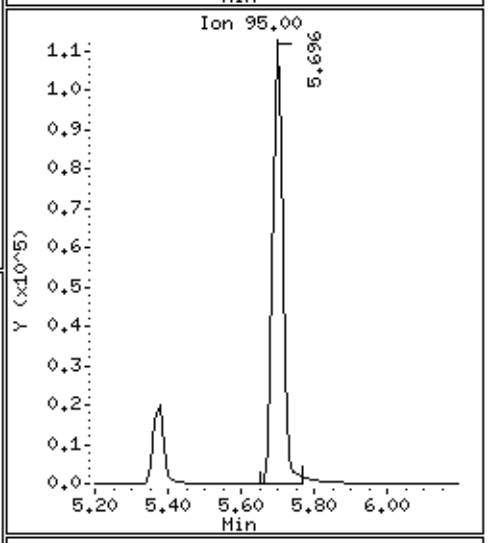
Column phase: DB-624 Column diameter: 0.25

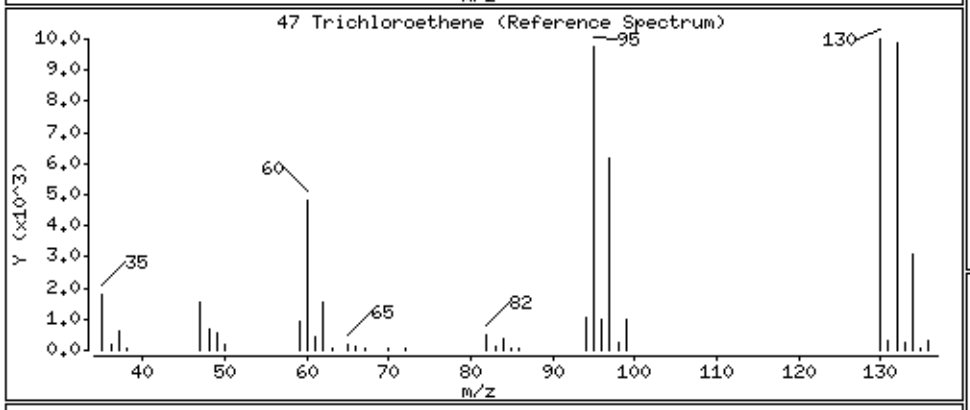
47 Trichloroethene Concentration: 110 ug/L

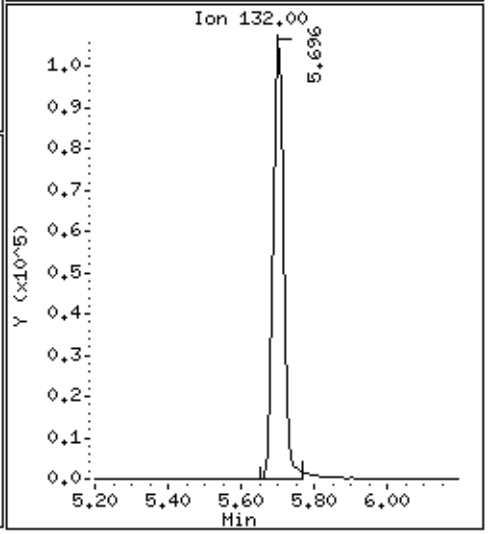


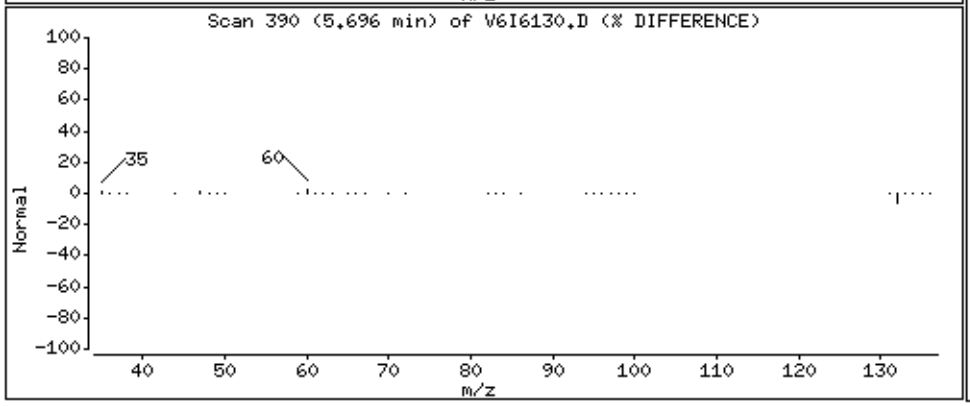












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6131.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.8	
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

EPA SAMPLE NO.

MW-6-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6131.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6131.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

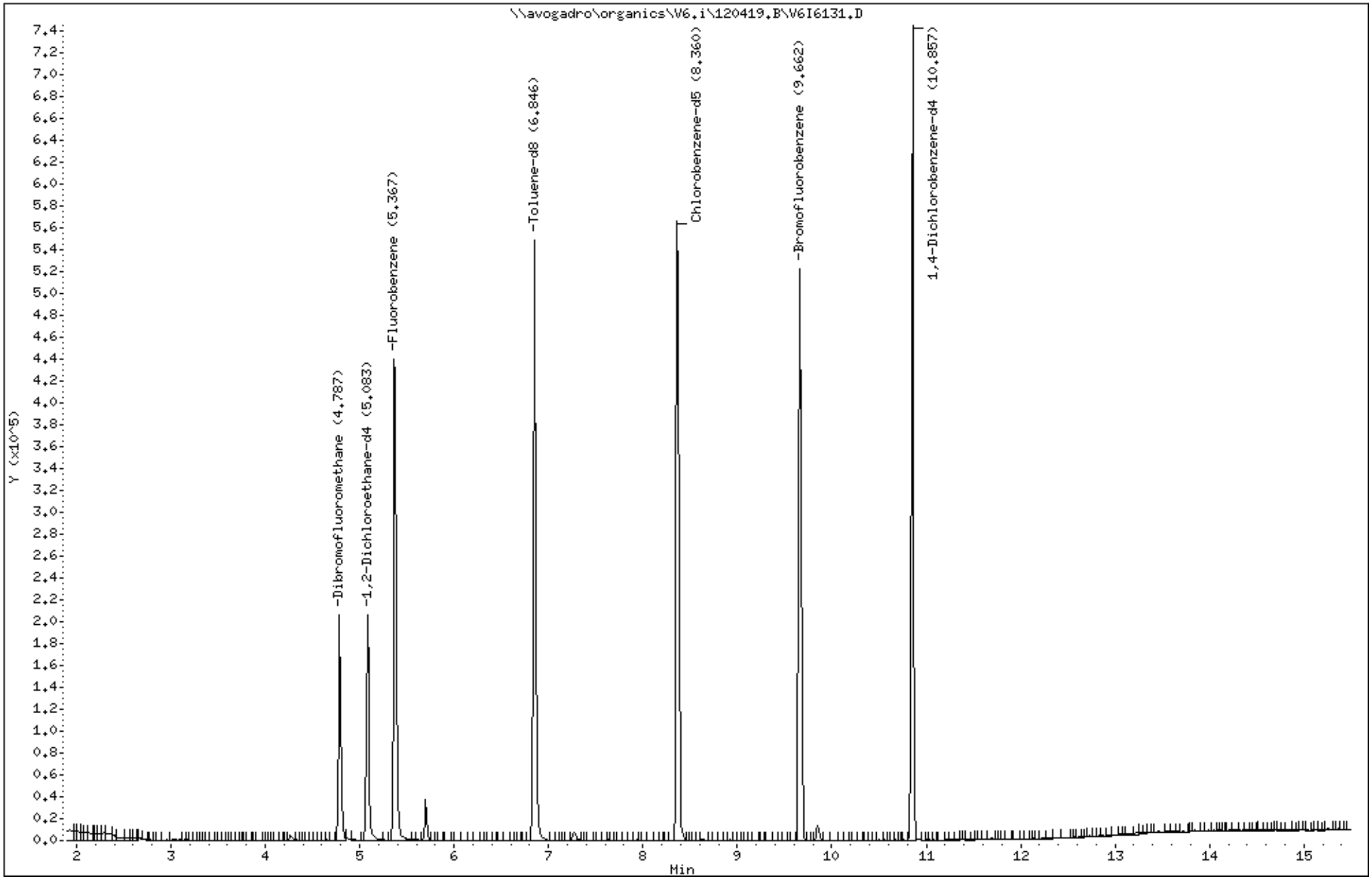
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Lab Smp Id: L0731-04A Client Smp ID: MW-6-041612
Inj Date : 19-APR-2012 14:45
Operator : AM   SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-04A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 35
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	4.786	4.785	(0.890)	121065	50.4379	50
$	42 1,2-Dichloroethane-d4	102	5.082	5.081	(0.945)	26257	50.3390	50
*	46 Fluorobenzene	96	5.378	5.377	(1.000)	417590	50.0000	
	47 Trichloroethene	130	5.698	5.697	(1.059)	12214	5.77261	6
$	58 Toluene-d8	98	6.857	6.856	(0.820)	421747	48.5688	48
*	68 Chlorobenzene-d5	117	8.360	8.370	(1.000)	370583	50.0000	
$	79 Bromofluorobenzene	95	9.662	9.660	(1.156)	183700	48.2212	48
*	92 1,4-Dichlorobenzene-d4	152	10.857	10.855	(1.000)	191547	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6131.D
Date : 19-APR-2012 14:45
Client ID: MW-6-041612
Instrument: V6.i
Sample Info: 5ML,L0731-04A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6131.D

Date : 19-APR-2012 14:45

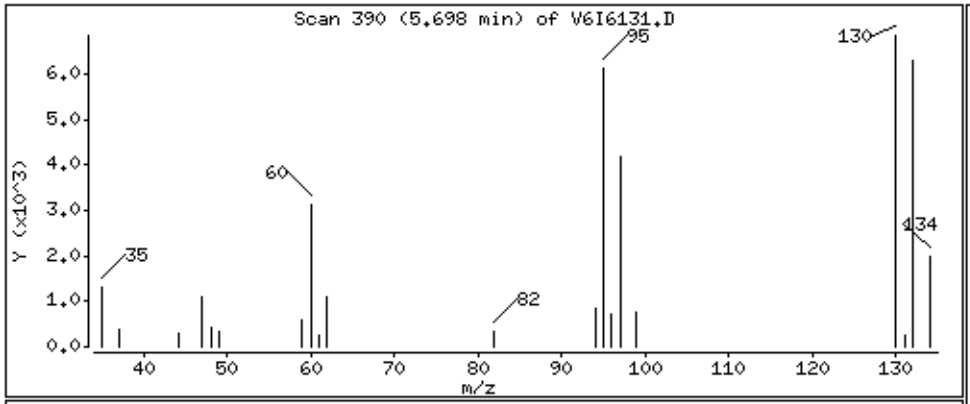
Client ID: MW-6-041612 Instrument: V6.i

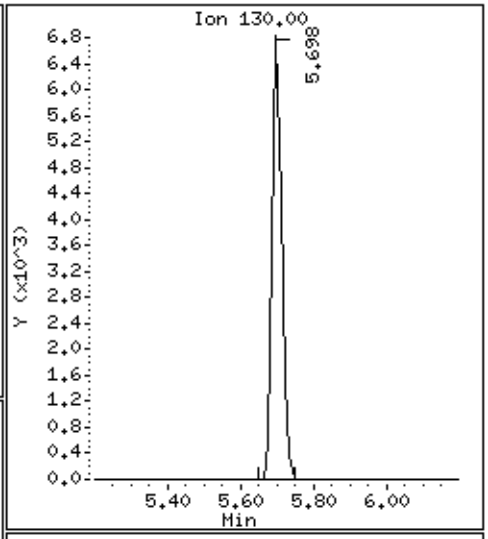
Sample Info: 5ML,L0731-04A,,65685

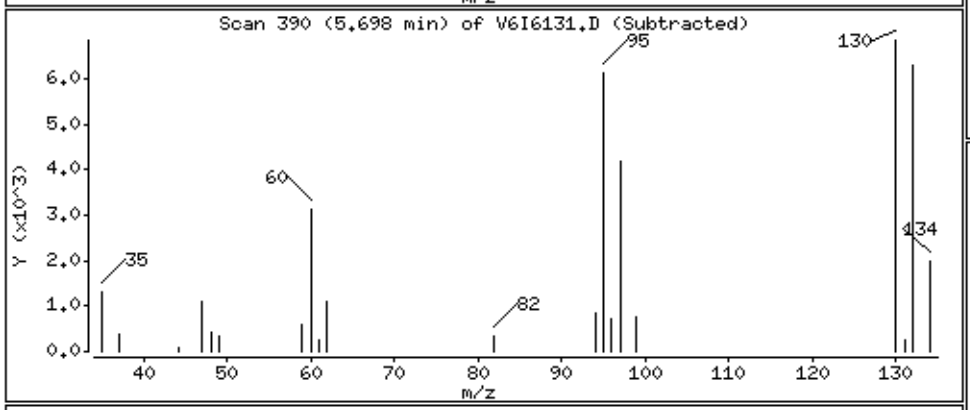
Purge Volume: 5.0 Operator: AM SRC: LIMS

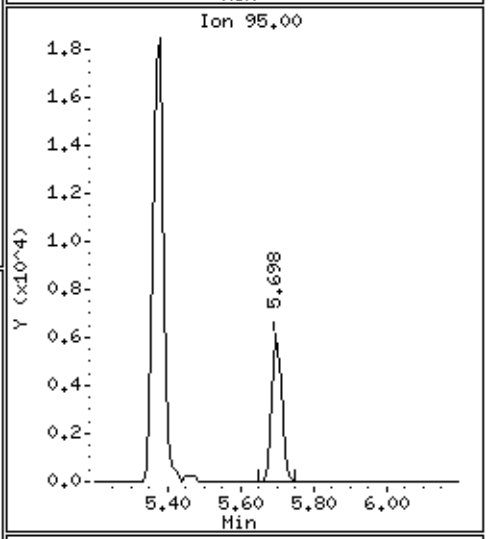
Column phase: DB-624 Column diameter: 0.25

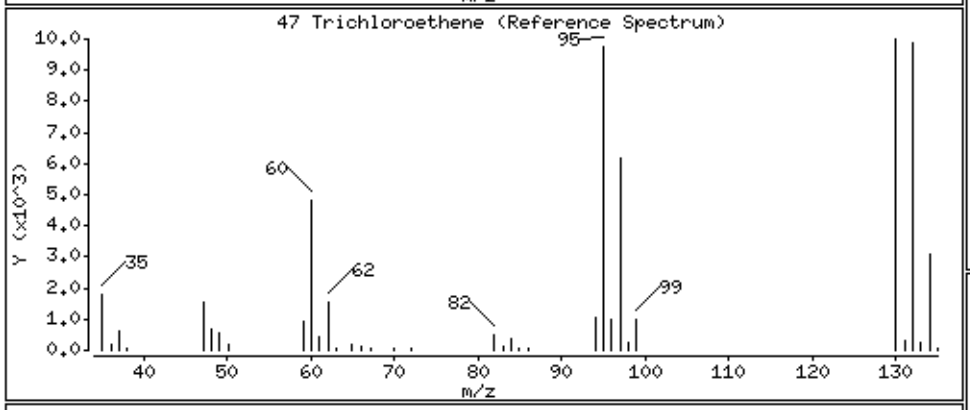
47 Trichloroethene Concentration: 6 ug/L

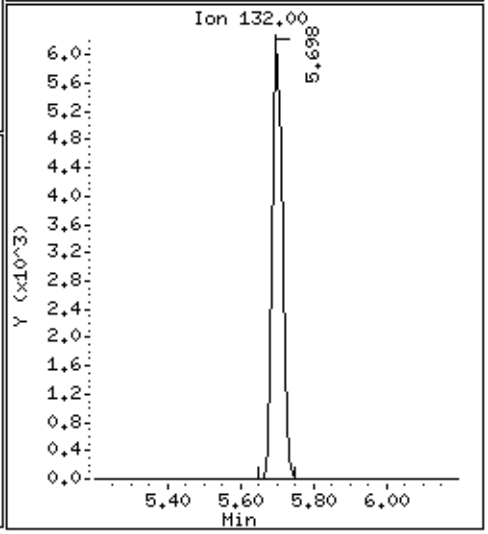


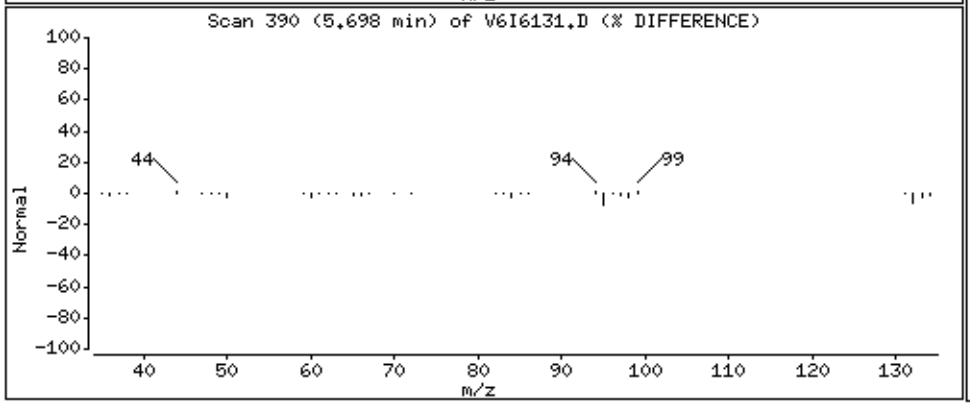












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6132.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	0.72	J
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	1.5	J
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

EPA SAMPLE NO.

MW-9-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6132.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6132.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

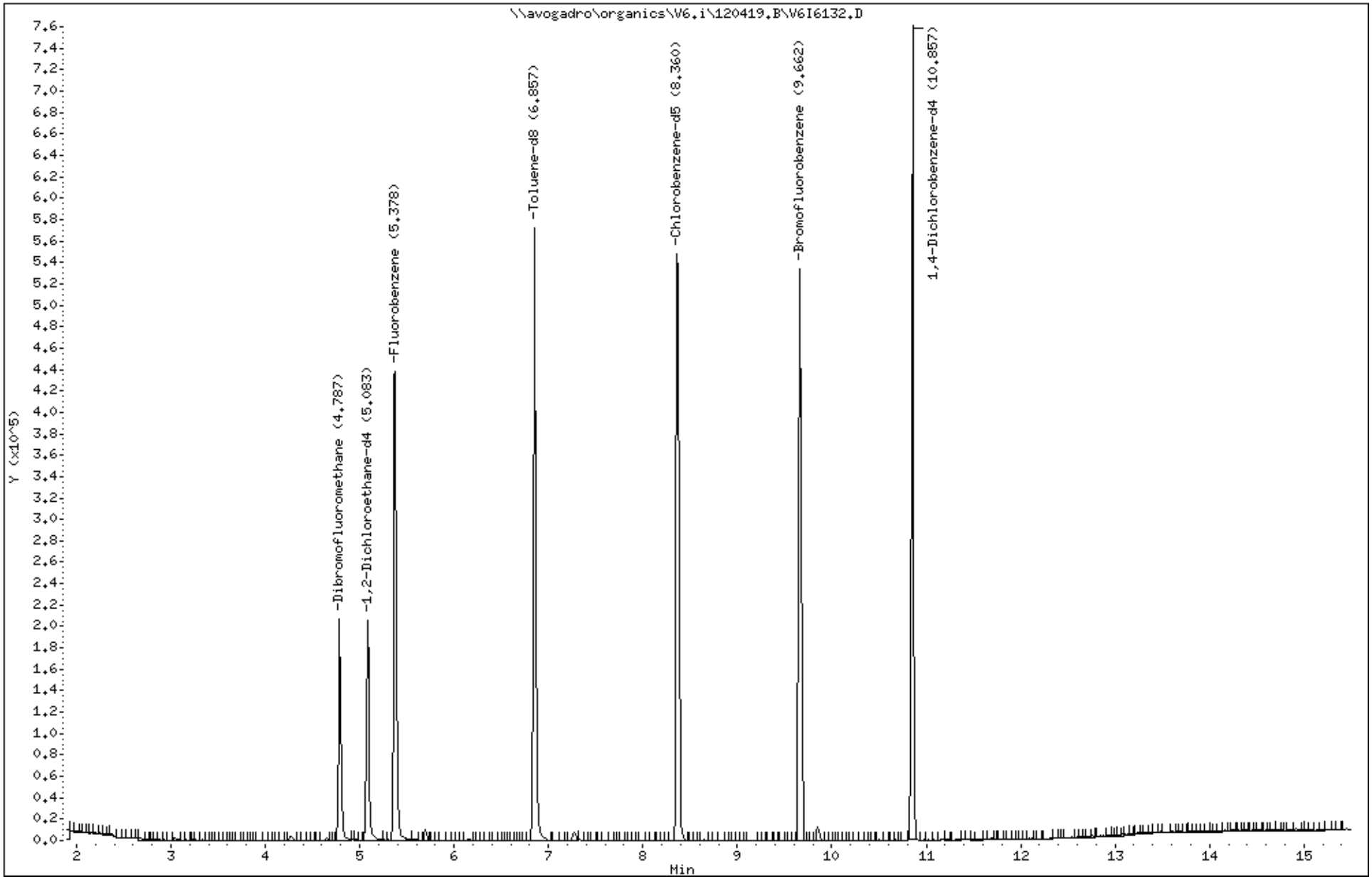
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Inj Date : 19-APR-2012 15:09
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-05A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 36
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	4.656	4.655	(0.866)	2421	0.72351	0.7
$	36 Dibromofluoromethane	113	4.786	4.785	(0.890)	123408	51.3358	51
$	42 1,2-Dichloroethane-d4	102	5.082	5.081	(0.945)	26158	50.0729	50
*	46 Fluorobenzene	96	5.378	5.377	(1.000)	418226	50.0000	
	47 Trichloroethene	130	5.697	5.697	(1.059)	3243	1.53038	2
$	58 Toluene-d8	98	6.857	6.856	(0.819)	424438	48.8222	49
*	68 Chlorobenzene-d5	117	8.372	8.370	(1.000)	371012	50.0000	
$	79 Bromofluorobenzene	95	9.661	9.660	(1.154)	184677	48.4216	48
*	92 1,4-Dichlorobenzene-d4	152	10.856	10.855	(1.000)	191920	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6132.D
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Client ID: MW-9-041612
Instrument: V6.i
Sample Info: 5ML,L0731-05A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6132.D

Date : 19-APR-2012 15:09

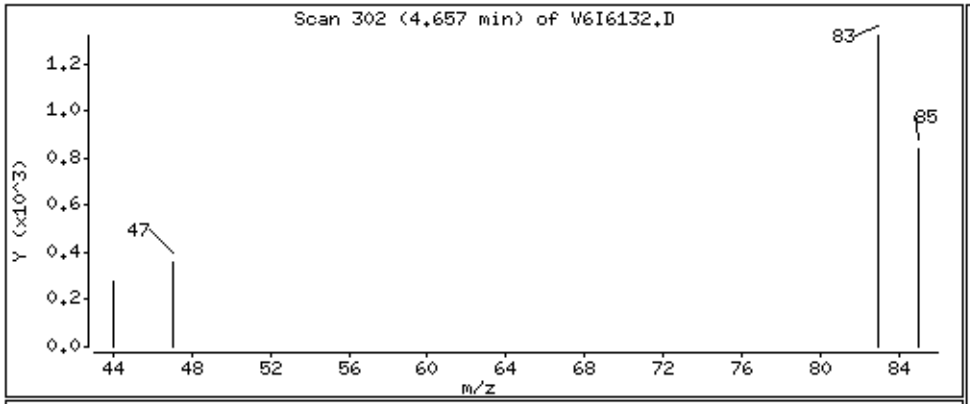
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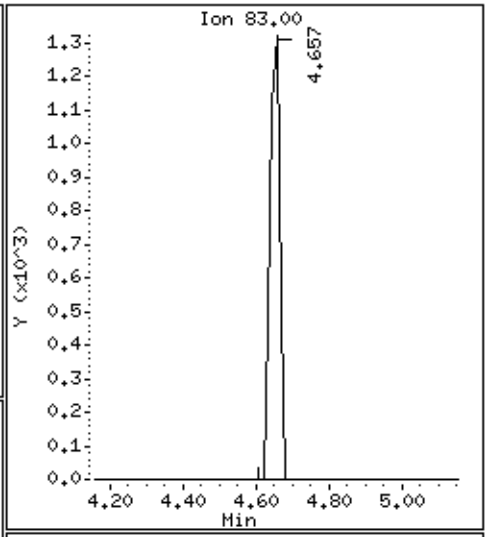
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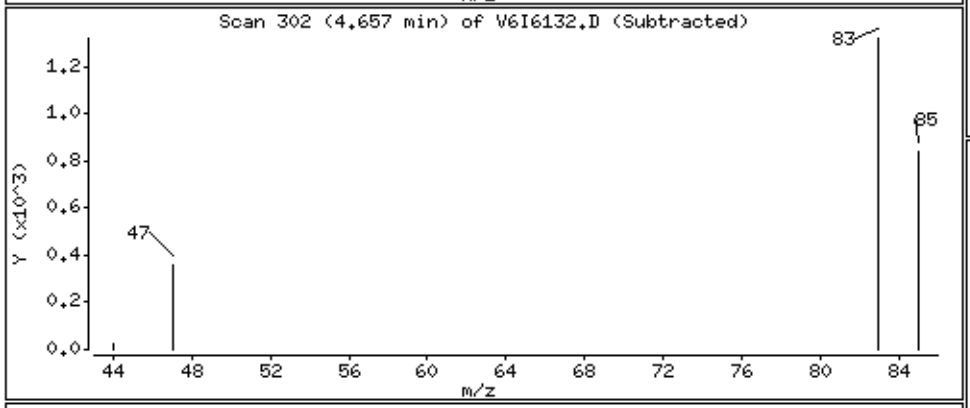
Purge Volume: 5.0 Operator: AM SRC: LIMS

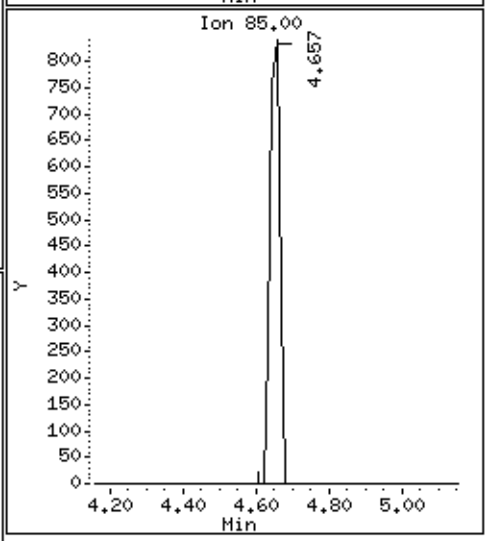
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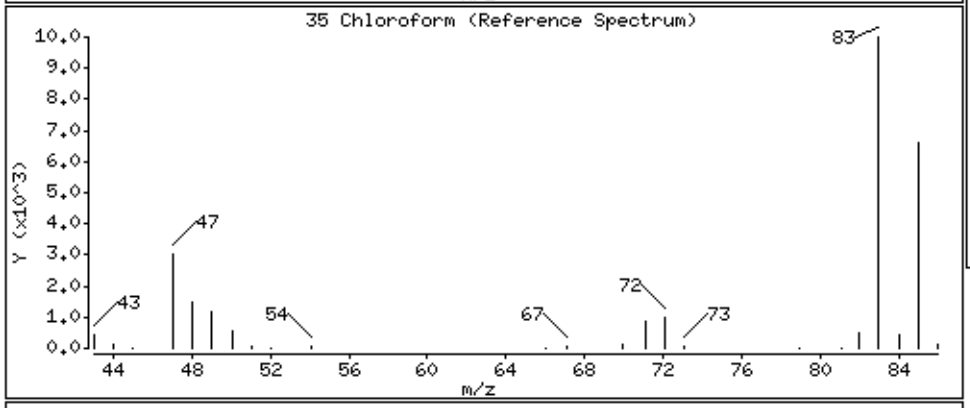
35 Chloroform Concentration: 0.7 ug/L

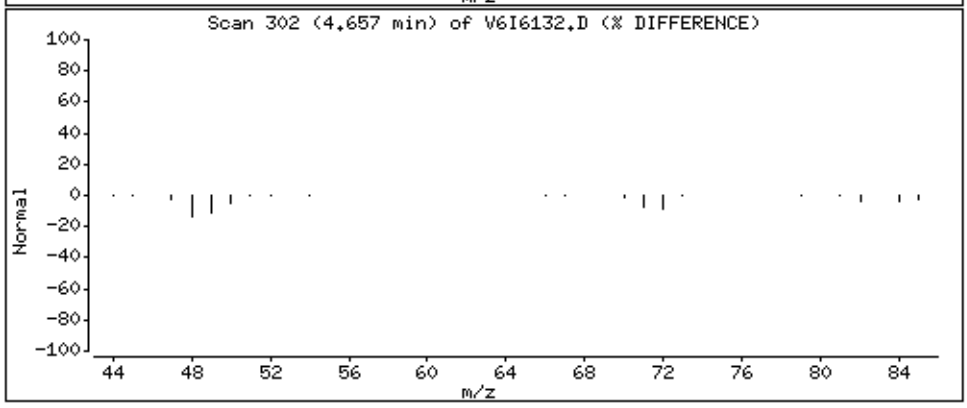












Data File: \\avogadro\organics\V6.i\120419.B\V6I6132.D

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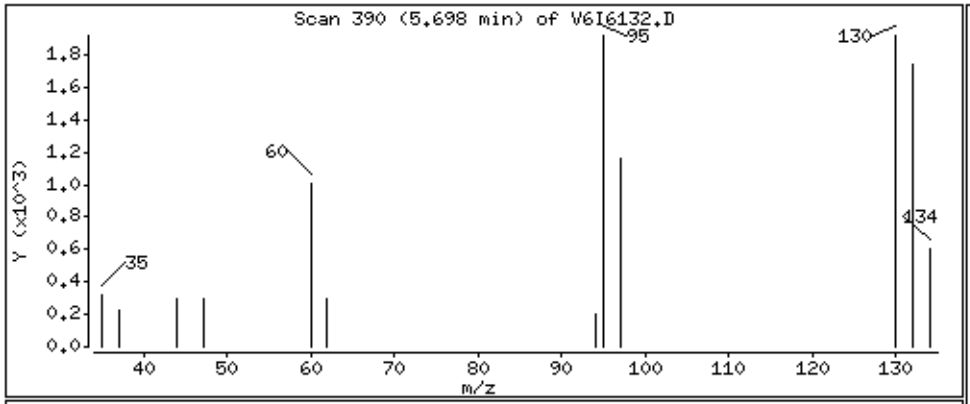
Client ID: MW-9-041612 Instrument: V6.i

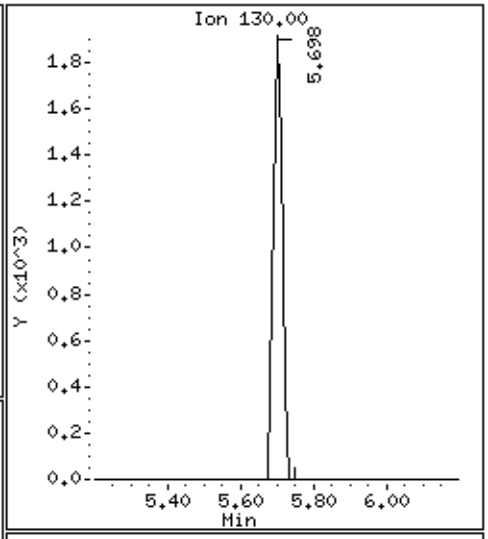
Sample Info: 5ML,L0731-05A,,65685

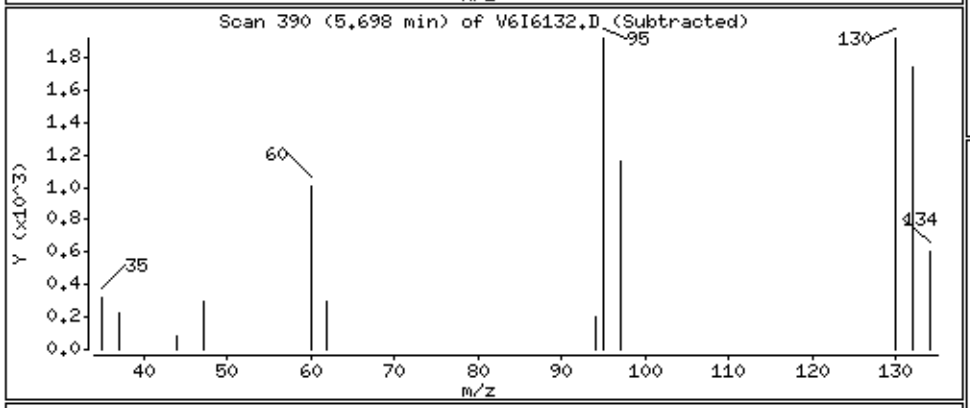
Purge Volume: 5.0 Operator: AM SRC: LIMS

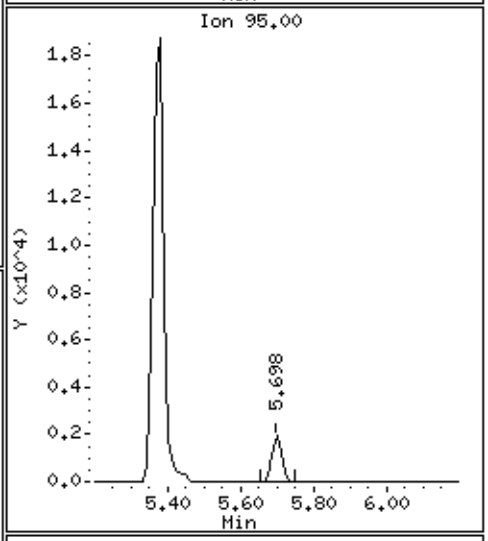
Column phase: DB-624 Column diameter: 0.25

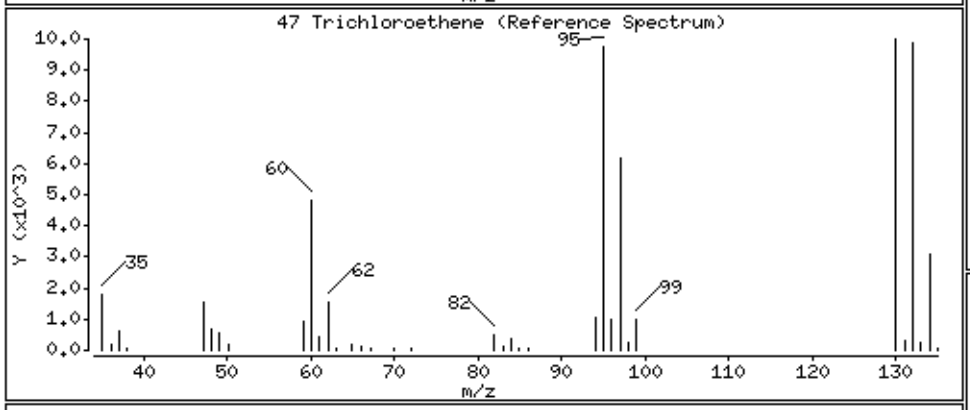
47 Trichloroethene Concentration: 2 ug/L

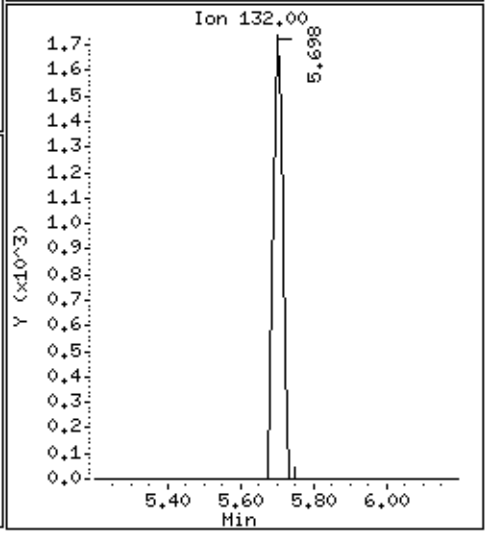


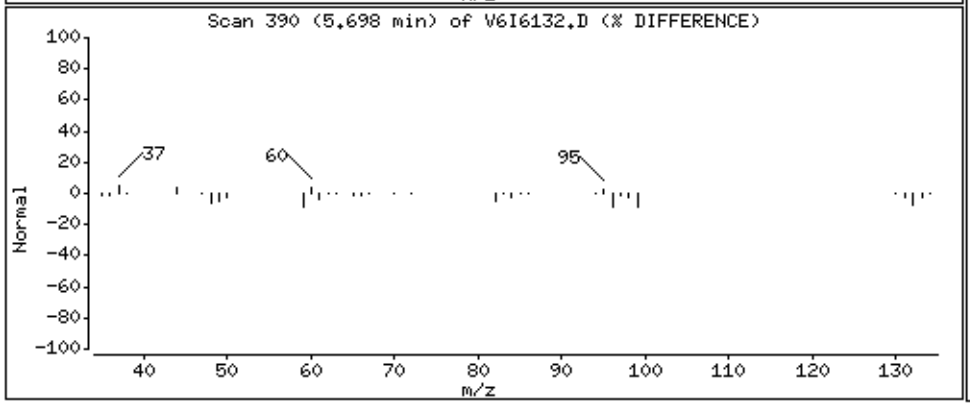












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6133.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	40	
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

EPA SAMPLE NO.

DUP-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6133.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6133.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

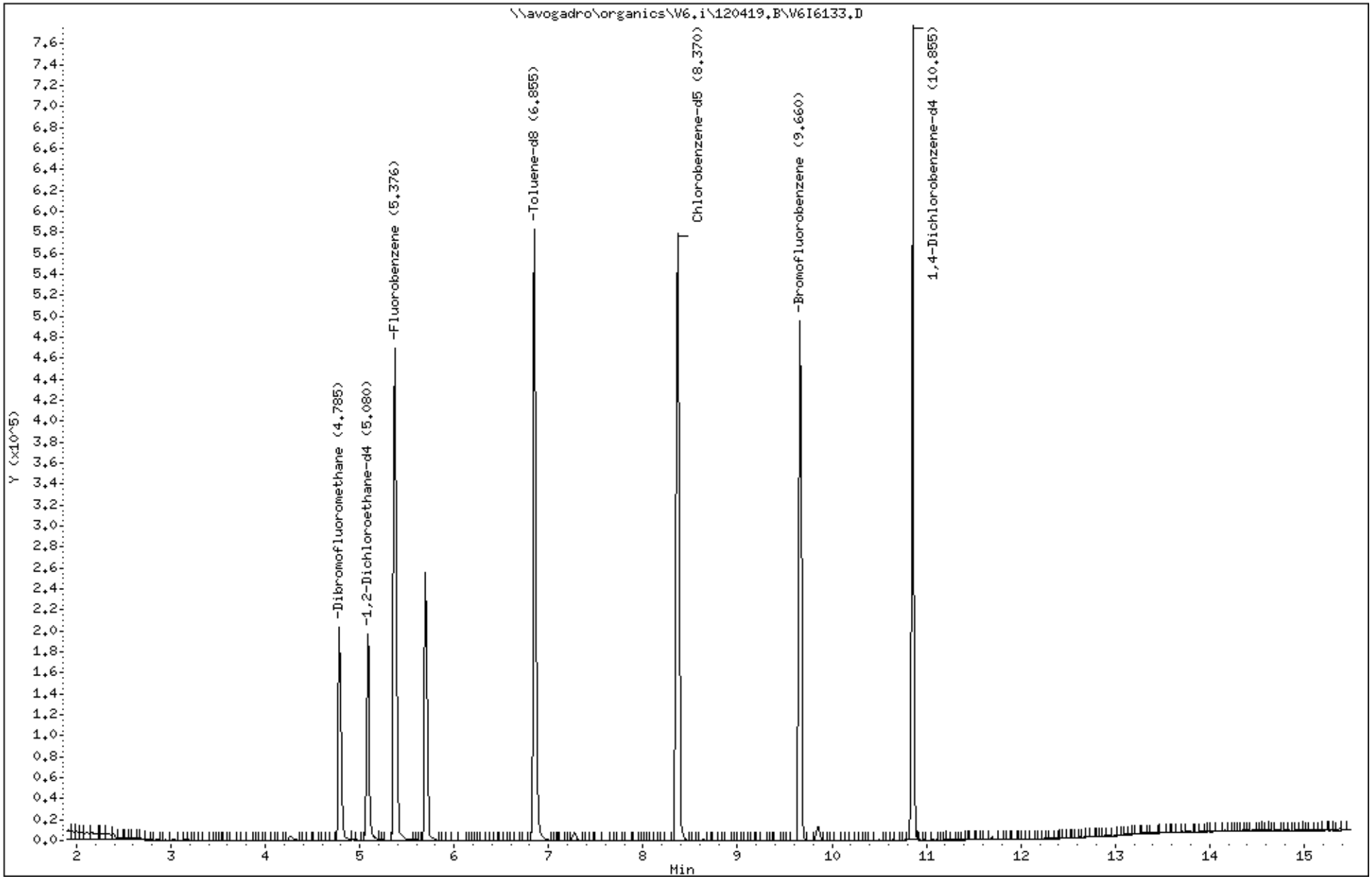
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Lab Smp Id: L0731-06A Client Smp ID: DUP-1-041612
Inj Date : 19-APR-2012 15:33
Operator : AM SRC: LIMS Inst ID: V6.i
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Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 37
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	4.784	4.785	(0.890)	121265	49.9250	50
$	42 1,2-Dichloroethane-d4	102	5.080	5.081	(0.945)	27146	51.4291	51
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	422577	50.0000	
	47 Trichloroethene	130	5.695	5.697	(1.059)	86020	40.1752	40
$	58 Toluene-d8	98	6.855	6.856	(0.819)	425875	49.1902	49
*	68 Chlorobenzene-d5	117	8.369	8.370	(1.000)	369483	50.0000	
$	79 Bromofluorobenzene	95	9.659	9.660	(1.154)	184434	48.5580	48
*	92 1,4-Dichlorobenzene-d4	152	10.854	10.855	(1.000)	189694	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6133.D
Date : 19-APR-2012 15:33
Client ID: DUP-1-041612
Instrument: V6.i
Sample Info: 5ML,L0731-06A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6133.D

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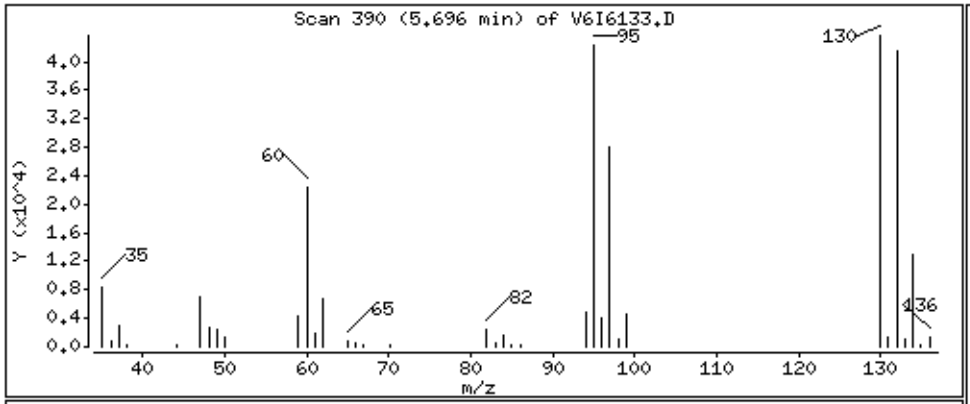
Client ID: DUP-1-041612 Instrument: V6.i

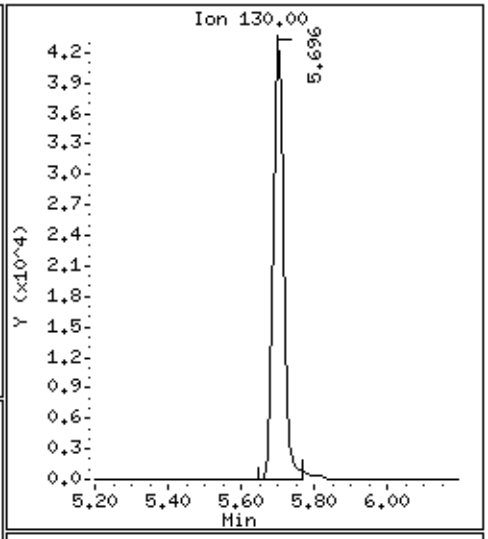
Sample Info: 5ML,L0731-06A,,65685

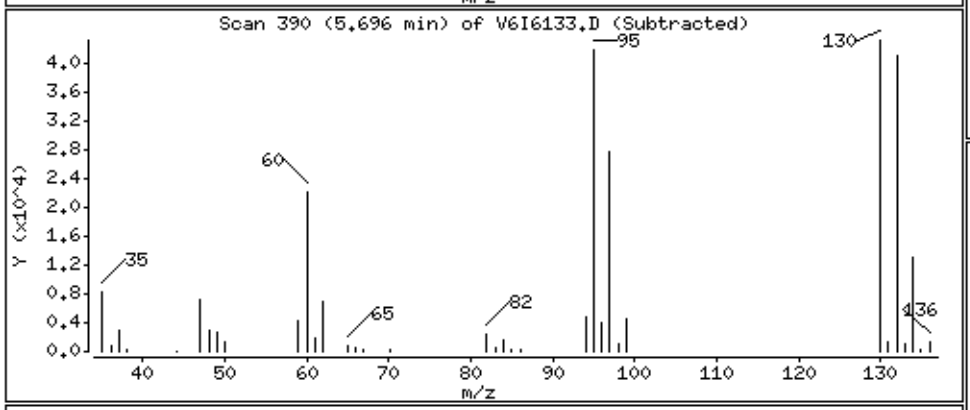
Purge Volume: 5.0 Operator: AM SRC: LIMS

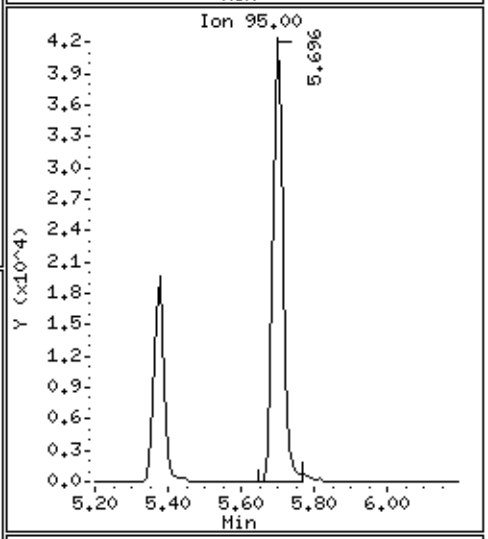
Column phase: DB-624 Column diameter: 0.25

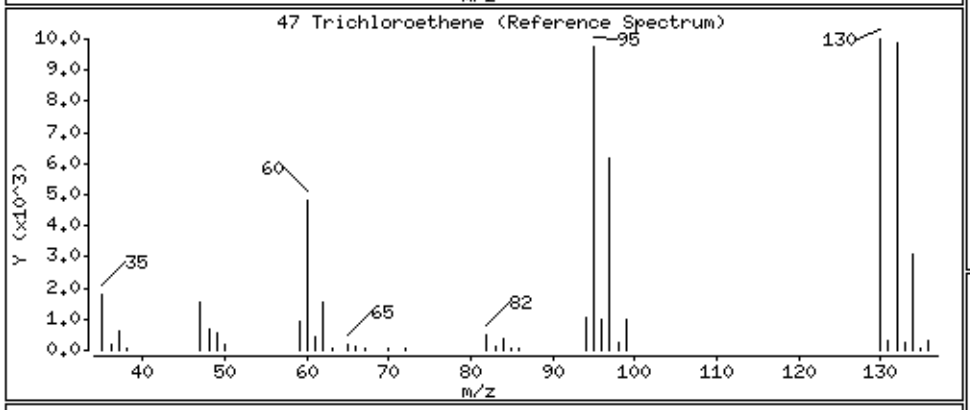
47 Trichloroethene Concentration: 40 ug/L

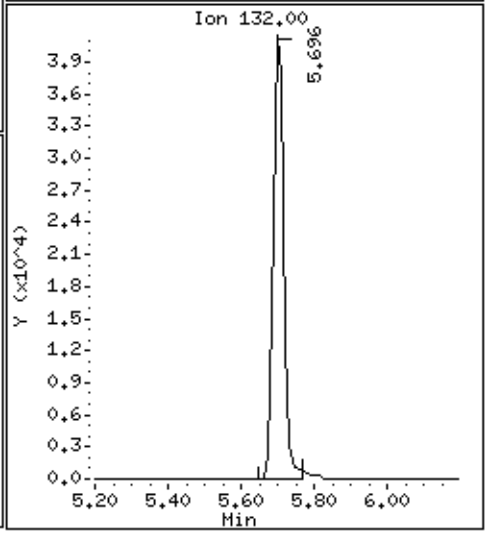


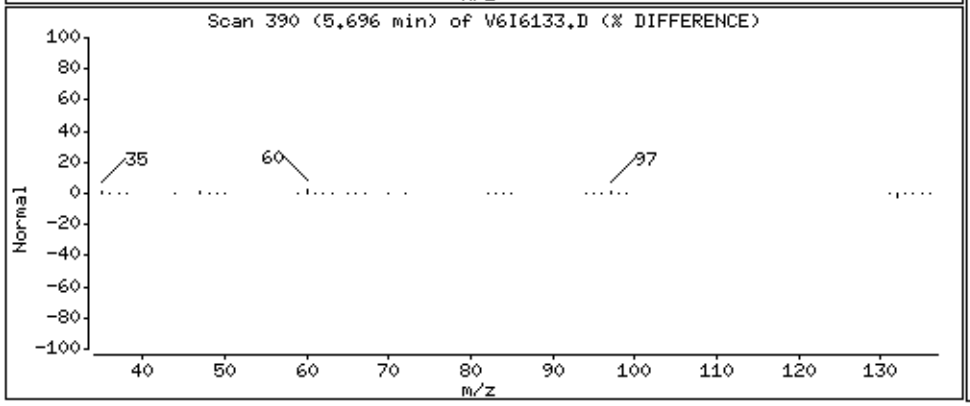












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6126.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6126.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6126.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

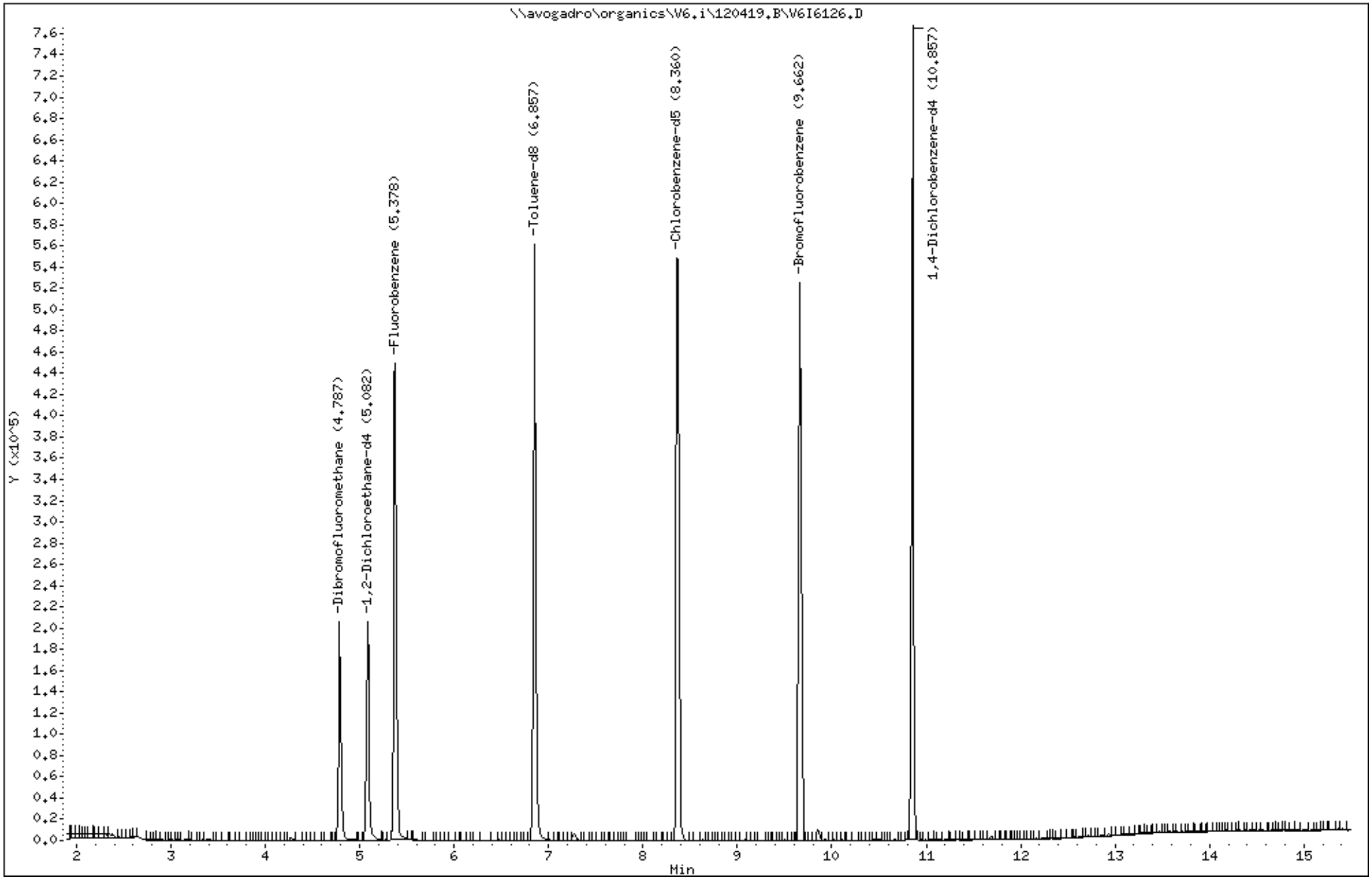
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Lab Smp Id: L0731-07A Client Smp ID: TB041612
Inj Date : 19-APR-2012 12:44
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-07A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 30
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	4.786	4.785	(0.890)	121206	49.8558	50
$ 42 1,2-Dichloroethane-d4	102	5.082	5.081	(0.945)	26375	49.9234	50
* 46 Fluorobenzene	96	5.378	5.377	(1.000)	422958	50.0000	
$ 58 Toluene-d8	98	6.857	6.856	(0.819)	418892	48.2260	48
* 68 Chlorobenzene-d5	117	8.371	8.370	(1.000)	370691	50.0000	
$ 79 Bromofluorobenzene	95	9.661	9.660	(1.154)	188505	49.4681	49
* 92 1,4-Dichlorobenzene-d4	152	10.856	10.855	(1.000)	192760	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6126.D
Date : 19-APR-2012 12:44
Client ID: TB041612
Instrument: V6.i
Sample Info: 5ML,L0731-07A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6134.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	9.6	
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

EPA SAMPLE NO.

MW-4-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6134.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6134.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

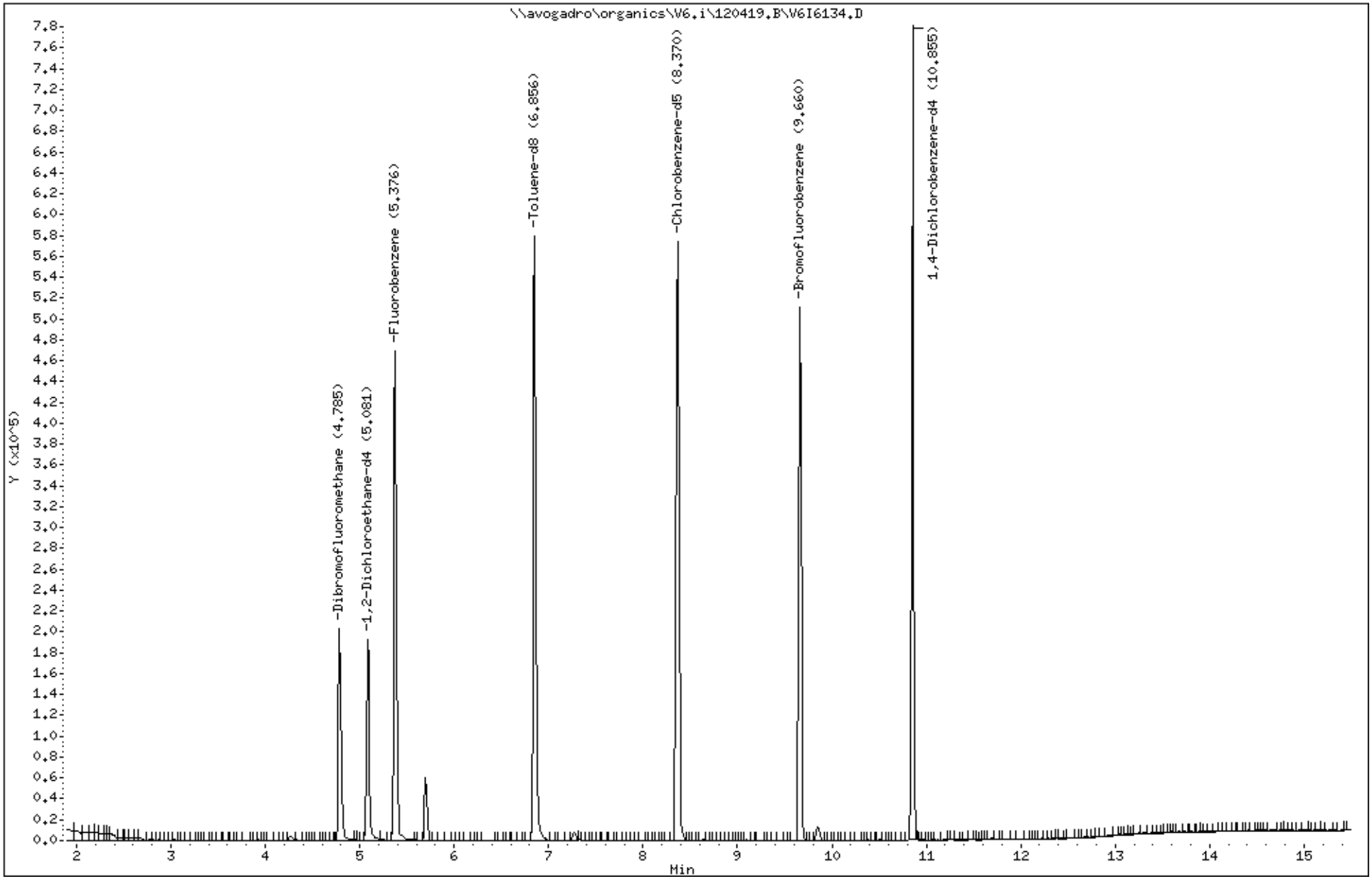
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Inj Date : 19-APR-2012 15:57
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-08A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 38
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	4.784	4.785	(0.890)	122484	50.6508	51
$	42 1,2-Dichloroethane-d4	102	5.080	5.081	(0.945)	26262	49.9753	50
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	420709	50.0000	
	47 Trichloroethene	130	5.695	5.697	(1.059)	20369	9.55548	10
$	58 Toluene-d8	98	6.855	6.856	(0.819)	420619	48.2039	48
*	68 Chlorobenzene-d5	117	8.370	8.370	(1.000)	372390	50.0000	
$	79 Bromofluorobenzene	95	9.659	9.660	(1.154)	184802	48.2750	48
*	92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	190201	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6134.D
Date : 19-APR-2012 15:57
Client ID: MW-4-041712
Instrument: V6.i
Sample Info: 5ML,L0731-08A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6134.D

Date : 19-APR-2012 15:57

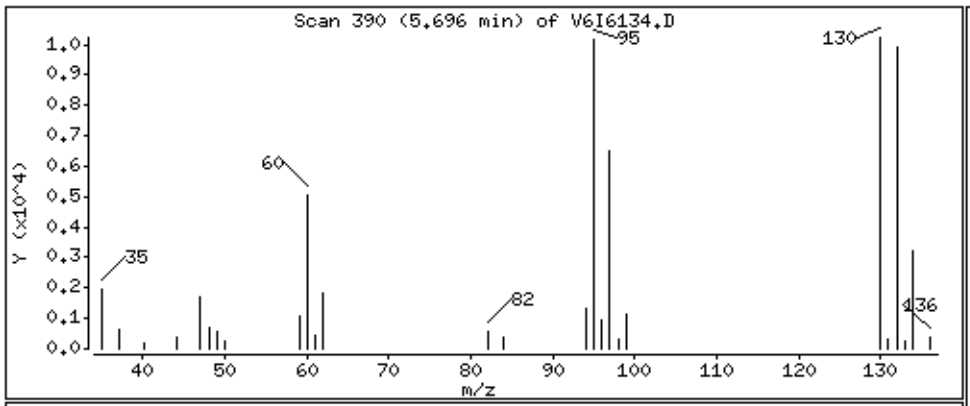
Client ID: MW-4-041712 Instrument: V6.i

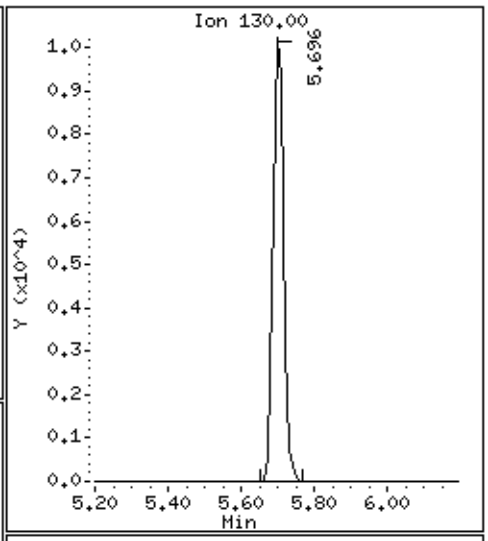
Sample Info: 5ML,L0731-08A,,65685

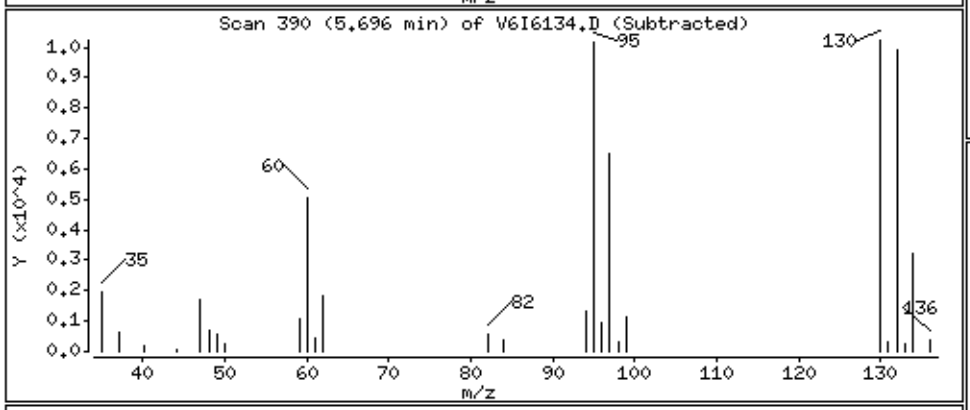
Purge Volume: 5.0 Operator: AM SRC: LIMS

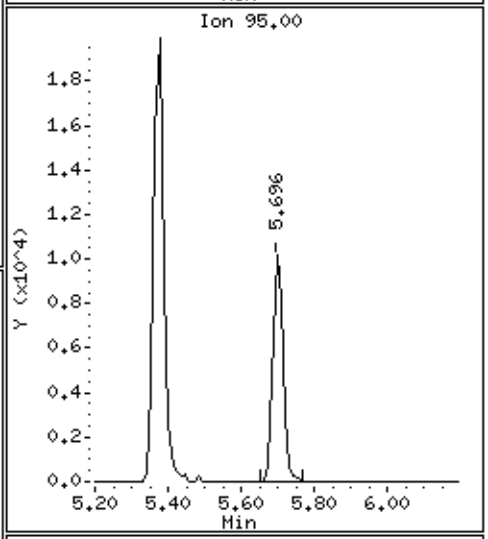
Column phase: DB-624 Column diameter: 0.25

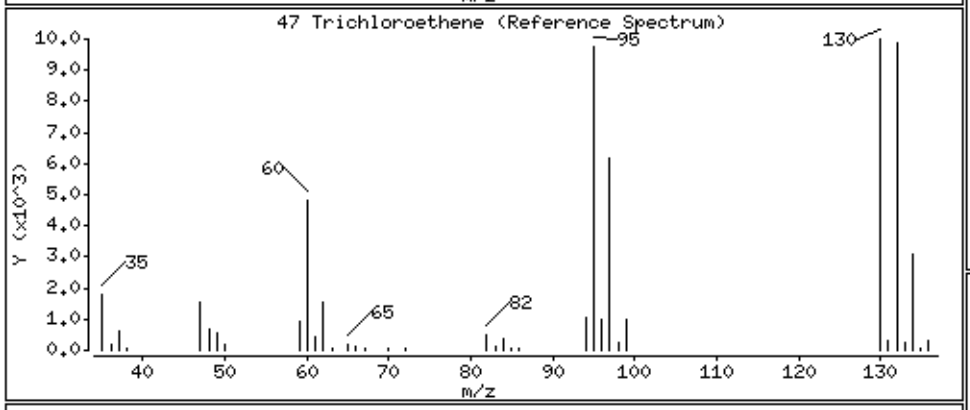
47 Trichloroethene Concentration: 10 ug/L

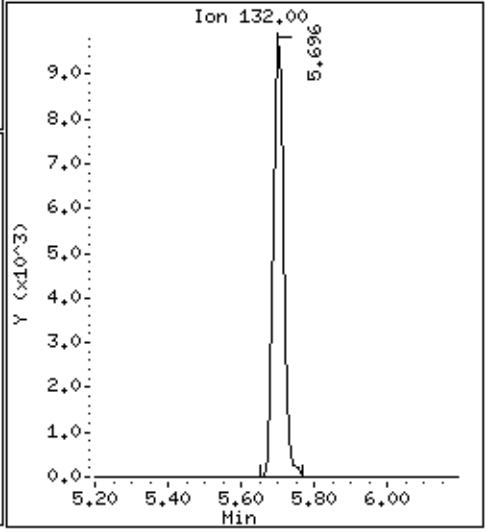


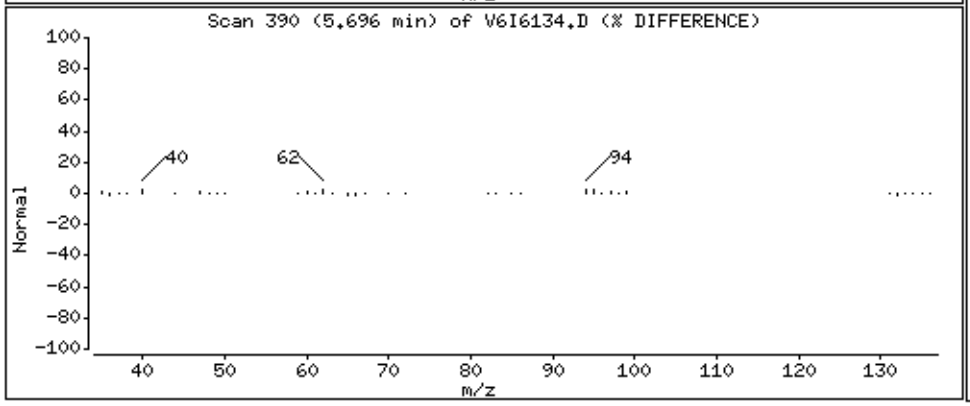












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6135.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.9	
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	13	
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

EPA SAMPLE NO.

MW-7-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6135.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6135.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120419.B\V6I6135.D
Lab Smp Id: L0731-09A Client Smp ID: MW-7-041712
Inj Date : 19-APR-2012 16:21
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-09A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

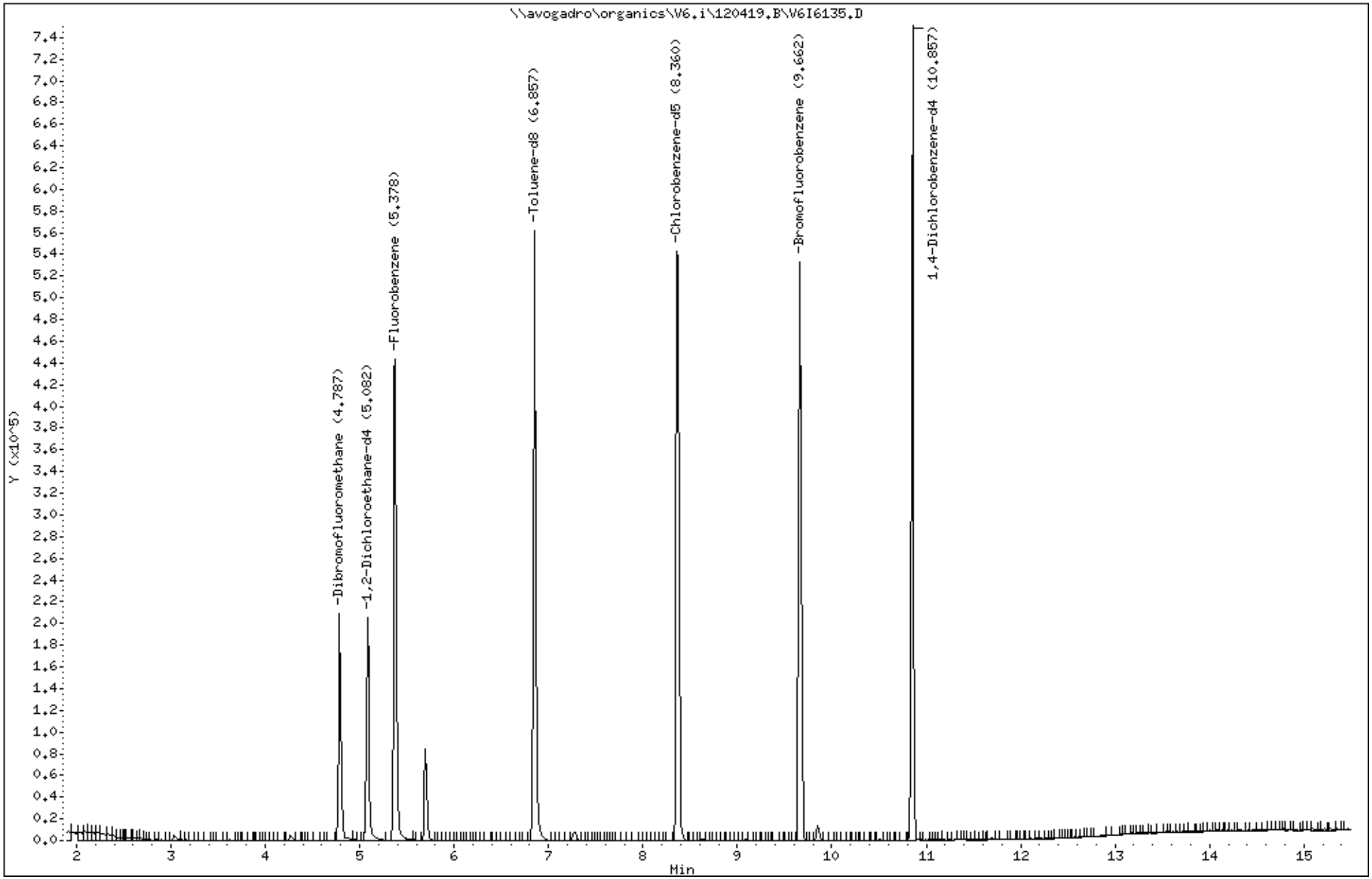
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	12 Acetone	58	3.035	3.034	(0.564)	1741	5.85657	6(Q)
$	36 Dibromofluoromethane	113	4.786	4.785	(0.890)	122717	51.0633	51
$	42 1,2-Dichloroethane-d4	102	5.082	5.081	(0.945)	26693	51.1119	51
*	46 Fluorobenzene	96	5.378	5.377	(1.000)	418104	50.0000	
	47 Trichloroethene	130	5.697	5.697	(1.059)	28273	13.3460	13
$	58 Toluene-d8	98	6.857	6.856	(0.819)	420496	48.1159	48
*	68 Chlorobenzene-d5	117	8.371	8.370	(1.000)	372962	50.0000	
$	79 Bromofluorobenzene	95	9.661	9.660	(1.154)	184630	48.1561	48
*	92 1,4-Dichlorobenzene-d4	152	10.856	10.855	(1.000)	189014	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120419.B\V6I6135.D
Date : 19-APR-2012 16:21
Client ID: MW-7-041712
Instrument: V6.i
Sample Info: 5ML,L0731-09A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6135.D

Date : 19-APR-2012 16:21

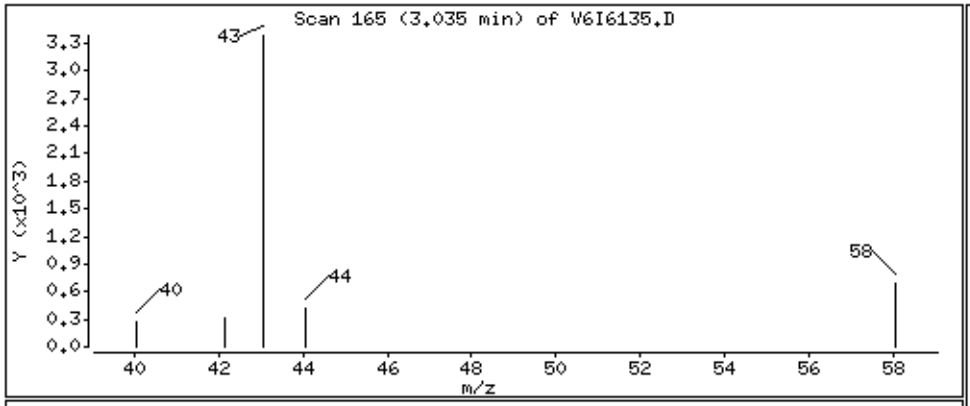
Client ID: MW-7-041712 Instrument: V6.i

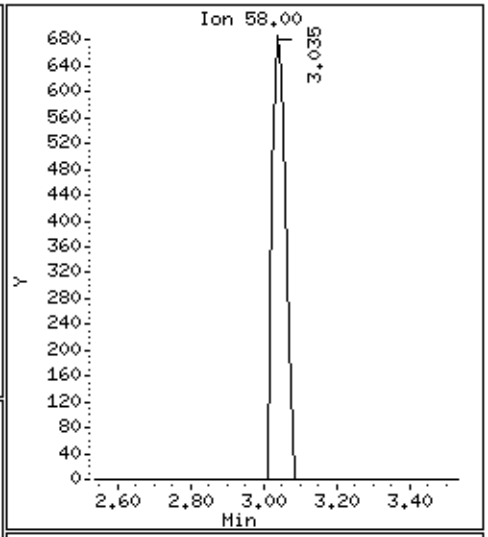
Sample Info: 5ML,L0731-09A,,65685

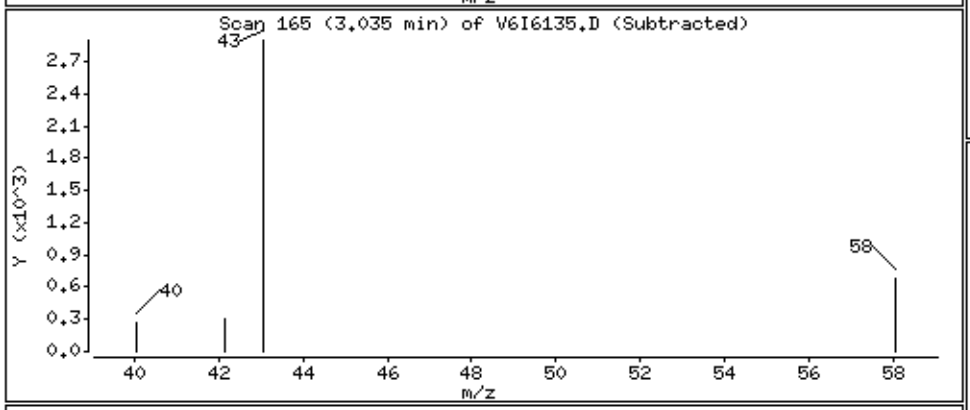
Purge Volume: 5.0 Operator: AM SRC: LIMS

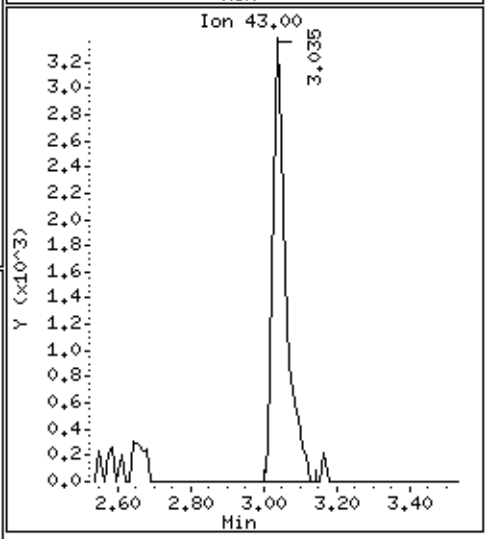
Column phase: DB-624 Column diameter: 0.25

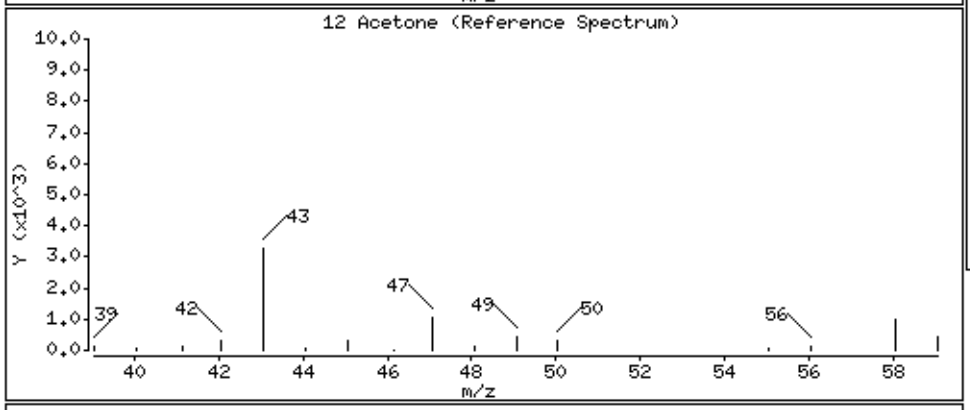
12 Acetone Concentration: 6 ug/L

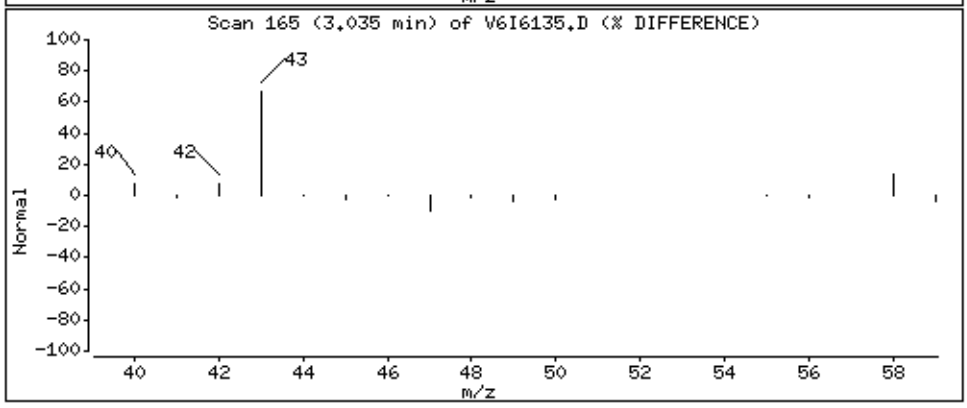












Data File: \\avogadro\organics\V6.i\120419.B\V6I6135.D

Date : 19-APR-2012 16:21

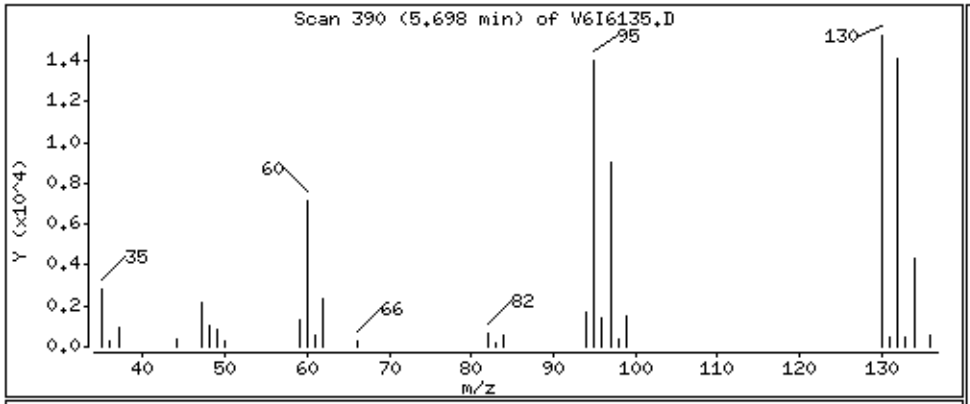
Client ID: MW-7-041712 Instrument: V6.i

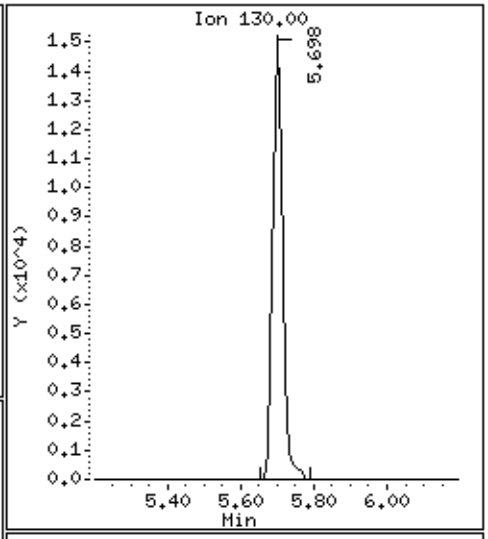
Sample Info: 5ML,L0731-09A,,65685

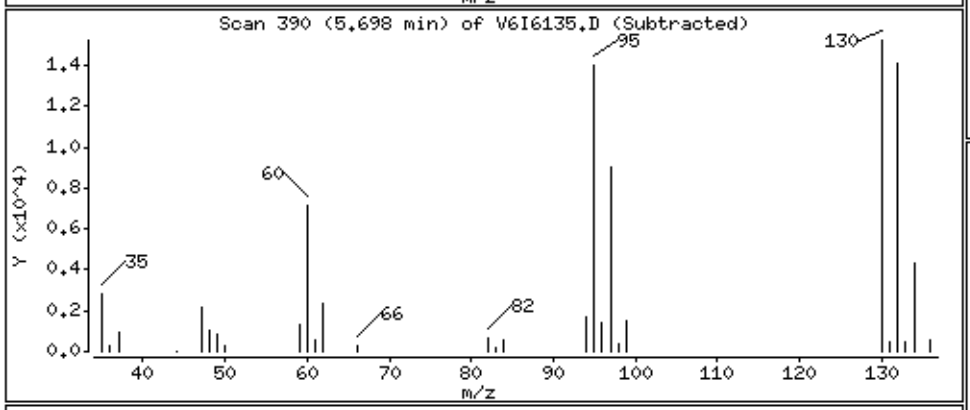
Purge Volume: 5.0 Operator: AM SRC: LIMS

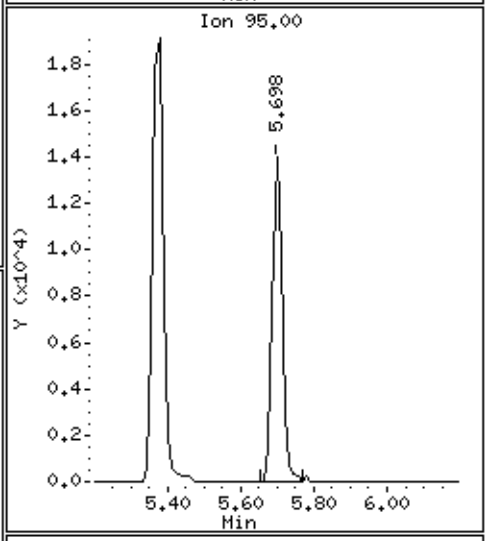
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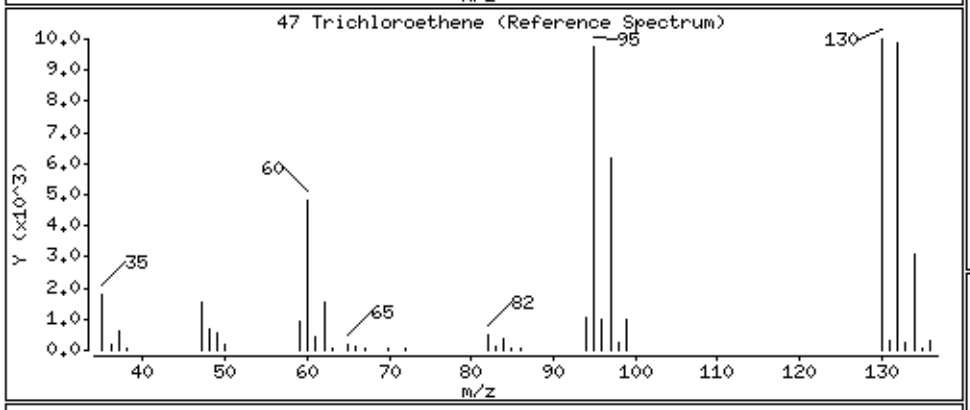
47 Trichloroethene Concentration: 13 ug/L

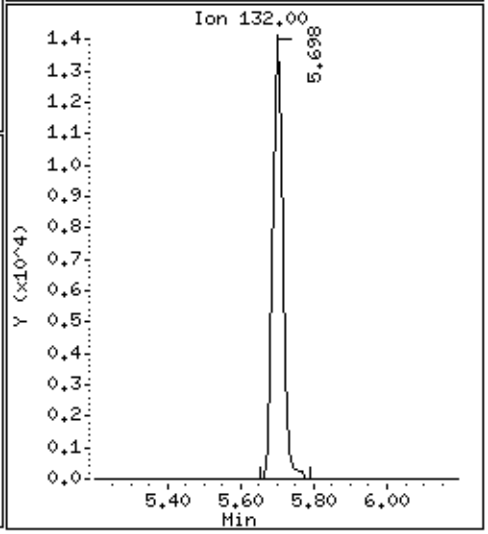


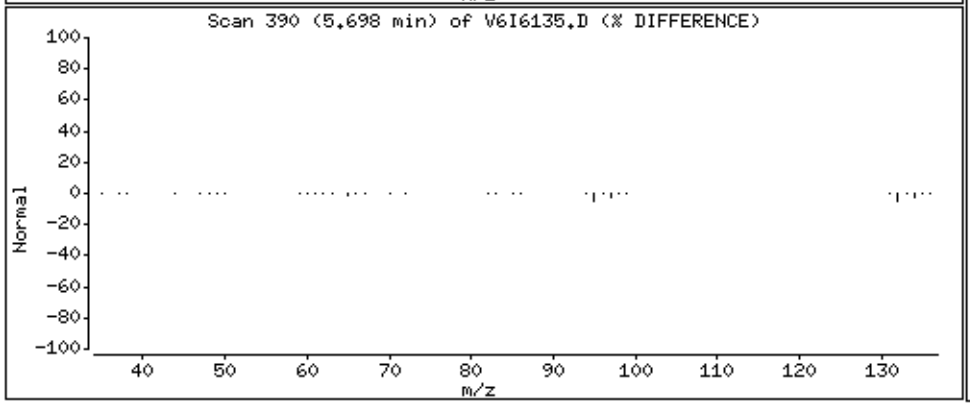












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6136.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	9.6	
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	1.2	J
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	130	
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

EPA SAMPLE NO.

MW-8-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6136.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6136.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120419.B\V6I6136.D
Lab Smp Id: L0731-10A Client Smp ID: MW-8-041712
Inj Date : 19-APR-2012 16:46
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-10A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

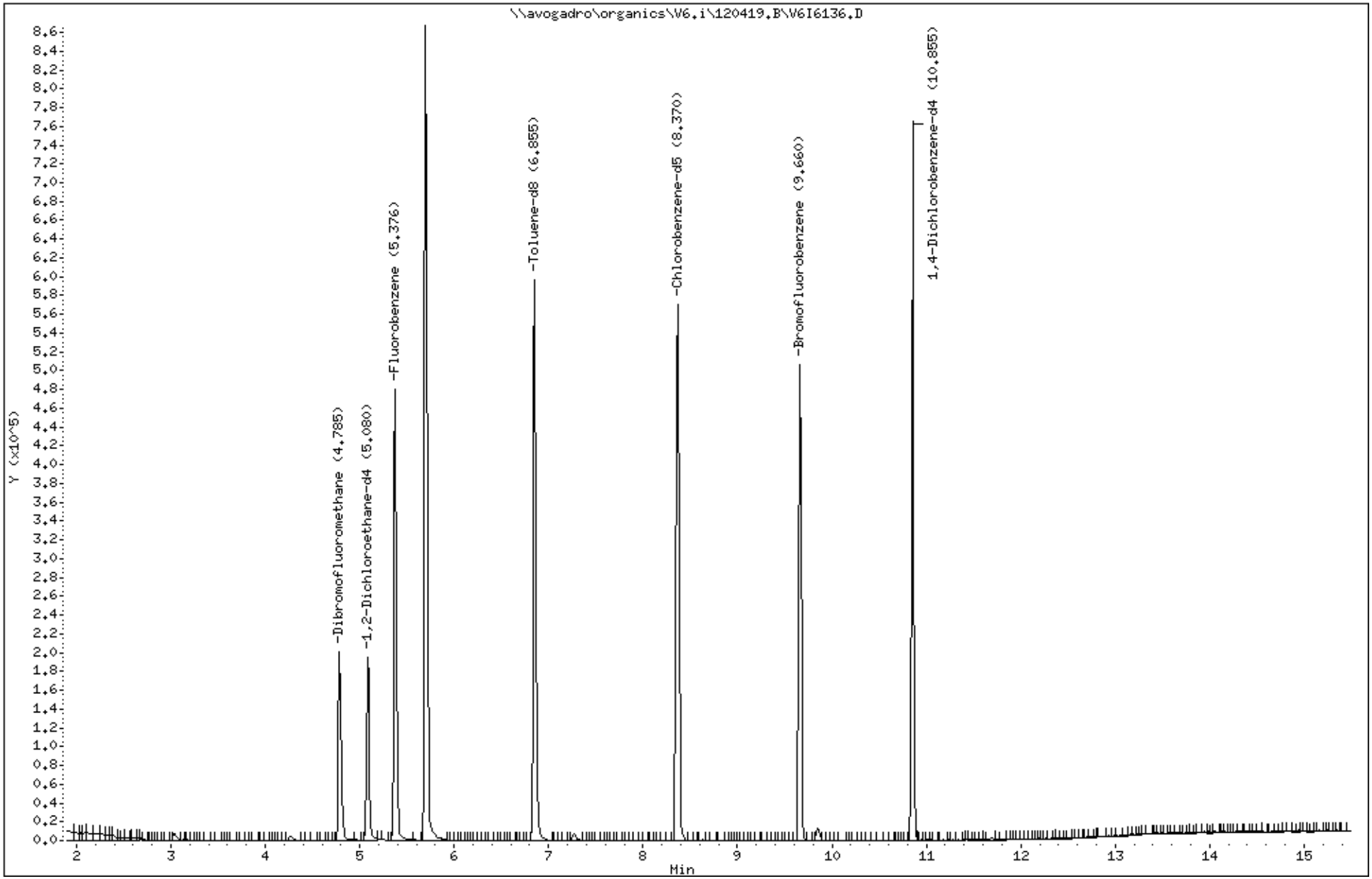
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	12 Acetone	58	3.045	3.034	(0.566)	2892	9.61316	10(Q)
$	36 Dibromofluoromethane	113	4.784	4.785	(0.890)	120518	49.5540	50
	37 1,1,1-Trichloroethane	97	4.820	4.821	(0.897)	3442	1.21315	1
$	42 1,2-Dichloroethane-d4	102	5.080	5.081	(0.945)	26247	49.6624	50
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	423118	50.0000	
	47 Trichloroethene	130	5.695	5.697	(1.059)	283706	132.334	130
$	58 Toluene-d8	98	6.855	6.856	(0.819)	424599	48.9446	49
*	68 Chlorobenzene-d5	117	8.369	8.370	(1.000)	370225	50.0000	
$	79 Bromofluorobenzene	95	9.659	9.660	(1.154)	185113	48.6391	49
*	92 1,4-Dichlorobenzene-d4	152	10.854	10.855	(1.000)	190083	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120419.B\V6I6136.D
Date : 19-APR-2012 16:46
Client ID: MW-8-041712
Instrument: V6.i
Sample Info: 5ML,L0731-10A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6136.D

Date : 19-APR-2012 16:46

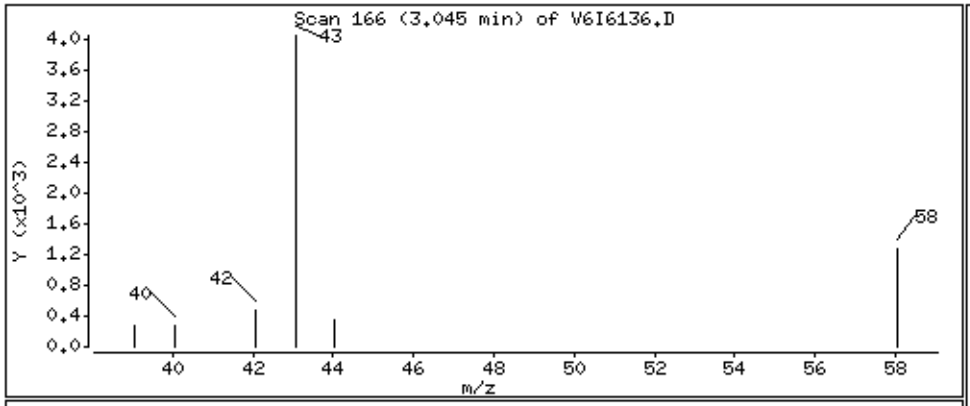
Client ID: MW-8-041712 Instrument: V6.i

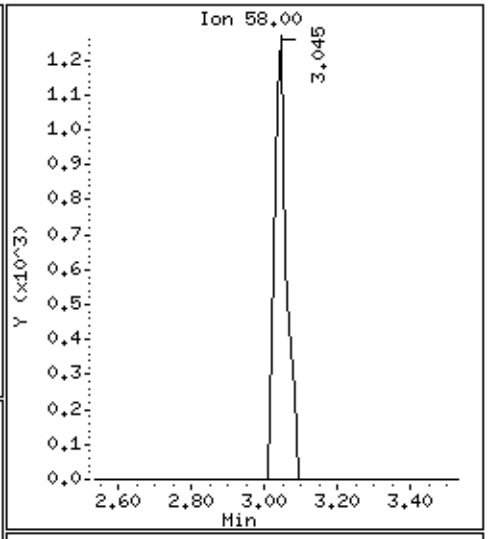
Sample Info: 5ML,L0731-10A,,65685

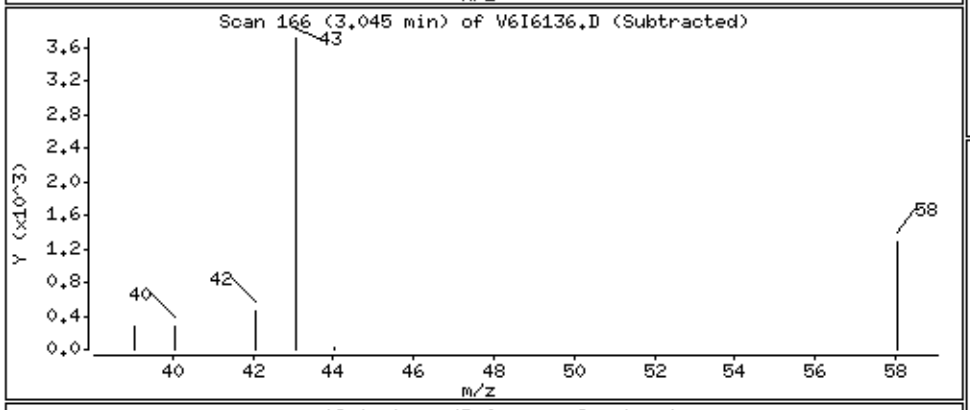
Purge Volume: 5.0 Operator: AM SRC: LIMS

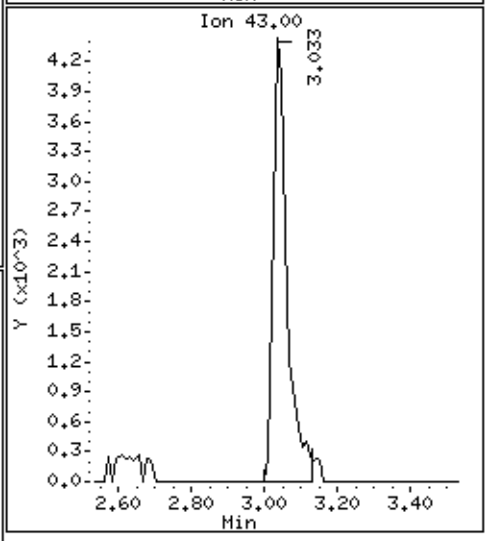
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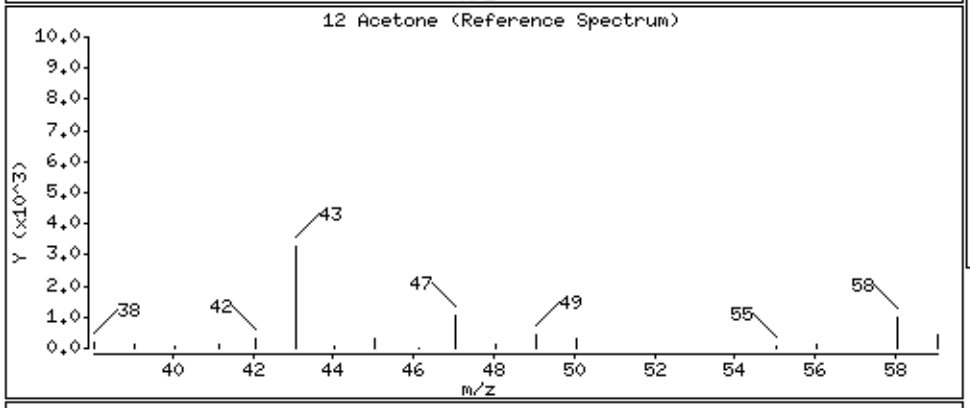
12 Acetone Concentration: 10 ug/L

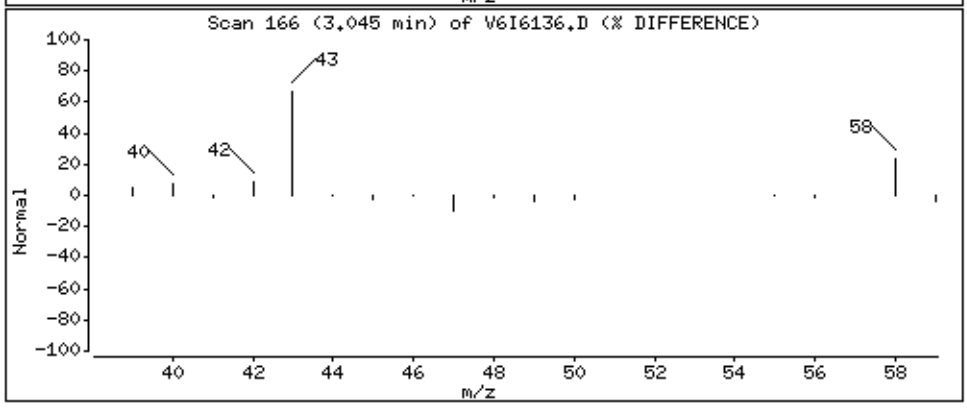












Data File: \\avogadro\organics\V6.i\120419.B\V6I6136.D

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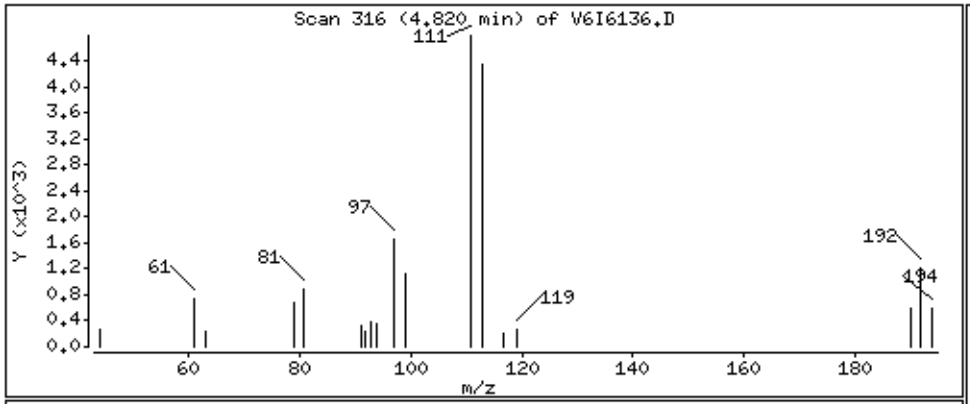
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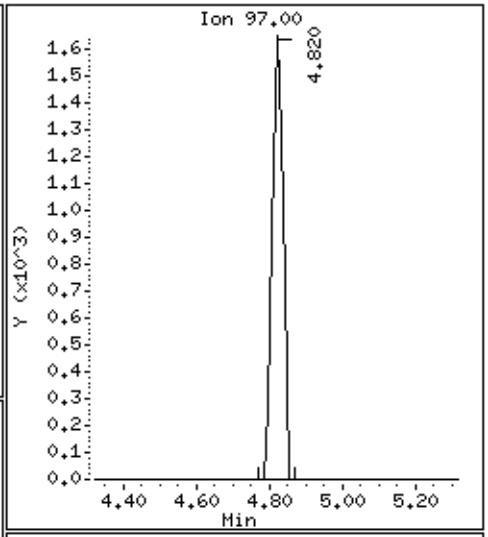
Sample Info: 5ML,L0731-10A,,65685

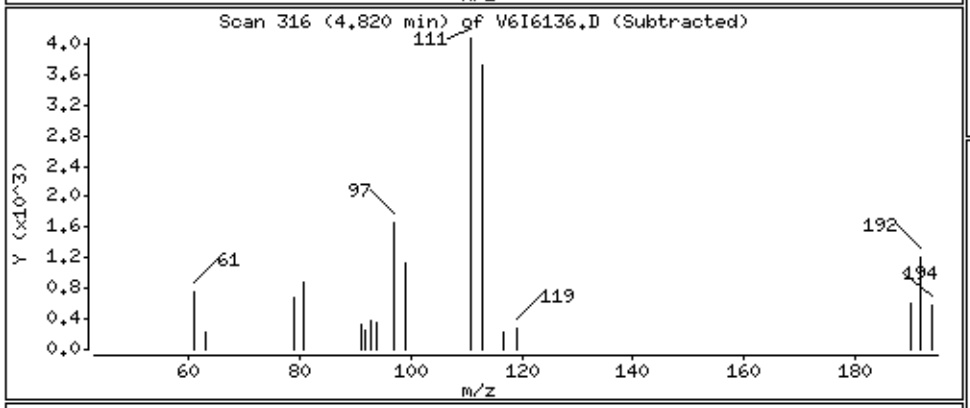
Purge Volume: 5.0 Operator: AM SRC: LIMS

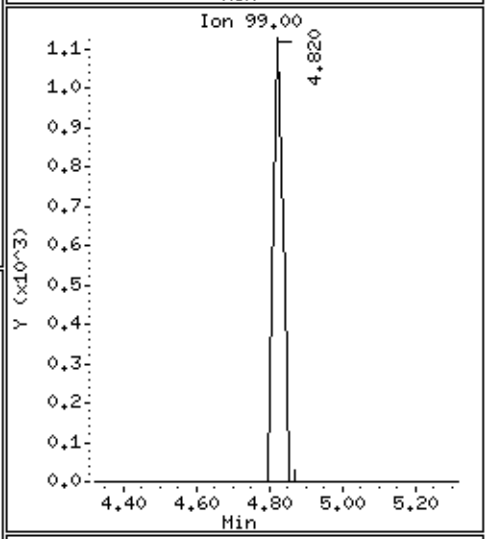
Column phase: DB-624 Column diameter: 0.25

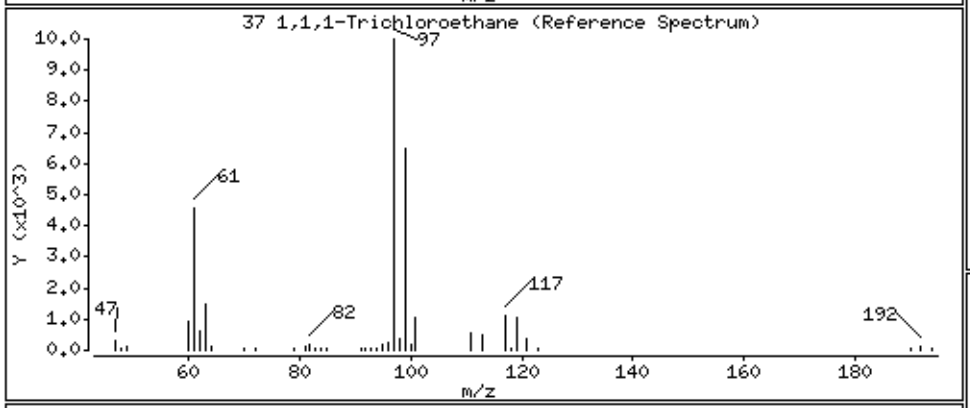
37 1,1,1-Trichloroethane Concentration: 1 ug/L

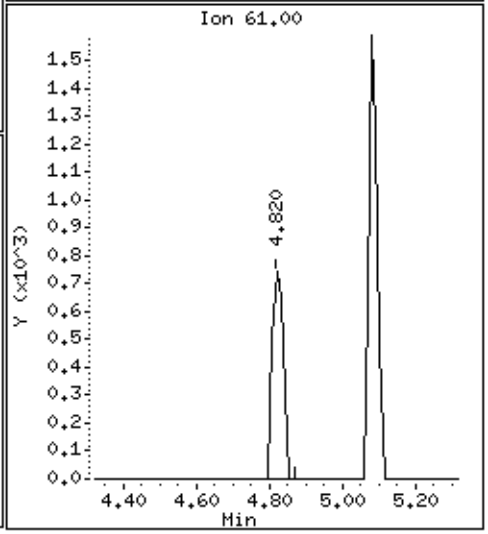


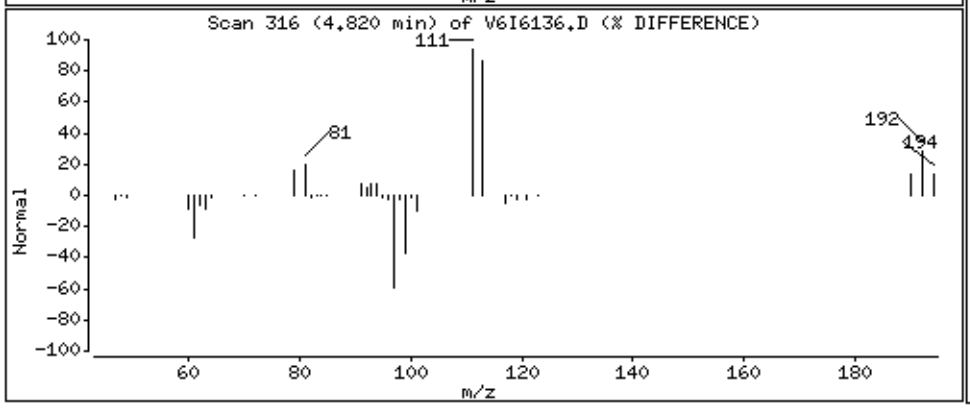












Data File: \\avogadro\organics\V6.i\120419.B\V6I6136.D

Date : 19-APR-2012 16:46

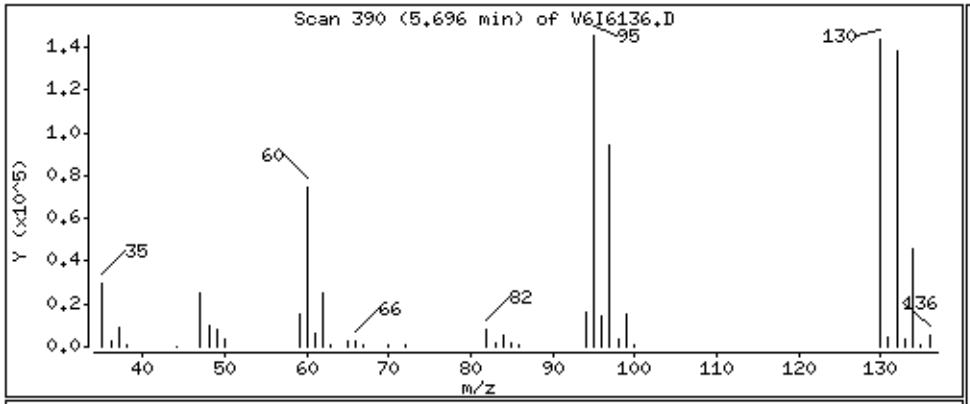
Client ID: MW-8-041712 Instrument: V6.i

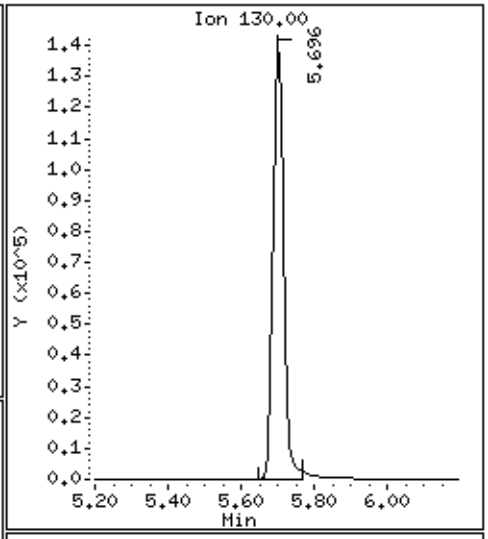
Sample Info: 5ML,L0731-10A,,65685

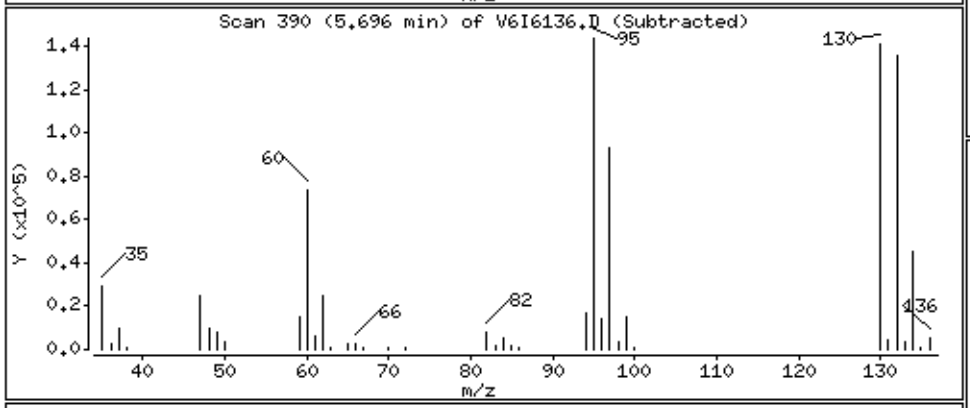
Purge Volume: 5.0 Operator: AM SRC: LIMS

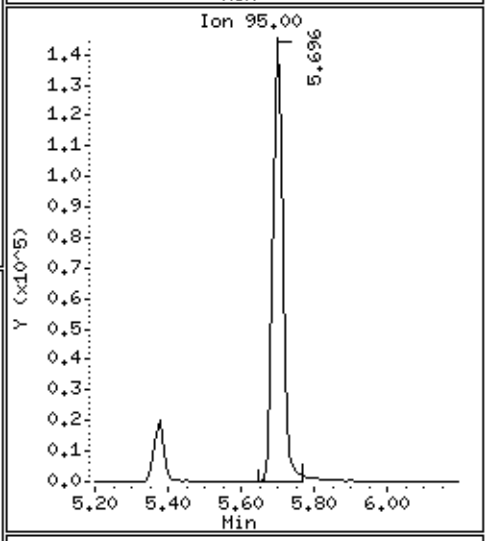
Column phase: DB-624 Column diameter: 0.25

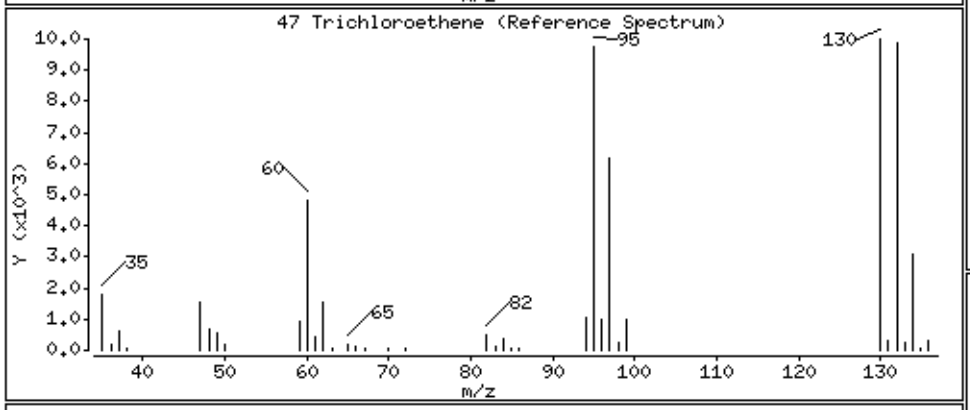
47 Trichloroethene Concentration: 130 ug/L

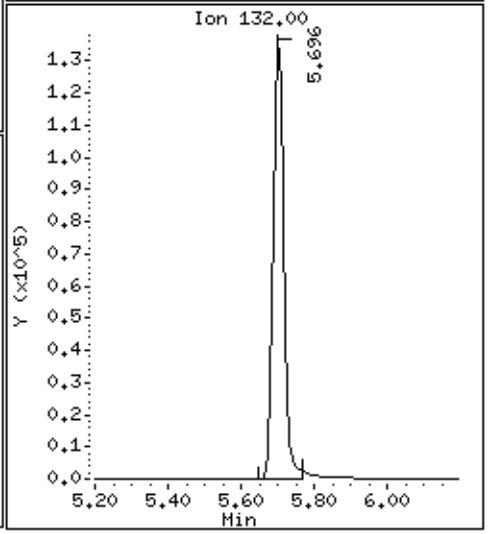


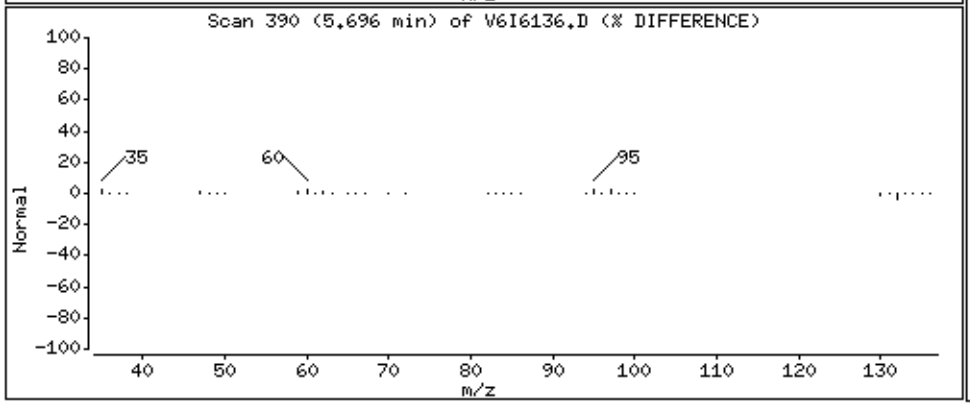












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6137.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	21	
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

EPA SAMPLE NO.

MW-3R-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6137.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6137.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

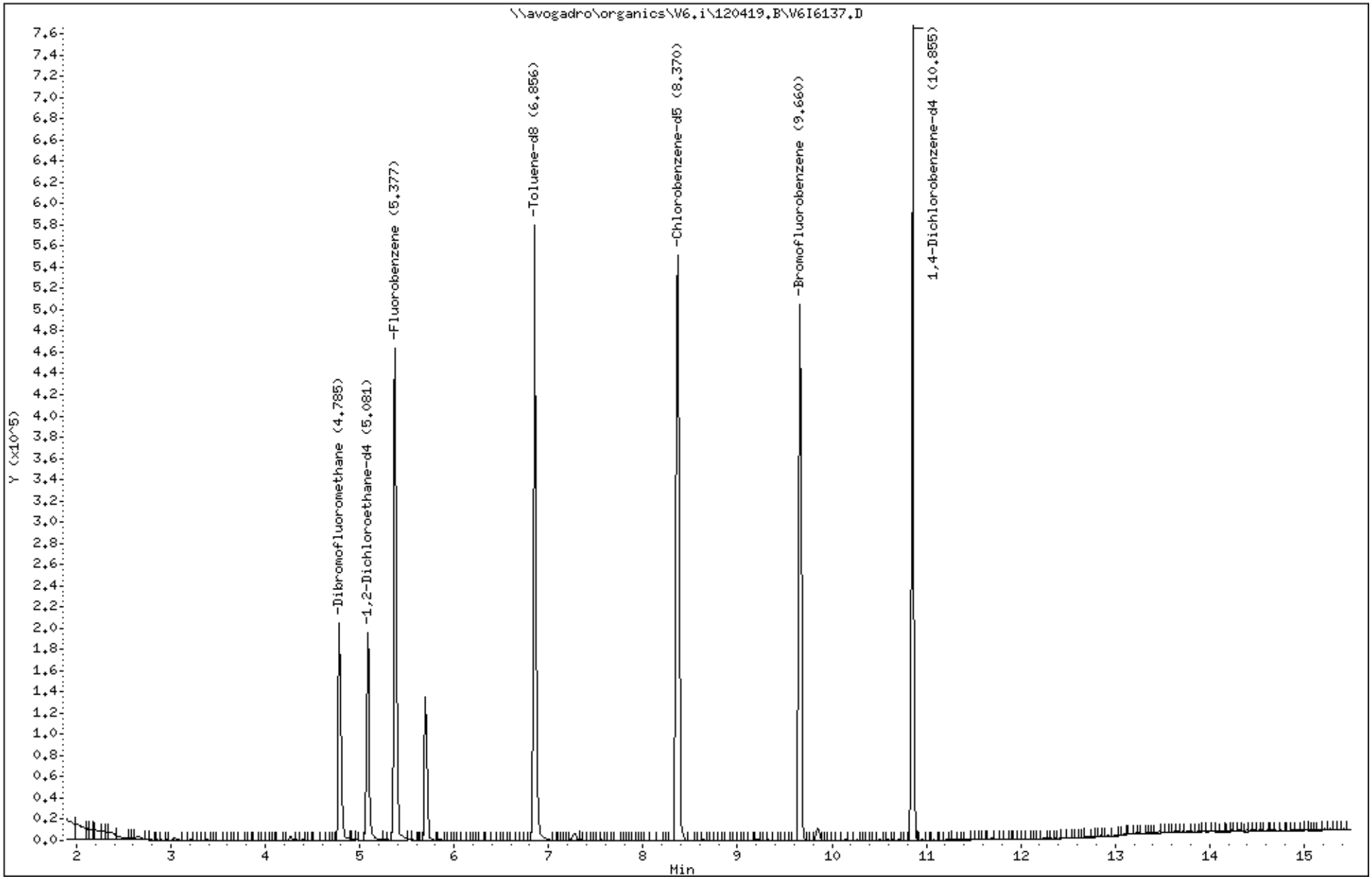
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Inj Date : 19-APR-2012 17:10
Operator : AM   SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-11A,,65685
Misc Info :
Comment   :
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Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 41
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	4.785	4.785	(0.890)	121367	50.3845	50
$	42 1,2-Dichloroethane-d4	102	5.080	5.081	(0.945)	25262	48.2598	48
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	419075	50.0000	
	47 Trichloroethene	130	5.696	5.697	(1.059)	45124	21.2511	21
$	58 Toluene-d8	98	6.855	6.856	(0.819)	416678	48.2207	48
*	68 Chlorobenzene-d5	117	8.370	8.370	(1.000)	368772	50.0000	
$	79 Bromofluorobenzene	95	9.660	9.660	(1.154)	184306	48.6178	49
*	92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	190347	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6137.D
Date : 19-APR-2012 17:10
Client ID: MW-3R-041712
Instrument: V6.i
Sample Info: 5ML,L0731-11A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6137.D

Date : 19-APR-2012 17:10

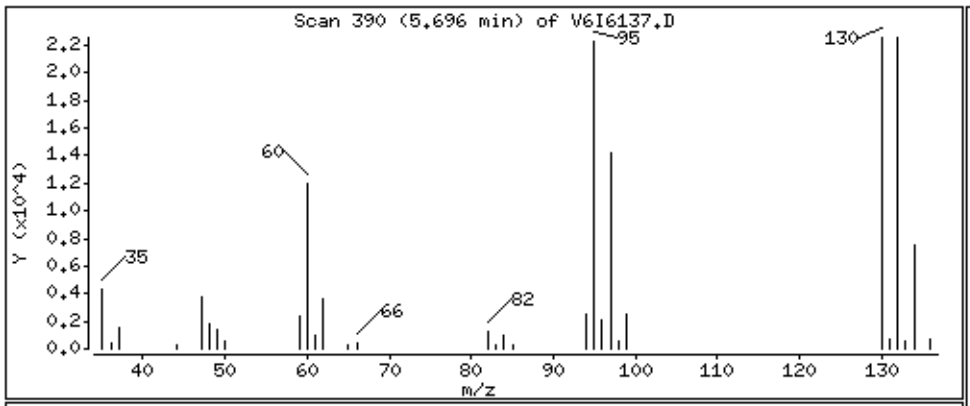
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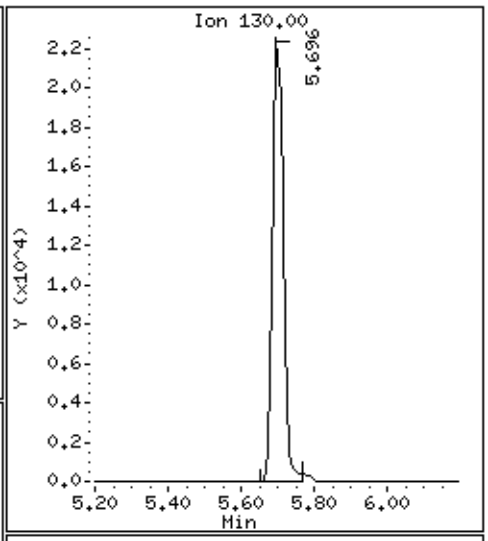
Sample Info: 5ML,L0731-11A,,65685

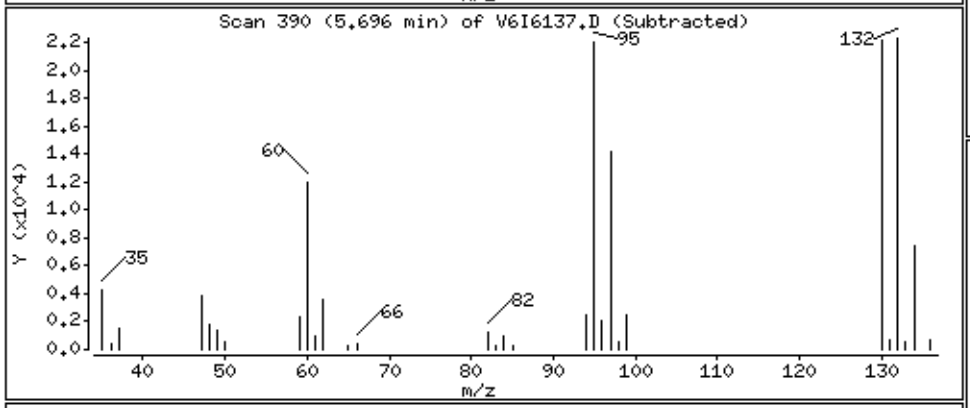
Purge Volume: 5.0 Operator: AM SRC: LIMS

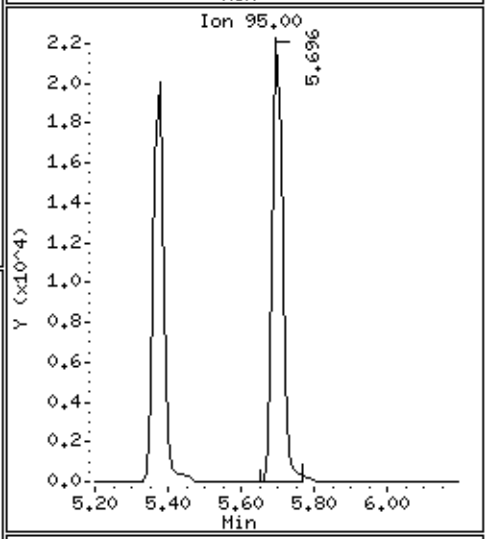
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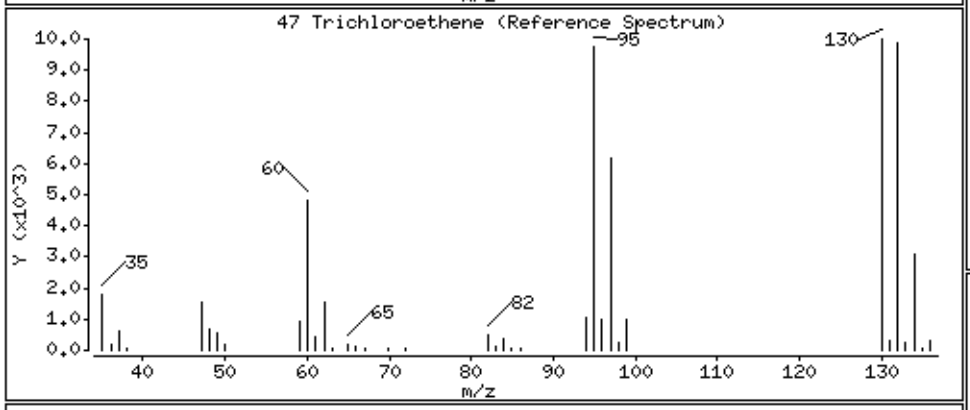
47 Trichloroethene Concentration: 21 ug/L

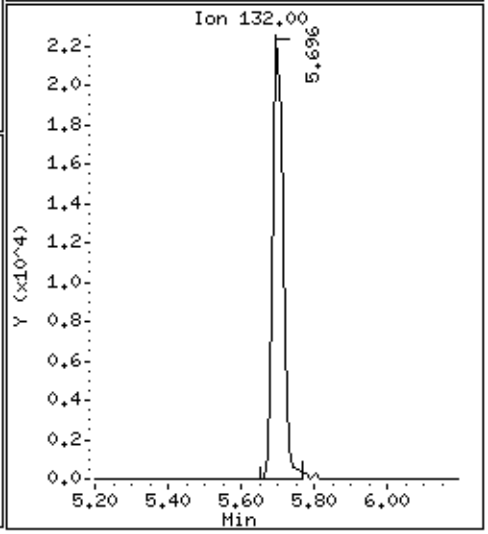


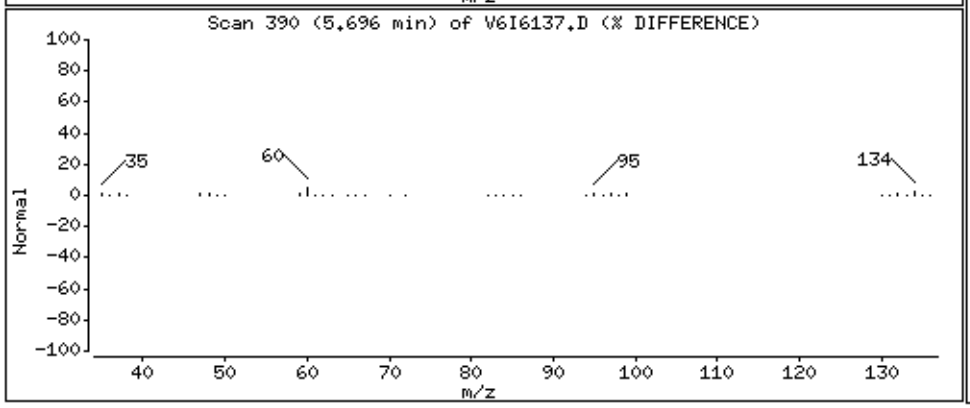












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6127.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6127.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6127.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

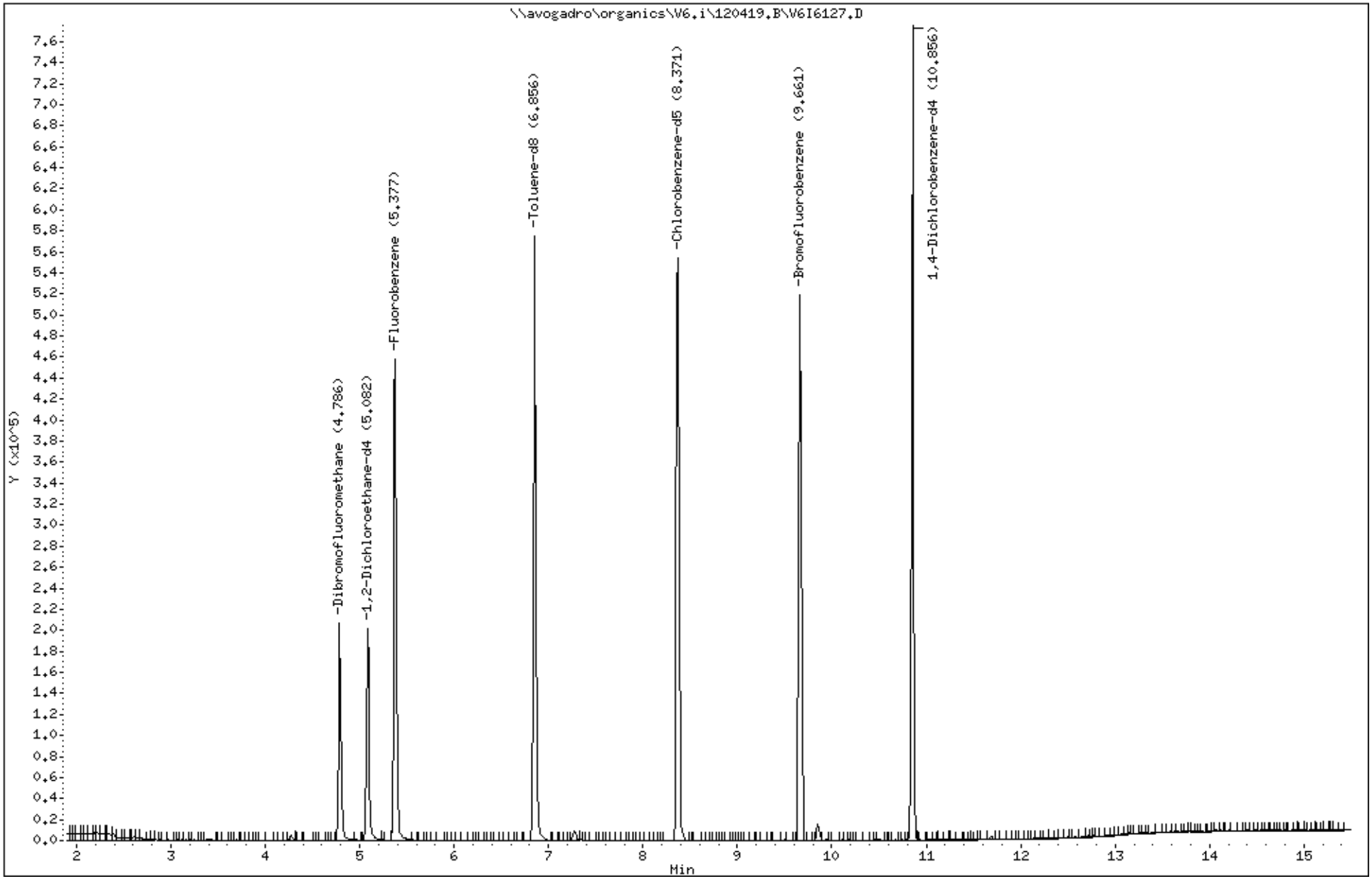
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Inj Date : 19-APR-2012 13:08
Operator : AM   SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-12A,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 31
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	4.785	4.785	(0.890)	120644	50.2609	50
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	27011	51.7829	52
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	417603	50.0000	
$	58 Toluene-d8	98	6.856	6.856	(0.819)	416388	47.9788	48
*	68 Chlorobenzene-d5	117	8.371	8.370	(1.000)	370374	50.0000	
$	79 Bromofluorobenzene	95	9.660	9.660	(1.154)	186891	49.0865	49
*	92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	192422	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6127.D
Date : 19-APR-2012 13:08
Client ID: TB041712
Instrument: V6.i
Sample Info: 5ML,L0731-12A,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Instrument ID: V6 Calibration Date(s): 04/13/2012 04/13/2012

Heated Purge: (Y/N) N Calibration Time(s): 8:57 12:45

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V6I6064.D RRF020 = V6I6063.D

RRF050 = V6I6062.D RRF100 = V6I6070.D RRF200 = V6I6069.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.332	0.337	0.284	0.315	0.309	0.316	6.7
Chloromethane	0.453	0.510	0.408	0.434	0.420	0.445	9.0
Vinyl chloride	0.334	0.366	0.301	0.334	0.332	0.333	6.9
Bromomethane	0.223	0.220	0.172	0.177	0.178	0.194	13.0
Chloroethane	0.193	0.204	0.169	0.187	0.182	0.187	7.1
Trichlorofluoromethane	0.381	0.400	0.330	0.377	0.374	0.372	6.8
1,1-Dichloroethene	0.245	0.265	0.214	0.243	0.237	0.241	7.5
Acetone	0.033	0.040	0.034	0.036	0.035	0.036	8.2
Iodomethane	0.371	0.365	0.261	0.365	0.340	0.341	13.5
Carbon disulfide	0.791	0.825	0.652	0.701	0.672	0.728	10.4
Methylene chloride	0.279	0.300	0.240	0.245	0.242	0.261	10.3
trans-1,2-Dichloroethene	0.228	0.252	0.205	0.224	0.213	0.224	7.9
Methyl tert-butyl ether	0.635	0.701	0.599	0.604	0.583	0.624	7.5
1,1-Dichloroethane	0.430	0.482	0.397	0.388	0.373	0.414	10.4
Vinyl acetate	0.934	1.056	0.902	0.889	0.832	0.923	9.0
2-Butanone	0.023	0.034	0.030	0.033	0.032	0.030	13.2
cis-1,2-Dichloroethene	0.251	0.286	0.227	0.235	0.233	0.246	9.6
2,2-Dichloropropane	0.220	0.236	0.183	0.197	0.184	0.204	11.4
Bromochloromethane	0.125	0.150	0.125	0.128	0.126	0.131	8.3
Chloroform	0.417	0.461	0.370	0.387	0.365	0.400	9.9
1,1,1-Trichloroethane	0.358	0.373	0.295	0.336	0.314	0.335	9.4
1,1-Dichloropropene	0.115	0.125	0.103	0.114	0.108	0.113	7.3
Carbon tetrachloride	0.307	0.320	0.269	0.309	0.294	0.300	6.5
1,2-Dichloroethane	0.352	0.388	0.324	0.336	0.331	0.346	7.3
Benzene	0.899	0.970	0.774	0.795	0.731	0.834	11.7
Trichloroethene	0.272	0.286	0.227	0.248	0.233	0.253	10.0
1,2-Dichloropropane	0.245	0.271	0.221	0.229	0.219	0.237	9.1
Dibromomethane	0.162	0.175	0.152	0.156	0.151	0.159	6.3
Bromodichloromethane	0.324	0.368	0.303	0.316	0.295	0.321	8.8
cis-1,3-Dichloropropene	0.393	0.427	0.352	0.365	0.343	0.376	9.1
4-Methyl-2-pentanone	0.232	0.261	0.227	0.235	0.220	0.235	6.7
Toluene	1.006	1.056	0.829	0.859	0.824	0.915	11.8
trans-1,3-Dichloropropene	0.364	0.411	0.341	0.355	0.330	0.360	8.7
1,1,2-Trichloroethane	0.214	0.234	0.196	0.203	0.197	0.209	7.5
1,3-Dichloropropane	0.439	0.473	0.393	0.407	0.374	0.417	9.4
Tetrachloroethene	0.277	0.267	0.207	0.237	0.225	0.243	11.9
2-Hexanone	0.215	0.253	0.217	0.235	0.223	0.228	6.9
Dibromochloromethane	0.341	0.377	0.320	0.337	0.319	0.339	7.0
1,2-Dibromoethane	0.291	0.319	0.266	0.286	0.267	0.286	7.6

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Instrument ID: V6 Calibration Date(s): 04/13/2012 04/13/2012

Heated Purge: (Y/N) N Calibration Time(s): 8:57 12:45

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V6I6064.D RRF020 = V6I6063.D

RRF050 = V6I6062.D RRF100 = V6I6070.D RRF200 = V6I6069.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Chlorobenzene	0.853	0.894	0.697	0.736	0.686	0.773	12.2
1,1,1,2-Tetrachloroethane	0.340	0.351	0.285	0.304	0.291	0.314	9.4
Ethylbenzene	0.417	0.449	0.353	0.386	0.373	0.395	9.6
m,p-Xylene	0.527	0.549	0.426	0.457	0.443	0.480	11.3
o-Xylene	0.512	0.543	0.425	0.465	0.455	0.480	9.9
Xylene (Total)	0.522	0.547	0.425	0.460	0.447	0.480	10.8
Styrene	0.819	0.919	0.735	0.788	0.757	0.804	8.9
Bromoform	0.215	0.245	0.210	0.227	0.213	0.222	6.5
Isopropylbenzene	1.294	1.332	1.024	1.110	1.057	1.163	12.1
1,1,2,2-Tetrachloroethane	0.700	0.695	0.586	0.642	0.554	0.635	10.2
Bromobenzene	0.716	0.700	0.561	0.617	0.551	0.629	12.2
1,2,3-Trichloropropane	0.792	0.856	0.737	0.823	0.720	0.786	7.2
n-Propylbenzene	0.694	0.673	0.526	0.605	0.564	0.612	11.6
2-Chlorotoluene	0.652	0.656	0.506	0.568	0.519	0.580	12.2
1,3,5-Trimethylbenzene	2.082	2.028	1.550	1.716	1.557	1.787	14.2
4-Chlorotoluene	0.690	0.668	0.527	0.598	0.545	0.606	12.0
tert-Butylbenzene	2.344	2.285	1.777	2.041	1.857	2.061	12.2
1,2,4-Trimethylbenzene	2.069	2.078	1.601	1.747	1.592	1.817	13.3
sec-Butylbenzene	2.510	2.413	1.798	2.037	1.851	2.122	15.3
4-Isopropyltoluene	2.095	2.030	1.510	1.709	1.611	1.791	14.5
1,3-Dichlorobenzene	1.260	1.247	0.965	1.064	0.970	1.101	13.1
1,4-Dichlorobenzene	1.297	1.281	0.995	1.090	0.989	1.130	13.3
n-Butylbenzene	1.916	1.736	1.320	1.497	1.432	1.580	15.3
1,2-Dichlorobenzene	1.239	1.244	0.966	1.048	0.947	1.089	13.3
1,2-Dibromo-3-chloropropane	0.126	0.126	0.113	0.131	0.109	0.121	7.6
1,2,4-Trichlorobenzene	0.690	0.655	0.487	0.559	0.549	0.588	14.1
Hexachlorobutadiene	0.305	0.268	0.196	0.225	0.226	0.244	17.5
1,2,3-Trichlorobenzene	0.689	0.599	0.427	0.504	0.477	0.539	19.4
Naphthalene	1.998	1.708	1.270	1.548	1.270	1.558	19.8

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Instrument ID: V6 Calibration Date(s): 04/13/2012 04/13/2012

Heated Purge: (Y/N) N Calibration Time(s): 8:57 12:45

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V6I6064.D RRF020 = V6I6063.D

RRF050 = V6I6062.D RRF100 = V6I6070.D RRF200 = V6I6069.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dibromofluoromethane	0.286	0.286	0.287	0.290	0.288	0.287	0.7
1,2-Dichloroethane-d4	0.063	0.061	0.063	0.063	0.063	0.062	1.3
Toluene-d8	1.188	1.178	1.173	1.179	1.141	1.172	1.5
Bromofluorobenzene	0.506	0.518	0.515	0.506	0.526	0.514	1.7

Data File: \\avogadro\organics\V6.i\120413.B\V6I6062.D
Report Date: 19-Apr-2012 13:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120413.B\V6I6062.D
Lab Smp Id: VSTD0506L Client Smp ID: VSTD0506L
Inj Date : 13-APR-2012 08:57
Operator : AM   SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506L,VSTD0506L
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413.B\v68260Gadd-6lvl.m
Meth Date : 19-Apr-2012 13:04 adatta Quant Type: ISTD
Cal Date : 22-MAR-2012 12:55 Cal File: V6I5659.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.744	1.744	(0.324)	109823	50.0000	45
2	Freon114	85	1.863	1.863	(0.346)	107003	50.0000	45
3	Chloromethane	50	1.922	1.922	(0.357)	157635	50.0000	46
4	Vinyl Chloride	62	2.028	2.028	(0.377)	116155	50.0000	45
5	Bromomethane	94	2.324	2.324	(0.432)	66434	50.0000	44
6	Chloroethane	64	2.407	2.407	(0.448)	65130	50.0000	45
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	127687	50.0000	45
126	Ethanol	46	2.715	2.715	(0.505)	26737	5000.00	4400(A)
8	Ether	59	2.809	2.809	(0.522)	67904	50.0000	48(Q)
9	Acrolein	56	2.916	2.916	(0.542)	87528	250.000	260(A)
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	82721	50.0000	45
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	83068	50.0000	43
12	Acetone	58	3.034	3.034	(0.564)	13068	50.0000	48
13	Iodomethane	142	3.164	3.164	(0.589)	100934	50.0000	39
14	Carbon Disulfide	76	3.211	3.211	(0.597)	252088	50.0000	45
15	Acetonitrile	41	3.282	3.282	(0.611)	248132	500.000	440(A)
16	Allyl Chloride	39	3.282	3.282	(0.611)	124761	50.0000	45(Q)
17	Methyl Acetate	43	3.282	3.282	(0.611)	72017	50.0000	47
18	Methylene Chloride	84	3.401	3.401	(0.633)	92549	50.0000	46
19	tert-Butanol	59	3.436	3.436	(0.639)	17265	100.000	98
20	Acrylonitrile	53	3.566	3.566	(0.663)	35932	50.0000	51
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	79409	50.0000	46
22	Methyl tert-butyl ether	73	3.578	3.578	(0.666)	231635	50.0000	48

Data File: \\avogadro\organics\V6.i\120413.B\V6I6062.D
Report Date: 19-Apr-2012 13:05

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	23	1,1-Dichloroethane	63	3.921	3.921	(0.729)	153333	50.0000	48
	24	Vinyl acetate	43	3.945	3.945	(0.734)	348578	50.0000	49
	25	Diisopropyl Ether	45	3.957	3.957	(0.736)	303274	50.0000	48
	26	2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.745)	128053	50.0000	46
	27	Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	258042	50.0000	48
	29	2,2-Dichloropropane	77	4.395	4.395	(0.817)	70548	50.0000	45
	28	cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	87721	50.0000	46
	30	2-Butanone	72	4.395	4.395	(0.817)	11756	50.0000	51
	32	Propionitrile	54	4.454	4.454	(0.828)	127673	500.000	480(A)
	33	Methacrylonitrile	41	4.572	4.572	(0.850)	108054	100.000	97
	34	Bromochloromethane	128	4.596	4.596	(0.855)	48376	50.0000	48
	31	Tetrahydrofuran	72	4.631	4.631	(0.861)	20560	100.000	98
	35	Chloroform	83	4.643	4.643	(0.864)	142849	50.0000	46
$	36	Dibromofluoromethane	113	4.785	4.785	(0.890)	110895	50.0000	50
	37	1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	114177	50.0000	44
	38	Cyclohexane	56	4.868	4.868	(0.905)	129037	50.0000	44
	39	1,1-Dichloropropene	110	4.951	4.951	(0.921)	39755	50.0000	46
	40	Carbon Tetrachloride	117	4.963	4.963	(0.923)	104070	50.0000	46
	41	Isobutyl Alcohol	43	4.998	4.998	(0.930)	80567	1000.00	950(A)
$	42	1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	24159	50.0000	50
	43	Benzene	78	5.140	5.140	(0.956)	299203	50.0000	46
	44	1,2-Dichloroethane	62	5.152	5.152	(0.958)	125386	50.0000	47
	45	tert-Amyl methyl ether	73	5.211	5.211	(0.969)	233669	50.0000	48
M	50	1,2-Dichloroethene (Total)	96				167130	100.000	(a)
*	46	Fluorobenzene	96	5.377	5.377	(1.000)	386424	50.0000	
	47	Trichloroethene	130	5.696	5.696	(1.059)	87895	50.0000	45
	48	Methylcyclohexane	83	5.886	5.886	(1.095)	109371	50.0000	44
	49	1,2-Dichloropropane	63	5.909	5.909	(1.099)	85317	50.0000	47
	51	Methyl Methacrylate	69	5.980	5.980	(1.112)	63584	50.0000	49
	52	Dibromomethane	93	6.028	6.028	(1.121)	58708	50.0000	48
	53	1,4-Dioxane	88	6.028	6.028	(1.121)	17723	1000.00	970(A)
	54	Bromodichloromethane	83	6.158	6.158	(1.145)	117104	50.0000	48
	55	2-Chloroethyl vinyl ether	63	6.418	6.418	(1.194)	20695	50.0000	53
	56	cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	136062	50.0000	47
	57	4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	87844	50.0000	49
$	58	Toluene-d8	98	6.856	6.856	(0.819)	375173	50.0000	50
	59	Toluene	91	6.915	6.915	(1.286)	320318	50.0000	45
	60	trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	131691	50.0000	48
	61	Ethyl Methacrylate	69	7.199	7.199	(1.339)	91084	50.0000	51
	62	1,1,2-Trichloroethane	97	7.317	7.317	(1.361)	75828	50.0000	47
	63	Tetrachloroethene	164	7.483	7.483	(0.894)	66326	50.0000	43
	64	1,3-Dichloropropane	76	7.495	7.495	(0.895)	125749	50.0000	48
	65	2-Hexanone	43	7.566	7.566	(0.904)	69292	50.0000	48
	66	Dibromochloromethane	129	7.743	7.743	(0.925)	102342	50.0000	48
	67	1,2-Dibromoethane	107	7.874	7.874	(0.941)	84998	50.0000	47
	69	1-Chlorohexane	91	8.347	8.347	(0.997)	95969	50.0000	43(Q)
*	68	Chlorobenzene-d5	117	8.371	8.371	(1.000)	319928	50.0000	
	70	Chlorobenzene	112	8.394	8.394	(1.003)	223085	50.0000	45
	71	1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	91208	50.0000	46
	72	Ethylbenzene	106	8.513	8.513	(1.017)	112809	50.0000	45
	73	m,p-Xylene	106	8.643	8.643	(1.033)	272271	100.000	89
	74	o-Xylene	106	9.092	9.092	(1.086)	135813	50.0000	45
	75	Styrene	104	9.104	9.104	(1.088)	235195	50.0000	46
	76	Bromoform	173	9.317	9.317	(1.113)	67087	50.0000	48

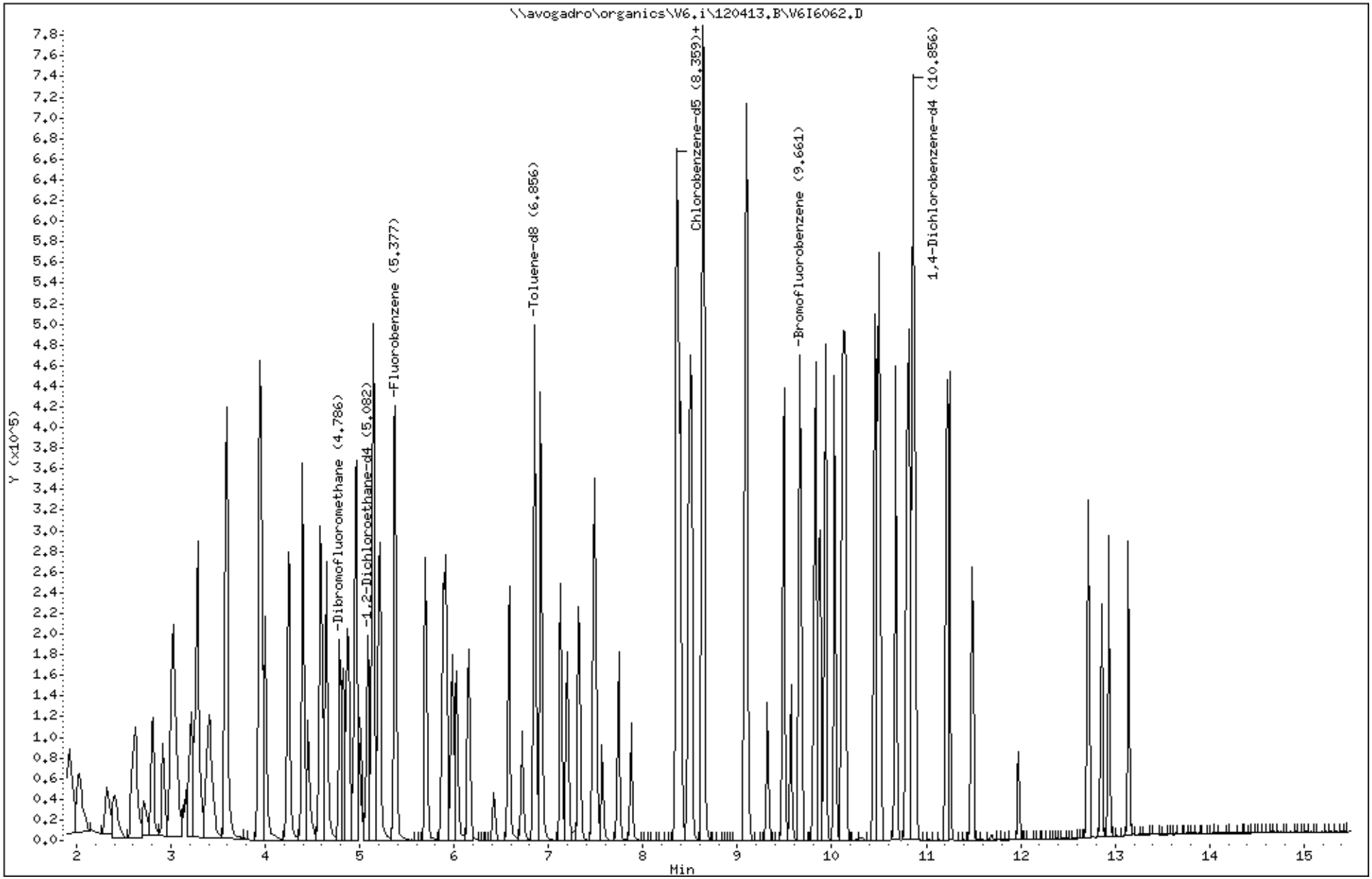
Data File: \\avogadro\organics\V6.i\120413.B\V6I6062.D
Report Date: 19-Apr-2012 13:05

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.495	9.495	(1.134)	327672	50.0000	44
	78	trans-1,4-Dichloro-2-butene	75	9.566	9.566	(1.143)	35034	50.0000	55
$	79	Bromofluorobenzene	95	9.660	9.660	(1.154)	164721	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	104018	50.0000	47
	81	Bromobenzene	156	9.826	9.826	(0.905)	99669	50.0000	45
	82	1,2,3-Trichloropropane	75	9.873	9.873	(0.910)	130899	50.0000	48
	83	n-Propylbenzene	120	9.933	9.933	(0.915)	93363	50.0000	44(Q)
	84	2-Chlorotoluene	126	10.027	10.027	(0.924)	89906	50.0000	44
	85	1,3,5-Trimethylbenzene	105	10.110	10.110	(0.931)	275052	50.0000	44
	86	4-Chlorotoluene	126	10.146	10.146	(0.935)	93486	50.0000	44
M	94	Xylene (Total)	106				408084	150.000	(a)
	87	tert-Butylbenzene	119	10.453	10.453	(0.963)	315490	50.0000	44
	88	1,2,4-Trimethylbenzene	105	10.500	10.500	(0.967)	284211	50.0000	45
	89	sec-Butylbenzene	105	10.678	10.678	(0.984)	319144	50.0000	43
	90	1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	171320	50.0000	44
	91	4-Isopropyltoluene	119	10.820	10.820	(0.997)	268054	50.0000	42
*	92	1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	177507	50.0000	(Q)
	93	1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	176569	50.0000	44
	95	n-Butylbenzene	91	11.222	11.222	(1.034)	234333	50.0000	42
	96	1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	171557	50.0000	45
	97	Hexachloroethane	117	11.483	11.483	(1.058)	57412	50.0000	46
	98	1,2-Dibromo-3-chloropropane	75	11.980	11.980	(1.104)	20111	50.0000	49
	141	1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	83218	50.0000	43(A)
	99	1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	86490	50.0000	42
	100	Hexachlorobutadiene	225	12.855	12.855	(1.184)	34765	50.0000	40
	101	Naphthalene	128	12.938	12.938	(1.192)	225357	50.0000	42
	102	1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	75829	50.0000	40

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120413.B\V6I6062.D
Date : 13-APR-2012 08:57
Client ID: VSTD0506L
Instrument: V6.i
Sample Info: 5ML,VSTD0506L,VSTD0506L
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120413.B\V6I6063.D
Report Date: 19-Apr-2012 13:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120413.B\V6I6063.D
Lab Smp Id: VSTD0206L Client Smp ID: VSTD0206L
Inj Date : 13-APR-2012 09:34
Operator : AM   SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0206L,VSTD0206L
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413.B\v68260Gadd-6lvl.m
Meth Date : 19-Apr-2012 13:04 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 09:34 Cal File: V6I6063.D
Als bottle: 27 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	1.744	1.744	(0.324)	52619	20.0000	24
2	Freon114	85	1.862	1.863	(0.346)	49748	20.0000	23
3	Chloromethane	50	1.921	1.922	(0.357)	79462	20.0000	25
4	Vinyl Chloride	62	2.028	2.028	(0.377)	57044	20.0000	24
5	Bromomethane	94	2.324	2.324	(0.432)	34278	20.0000	26
6	Chloroethane	64	2.407	2.407	(0.448)	31874	20.0000	24
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	62335	20.0000	24
126	Ethanol	46	2.714	2.715	(0.505)	16872	2000.00	3100(AQ)
8	Ether	59	2.809	2.809	(0.522)	33039	20.0000	24
9	Acrolein	56	2.915	2.916	(0.542)	37710	100.000	110
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	41256	20.0000	25
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	40563	20.0000	24
12	Acetone	58	3.034	3.034	(0.564)	6302	20.0000	24
13	Iodomethane	142	3.164	3.164	(0.588)	56890	20.0000	28
14	Carbon Disulfide	76	3.211	3.211	(0.597)	128724	20.0000	25
15	Acetonitrile	41	3.282	3.282	(0.610)	127239	200.000	250(A)
16	Allyl Chloride	39	3.282	3.282	(0.610)	63127	20.0000	25
17	Methyl Acetate	43	3.282	3.282	(0.610)	33720	20.0000	23
18	Methylene Chloride	84	3.401	3.401	(0.633)	46804	20.0000	25
19	tert-Butanol	59	3.448	3.436	(0.641)	8052	40.0000	46
20	Acrylonitrile	53	3.566	3.566	(0.663)	16241	20.0000	22
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	39242	20.0000	24
22	Methyl tert-butyl ether	73	3.578	3.578	(0.665)	109293	20.0000	23

Data File: \\avogadro\organics\V6.i\120413.B\V6I6063.D
Report Date: 19-Apr-2012 13:05

	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	3.933	3.921	(0.732)	75121	20.0000	24
	24 Vinyl acetate	43	3.945	3.945	(0.734)	164678	20.0000	23
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	148934	20.0000	24
	26 2-Chloro-1,3-Butadiene	53	3.992	4.004	(0.743)	63623	20.0000	25
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	123958	20.0000	24
	29 2,2-Dichloropropane	77	4.394	4.395	(0.817)	36774	20.0000	26
	28 cis-1,2-Dichloroethene	96	4.394	4.395	(0.817)	44576	20.0000	25
	30 2-Butanone	72	4.394	4.395	(0.817)	5240	20.0000	22(Q)
	32 Propionitrile	54	4.454	4.454	(0.828)	60401	200.000	230(A)
	33 Methacrylonitrile	41	4.572	4.572	(0.850)	50452	40.0000	46
	34 Bromochloromethane	128	4.596	4.596	(0.855)	23406	20.0000	24
	31 Tetrahydrofuran	72	4.643	4.631	(0.864)	9448	40.0000	46
	35 Chloroform	83	4.643	4.643	(0.864)	71875	20.0000	25
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	111399	50.0000	50
	37 1,1,1-Trichloroethane	97	4.820	4.821	(0.897)	58241	20.0000	25
	38 Cyclohexane	56	4.868	4.868	(0.905)	62891	20.0000	24
	39 1,1-Dichloropropene	110	4.951	4.951	(0.921)	19484	20.0000	24
	40 Carbon Tetrachloride	117	4.962	4.963	(0.923)	49970	20.0000	24
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	39778	400.000	490(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	23870	50.0000	49
	43 Benzene	78	5.140	5.140	(0.956)	151225	20.0000	25
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	60467	20.0000	24
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	112618	20.0000	24
M	50 1,2-Dichloroethene (Total)	96				83818	40.0000	(a)
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	389842	50.0000	
	47 Trichloroethene	130	5.696	5.696	(1.059)	44673	20.0000	25
	48 Methylcyclohexane	83	5.885	5.886	(1.095)	54576	20.0000	25
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	42269	20.0000	24
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	29098	20.0000	23
	52 Dibromomethane	93	6.027	6.028	(1.121)	27291	20.0000	23
	53 1,4-Dioxane	88	6.027	6.028	(1.121)	8845	400.000	490(A)
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	57367	20.0000	24
	55 2-Chloroethyl vinyl ether	63	6.418	6.418	(1.194)	8681	20.0000	21
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	66584	20.0000	24
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	40703	20.0000	23
$	58 Toluene-d8	98	6.856	6.856	(0.819)	376581	50.0000	50
	59 Toluene	91	6.915	6.915	(1.286)	164652	20.0000	25
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	64124	20.0000	24
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	40993	20.0000	22
	62 1,1,2-Trichloroethane	97	7.317	7.317	(1.361)	36468	20.0000	24
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	34187	20.0000	26
	64 1,3-Dichloropropane	76	7.507	7.495	(0.897)	60418	20.0000	24
	65 2-Hexanone	43	7.566	7.566	(0.904)	32317	20.0000	23
	66 Dibromochloromethane	129	7.743	7.743	(0.925)	48229	20.0000	24(T)
	67 1,2-Dibromoethane	107	7.873	7.874	(0.941)	40817	20.0000	24
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	49045	20.0000	26(Q)
*	68 Chlorobenzene-d5	117	8.370	8.371	(1.000)	319584	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	114241	20.0000	26
	71 1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	44884	20.0000	25
	72 Ethylbenzene	106	8.512	8.513	(1.017)	57334	20.0000	25
	73 m,p-Xylene	106	8.642	8.643	(1.033)	140327	40.0000	52
	74 o-Xylene	106	9.080	9.092	(1.085)	69452	20.0000	26
	75 Styrene	104	9.104	9.104	(1.088)	117473	20.0000	25
	76 Bromoform	173	9.317	9.317	(1.113)	31303	20.0000	23

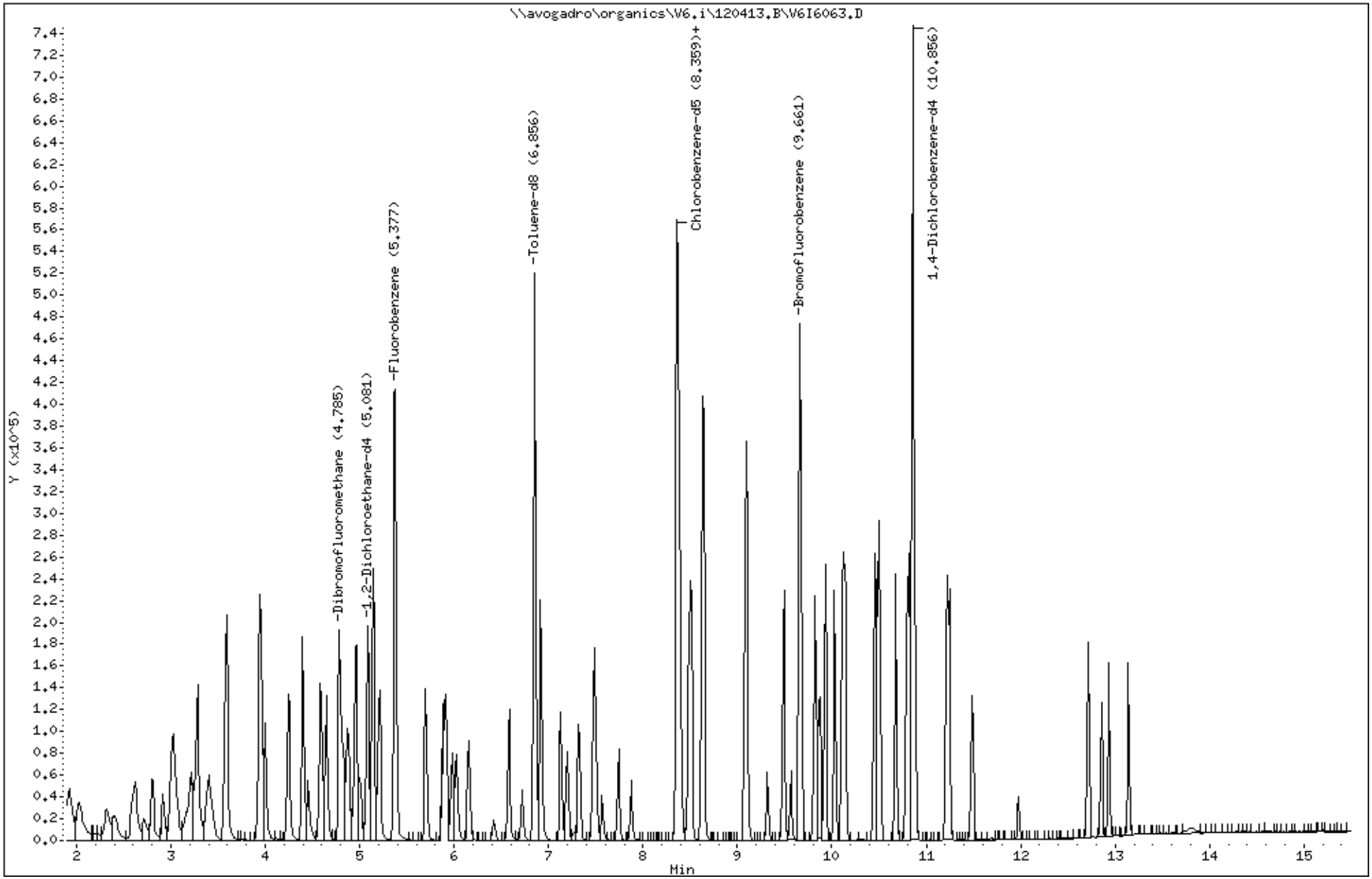
Data File: \\avogadro\organics\V6.i\120413.B\V6I6063.D
Report Date: 19-Apr-2012 13:05

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.494	9.495	(1.134)	170265	20.0000	26
	78 trans-1,4-Dichloro-2-butene	75	9.565	9.566	(1.143)	14874	20.0000	21
$	79 Bromofluorobenzene	95	9.660	9.660	(1.154)	165537	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	49432	20.0000	24
	81 Bromobenzene	156	9.826	9.826	(0.905)	49793	20.0000	25
	82 1,2,3-Trichloropropane	75	9.873	9.873	(0.910)	60861	20.0000	23
	83 n-Propylbenzene	120	9.932	9.933	(0.915)	47881	20.0000	26
	84 2-Chlorotoluene	126	10.027	10.027	(0.924)	46690	20.0000	26
	85 1,3,5-Trimethylbenzene	105	10.122	10.110	(0.932)	144247	20.0000	26
	86 4-Chlorotoluene	126	10.145	10.146	(0.935)	47545	20.0000	25
M	94 Xylene (Total)	106				209779	60.0000	(a)
	87 tert-Butylbenzene	119	10.453	10.453	(0.963)	162522	20.0000	26
	88 1,2,4-Trimethylbenzene	105	10.500	10.500	(0.967)	147803	20.0000	26
	89 sec-Butylbenzene	105	10.678	10.678	(0.984)	171593	20.0000	27
	90 1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	88678	20.0000	26
	91 4-Isopropyltoluene	119	10.820	10.820	(0.997)	144413	20.0000	27
*	92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	177806	50.0000	
	93 1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	91090	20.0000	26
	95 n-Butylbenzene	91	11.222	11.222	(1.034)	123479	20.0000	26
	96 1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	88459	20.0000	26
	97 Hexachloroethane	117	11.482	11.483	(1.058)	29491	20.0000	26
	98 1,2-Dibromo-3-chloropropane	75	11.979	11.980	(1.104)	8938	20.0000	22
	141 1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	44413	20.0000	26(A)
	99 1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	46590	20.0000	27
	100 Hexachlorobutadiene	225	12.855	12.855	(1.184)	19089	20.0000	27
	101 Naphthalene	128	12.938	12.938	(1.192)	121455	20.0000	27
	102 1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	42618	20.0000	28

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\V6.i\120413.B\V6I6063.D
Date : 13-APR-2012 09:34
Client ID: VSTD0206L
Instrument: V6.i
Sample Info: 5ML,VSTD0206L,VSTD0206L
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120413.B\V6I6064.D
Report Date: 19-Apr-2012 13:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120413.B\V6I6064.D
Lab Smp Id: VSTD0056L Client Smp ID: VSTD0056L
Inj Date : 13-APR-2012 09:58
Operator : AM   SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0056L,VSTD0056L
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413.B\v68260Gadd-6lvl.m
Meth Date : 19-Apr-2012 13:04 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 09:58 Cal File: V6I6064.D
Als bottle: 28 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	1.747	1.744	(0.326)	12828	5.00000	5
2	Freon114	85	1.854	1.863	(0.345)	13023	5.00000	6
3	Chloromethane	50	1.925	1.922	(0.359)	17506	5.00000	5
4	Vinyl Chloride	62	2.019	2.028	(0.376)	12887	5.00000	5
5	Bromomethane	94	2.315	2.324	(0.431)	8615	5.00000	6
6	Chloroethane	64	2.410	2.407	(0.449)	7457	5.00000	5
7	Trichlorofluoromethane	101	2.599	2.596	(0.484)	14706	5.00000	5
126	Ethanol	46	2.717	2.715	(0.506)	3817	500.000	560(AQ)
8	Ether	59	2.800	2.809	(0.522)	7009	5.00000	5(Q)
9	Acrolein	56	2.919	2.916	(0.544)	7807	25.0000	22
10	1,1-Dichloroethene	96	3.013	3.022	(0.561)	9460	5.00000	5
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.001	3.010	(0.559)	10405	5.00000	6
12	Acetone	58	3.049	3.034	(0.568)	1268	5.00000	4(Q)
13	Iodomethane	142	3.155	3.164	(0.588)	14354	5.00000	6
14	Carbon Disulfide	76	3.214	3.211	(0.599)	30569	5.00000	5
15	Acetonitrile	41	3.274	3.282	(0.610)	31527	50.0000	56
16	Allyl Chloride	39	3.274	3.282	(0.610)	14768	5.00000	5
17	Methyl Acetate	43	3.285	3.282	(0.612)	8445	5.00000	5
18	Methylene Chloride	84	3.404	3.401	(0.634)	10782	5.00000	5
19	tert-Butanol	59	3.439	3.436	(0.641)	2007	10.0000	11
20	Acrylonitrile	53	3.569	3.566	(0.665)	3130	5.00000	4
21	trans-1,2-Dichloroethene	96	3.593	3.590	(0.669)	8799	5.00000	5
22	Methyl tert-butyl ether	73	3.581	3.578	(0.667)	24542	5.00000	5

Data File: \\avogadro\organics\V6.i\120413.B\V6I6064.D
Report Date: 19-Apr-2012 13:05

	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	3.924	3.921	(0.731)	16611	5.00000	5
	24 Vinyl acetate	43	3.948	3.945	(0.736)	36083	5.00000	5
	25 Diisopropyl Ether	45	3.948	3.957	(0.736)	32686	5.00000	5
	26 2-Chloro-1,3-Butadiene	53	3.995	4.004	(0.744)	14415	5.00000	5
	27 Ethyl tert-butyl ether	59	4.244	4.241	(0.791)	27910	5.00000	5
	29 2,2-Dichloropropane	77	4.398	4.395	(0.819)	8496	5.00000	5
	28 cis-1,2-Dichloroethene	96	4.398	4.395	(0.819)	9693	5.00000	5
	30 2-Butanone	72	4.398	4.395	(0.819)	908	5.00000	4(Q)
	32 Propionitrile	54	4.457	4.454	(0.830)	14246	50.0000	51
	33 Methacrylonitrile	41	4.575	4.572	(0.852)	11330	10.0000	10
	34 Bromochloromethane	128	4.599	4.596	(0.857)	4814	5.00000	4
	31 Tetrahydrofuran	72	4.634	4.631	(0.863)	1997	10.0000	9
	35 Chloroform	83	4.646	4.643	(0.866)	16130	5.00000	5
$	36 Dibromofluoromethane	113	4.788	4.785	(0.892)	110391	50.0000	50
	37 1,1,1-Trichloroethane	97	4.824	4.821	(0.899)	13818	5.00000	5
	38 Cyclohexane	56	4.871	4.868	(0.907)	15881	5.00000	6
	39 1,1-Dichloropropene	110	4.954	4.951	(0.923)	4460	5.00000	5
	40 Carbon Tetrachloride	117	4.966	4.963	(0.925)	11847	5.00000	5
	41 Isobutyl Alcohol	43	5.001	4.998	(0.932)	10075	100.000	110
$	42 1,2-Dichloroethane-d4	102	5.084	5.081	(0.947)	24163	50.0000	50
	43 Benzene	78	5.143	5.140	(0.958)	34735	5.00000	5
	44 1,2-Dichloroethane	62	5.155	5.152	(0.960)	13590	5.00000	5
	45 tert-Amyl methyl ether	73	5.202	5.211	(0.969)	25738	5.00000	5
M	50 1,2-Dichloroethene (Total)	96				18492	10.0000	(a)
*	46 Fluorobenzene	96	5.368	5.377	(1.000)	386416	50.0000	
	47 Trichloroethene	130	5.699	5.696	(1.062)	10505	5.00000	5
	48 Methylcyclohexane	83	5.877	5.886	(1.095)	13290	5.00000	5
	49 1,2-Dichloropropane	63	5.912	5.909	(1.101)	9480	5.00000	5
	51 Methyl Methacrylate	69	5.983	5.980	(1.115)	5882	5.00000	4
	52 Dibromomethane	93	6.019	6.028	(1.121)	6274	5.00000	5
	53 1,4-Dioxane	88	6.019	6.028	(1.121)	2763	100.000	140
	54 Bromodichloromethane	83	6.149	6.158	(1.145)	12501	5.00000	5
	55 2-Chloroethyl vinyl ether	63	6.421	6.418	(1.196)	1286	5.00000	3(T)
	56 cis-1,3-Dichloropropene	75	6.575	6.584	(1.225)	15192	5.00000	5
	57 4-Methyl-2-pentanone	43	6.717	6.714	(1.251)	8982	5.00000	5
$	58 Toluene-d8	98	6.847	6.856	(0.819)	380996	50.0000	50
	59 Toluene	91	6.918	6.915	(1.289)	38866	5.00000	5
	60 trans-1,3-Dichloropropene	75	7.131	7.128	(1.328)	14060	5.00000	5
	61 Ethyl Methacrylate	69	7.202	7.199	(1.342)	8505	5.00000	4
	62 1,1,2-Trichloroethane	97	7.320	7.317	(1.364)	8280	5.00000	5
	63 Tetrachloroethene	164	7.474	7.483	(0.894)	8878	5.00000	6
	64 1,3-Dichloropropane	76	7.498	7.495	(0.897)	14099	5.00000	5
	65 2-Hexanone	43	7.569	7.566	(0.905)	6889	5.00000	4
	66 Dibromochloromethane	129	7.746	7.743	(0.926)	10955	5.00000	5(T)
	67 1,2-Dibromoethane	107	7.876	7.874	(0.942)	9351	5.00000	5(T)
	69 1-Chlorohexane	91	8.350	8.347	(0.999)	12786	5.00000	6(Q)
*	68 Chlorobenzene-d5	117	8.362	8.371	(1.000)	320824	50.0000	
	70 Chlorobenzene	112	8.397	8.394	(1.004)	27361	5.00000	5
	71 1,1,1,2-Tetrachloroethane	131	8.480	8.477	(1.014)	10909	5.00000	5
	72 Ethylbenzene	106	8.504	8.513	(1.017)	13373	5.00000	5
	73 m,p-Xylene	106	8.634	8.643	(1.033)	33797	10.0000	11
	74 o-Xylene	106	9.083	9.092	(1.086)	16411	5.00000	5
	75 Styrene	104	9.095	9.104	(1.088)	26274	5.00000	5
	76 Bromoform	173	9.320	9.317	(1.115)	6882	5.00000	5

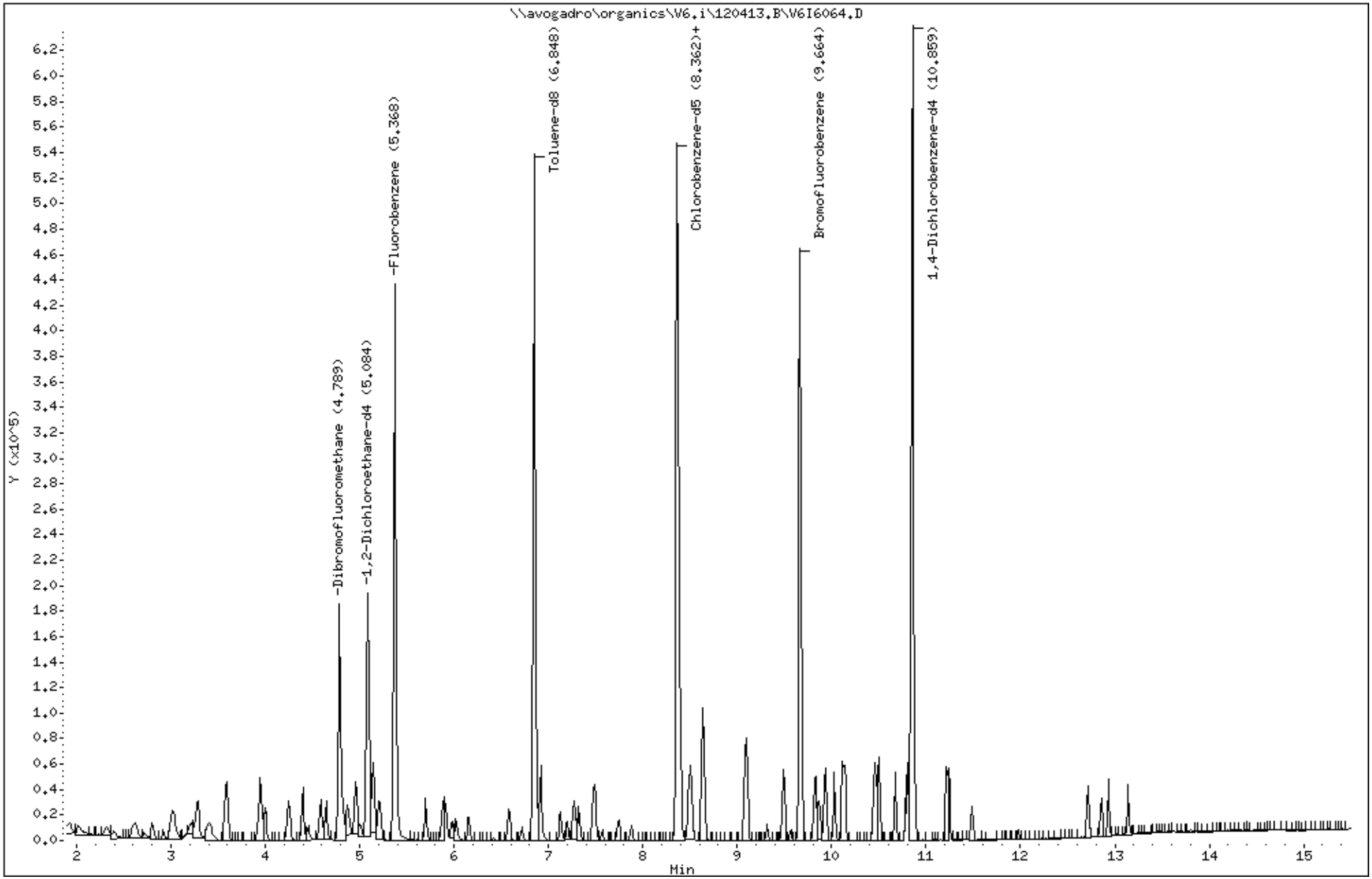
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Report Date: 19-Apr-2012 13:05

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.486	9.495	(1.134)	41525	5.00000	5
	78	trans-1,4-Dichloro-2-butene	75	9.569	9.566	(1.144)	2277	5.00000	3
$	79	Bromofluorobenzene	95	9.663	9.660	(1.156)	162270	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	9.817	9.814	(0.904)	11874	5.00000	5(T)
	81	Bromobenzene	156	9.829	9.826	(0.905)	12139	5.00000	6
	82	1,2,3-Trichloropropane	75	9.864	9.873	(0.908)	13442	5.00000	5
	83	n-Propylbenzene	120	9.935	9.933	(0.915)	11774	5.00000	6
	84	2-Chlorotoluene	126	10.030	10.027	(0.924)	11053	5.00000	6
	85	1,3,5-Trimethylbenzene	105	10.113	10.110	(0.931)	35313	5.00000	6
	86	4-Chlorotoluene	126	10.148	10.146	(0.935)	11710	5.00000	6
M	94	Xylene (Total)	106				50208	15.0000	(a)
	87	tert-Butylbenzene	119	10.456	10.453	(0.963)	39768	5.00000	6
	88	1,2,4-Trimethylbenzene	105	10.503	10.500	(0.967)	35103	5.00000	6
	89	sec-Butylbenzene	105	10.669	10.678	(0.983)	42573	5.00000	6
	90	1,3-Dichlorobenzene	146	10.787	10.796	(0.993)	21382	5.00000	6
	91	4-Isopropyltoluene	119	10.823	10.820	(0.997)	35544	5.00000	6
*	92	1,4-Dichlorobenzene-d4	152	10.858	10.855	(1.000)	169640	50.0000	
	93	1,4-Dichlorobenzene	146	10.882	10.879	(1.002)	21995	5.00000	6
	95	n-Butylbenzene	91	11.213	11.222	(1.033)	32502	5.00000	6
	96	1,2-Dichlorobenzene	146	11.249	11.246	(1.036)	21023	5.00000	6
	97	Hexachloroethane	117	11.486	11.483	(1.058)	5702	5.00000	4
	98	1,2-Dibromo-3-chloropropane	75	11.971	11.980	(1.102)	2139	5.00000	5
	141	1,3,5-Trichlorobenzene	182	12.716	12.713	(2.369)	10912	5.00000	6(A)
	99	1,2,4-Trichlorobenzene	180	12.716	12.713	(1.171)	11713	5.00000	6
	100	Hexachlorobutadiene	225	12.858	12.855	(1.184)	5168	5.00000	6
	101	Naphthalene	128	12.929	12.938	(1.191)	33889	5.00000	7
	102	1,2,3-Trichlorobenzene	180	13.142	13.139	(1.210)	11695	5.00000	7(TQ)

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\V6.i\120413.B\V6I6064.D
Date : 13-APR-2012 09:58
Client ID: VSTD0056L
Instrument: V6.i
Sample Info: 5ML,VSTD0056L,VSTD0056L
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120413.B\V6I6069.D
Report Date: 19-Apr-2012 13:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120413.B\V6I6069.D
Lab Smp Id: VSTD2006L Client Smp ID: VSTD2006L
Inj Date : 13-APR-2012 12:21
Operator : AM   SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD2006L,VSTD2006L
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413.B\v68260Gadd-6lvl.m
Meth Date : 19-Apr-2012 13:04 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:21 Cal File: V6I6069.D
Als bottle: 33 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	1.744	1.744	(0.324)	483904	200.000	200
2	Freon114	85	1.862	1.863	(0.346)	477294	200.000	200
3	Chloromethane	50	1.921	1.922	(0.357)	659057	200.000	190
4	Vinyl Chloride	62	2.028	2.028	(0.377)	520289	200.000	200
5	Bromomethane	94	2.324	2.324	(0.432)	278536	200.000	180
6	Chloroethane	64	2.407	2.407	(0.448)	285471	200.000	200
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	586131	200.000	200
126	Ethanol	46	2.714	2.715	(0.505)	89795	20000.0	14000(A)
8	Ether	59	2.797	2.809	(0.520)	268421	200.000	190
9	Acrolein	56	2.915	2.916	(0.542)	349460	1000.00	1000(A)
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	371000	200.000	200
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	397714	200.000	200(A)
12	Acetone	58	3.034	3.034	(0.564)	55143	200.000	200
13	Iodomethane	142	3.164	3.164	(0.588)	533205	200.000	200
14	Carbon Disulfide	76	3.211	3.211	(0.597)	1053410	200.000	180
15	Acetonitrile	41	3.270	3.282	(0.608)	986907	2000.00	1700(A)
16	Allyl Chloride	39	3.282	3.282	(0.610)	516313	200.000	180
17	Methyl Acetate	43	3.282	3.282	(0.610)	281226	200.000	180
18	Methylene Chloride	84	3.401	3.401	(0.633)	379894	200.000	180
19	tert-Butanol	59	3.436	3.436	(0.639)	64278	400.000	360(A)
20	Acrylonitrile	53	3.566	3.566	(0.663)	142598	200.000	200
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	333484	200.000	190

Data File: \\avogadro\organics\V6.i\120413.B\V6I6069.D
Report Date: 19-Apr-2012 13:05

	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	3.578	3.578	(0.665)	913750	200.000	190
	23 1,1-Dichloroethane	63	3.921	3.921	(0.729)	585723	200.000	180
	24 Vinyl acetate	43	3.945	3.945	(0.734)	1305554	200.000	180
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	1171801	200.000	180
	26 2-Chloro-1,3-Butadiene	53	3.992	4.004	(0.743)	550918	200.000	190
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	987347	200.000	180
	29 2,2-Dichloropropane	77	4.395	4.395	(0.817)	288901	200.000	180
	28 cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	365935	200.000	190
	30 2-Butanone	72	4.395	4.395	(0.817)	49839	200.000	220(A)
	32 Propionitrile	54	4.454	4.454	(0.828)	490312	2000.00	1800(A)
	33 Methacrylonitrile	41	4.584	4.572	(0.853)	432115	400.000	380(A)
	34 Bromochloromethane	128	4.596	4.596	(0.855)	197331	200.000	190
	31 Tetrahydrofuran	72	4.631	4.631	(0.861)	84617	400.000	400(A)
	35 Chloroform	83	4.643	4.643	(0.864)	572267	200.000	180
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	113061	50.0000	50
	37 1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	492438	200.000	190
	38 Cyclohexane	56	4.868	4.868	(0.905)	605377	200.000	200(A)
	39 1,1-Dichloropropene	110	4.951	4.951	(0.921)	169671	200.000	190
	40 Carbon Tetrachloride	117	4.963	4.963	(0.923)	461405	200.000	200
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	281528	4000.00	3300(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	24861	50.0000	51
	43 Benzene	78	5.140	5.140	(0.956)	1146031	200.000	180
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	518917	200.000	190
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	917145	200.000	180
M	50 1,2-Dichloroethene (Total)	96				699419	400.000	380
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	392067	50.0000	
	47 Trichloroethene	130	5.696	5.696	(1.059)	364900	200.000	180
	48 Methylcyclohexane	83	5.885	5.886	(1.095)	526947	200.000	210(A)
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	344169	200.000	190
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	274185	200.000	210(A)
	52 Dibromomethane	93	6.027	6.028	(1.121)	236300	200.000	190
	53 1,4-Dioxane	88	6.027	6.028	(1.121)	47659	4000.00	2600(A)
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	463099	200.000	190
	55 2-Chloroethyl vinyl ether	63	6.418	6.418	(1.194)	102286	200.000	260(A)
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	537590	200.000	180
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	344444	200.000	190
$	58 Toluene-d8	98	6.856	6.856	(0.819)	375952	50.0000	49
	59 Toluene	91	6.915	6.915	(1.286)	1292726	200.000	180
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	517658	200.000	180
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	368975	200.000	200
	62 1,1,2-Trichloroethane	97	7.317	7.317	(1.361)	308909	200.000	190
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	296889	200.000	190
	64 1,3-Dichloropropane	76	7.495	7.495	(0.895)	492419	200.000	180
	65 2-Hexanone	43	7.566	7.566	(0.904)	293856	200.000	200
	66 Dibromochloromethane	129	7.743	7.743	(0.925)	420058	200.000	190
	67 1,2-Dibromoethane	107	7.873	7.874	(0.941)	351924	200.000	190
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	453630	200.000	200
*	68 Chlorobenzene-d5	117	8.370	8.371	(1.000)	329523	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	903888	200.000	180
	71 1,1,1,2-Tetrachloroethane	131	8.489	8.477	(1.014)	383795	200.000	190
	72 Ethylbenzene	106	8.512	8.513	(1.017)	491500	200.000	190
	73 m,p-Xylene	106	8.643	8.643	(1.033)	1166541	400.000	370(A)
	74 o-Xylene	106	9.092	9.092	(1.086)	599149	200.000	190
	75 Styrene	104	9.104	9.104	(1.088)	997757	200.000	190

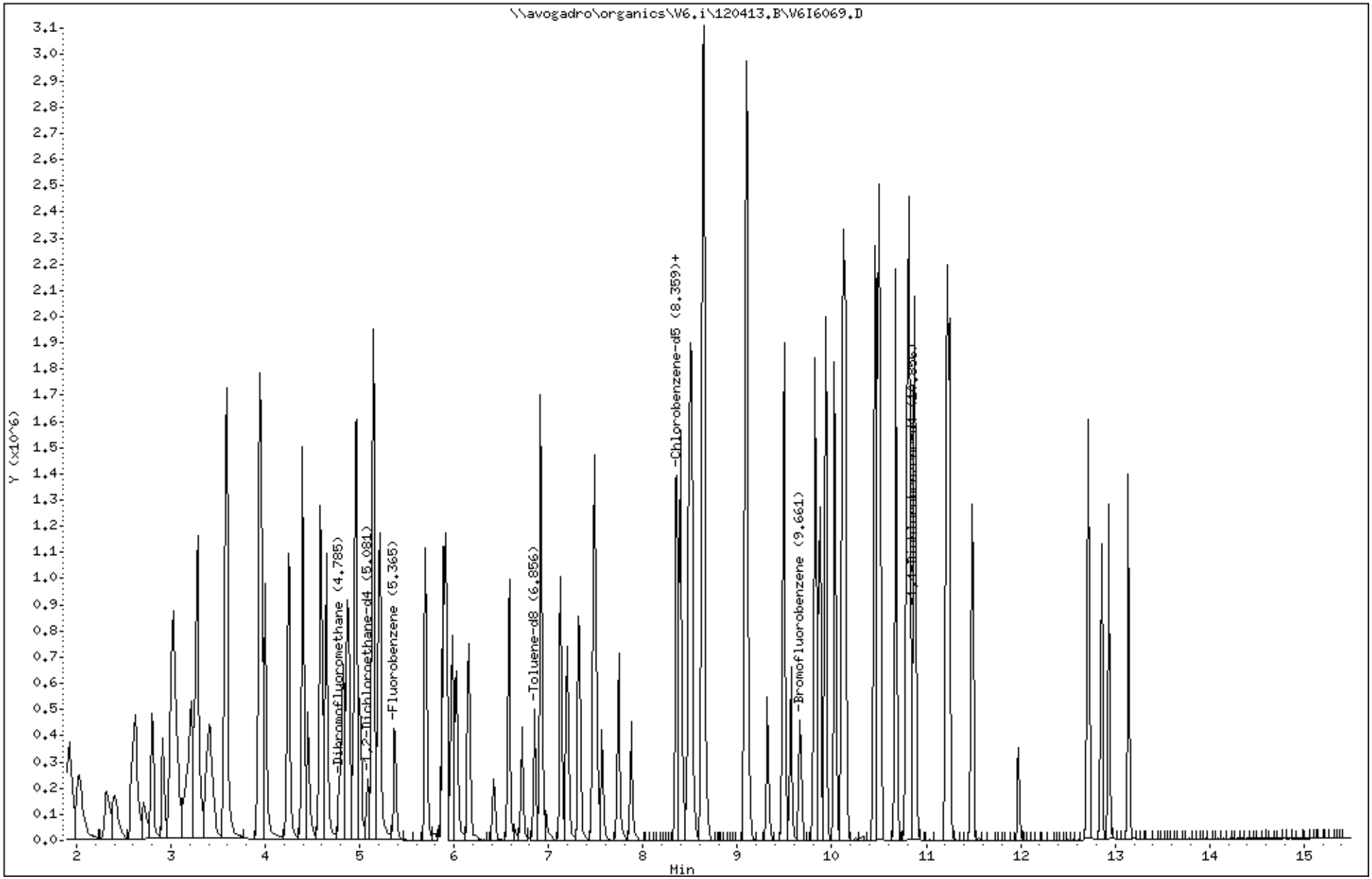
Data File: \\avogadro\organics\V6.i\120413.B\V6I6069.D
Report Date: 19-Apr-2012 13:05

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76	Bromoform	173	9.317	9.317	(1.113)	280973	200.000	200
	77	Isopropylbenzene	105	9.494	9.495	(1.134)	1392829	200.000	180
	78	trans-1,4-Dichloro-2-butene	75	9.565	9.566	(1.143)	151508	200.000	230(A)
$	79	Bromofluorobenzene	95	9.660	9.660	(1.154)	173247	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	417431	200.000	180
	81	Bromobenzene	156	9.826	9.826	(0.905)	415167	200.000	180
	82	1,2,3-Trichloropropane	75	9.873	9.873	(0.910)	543226	200.000	190
	83	n-Propylbenzene	120	9.932	9.933	(0.915)	425466	200.000	190
	84	2-Chlorotoluene	126	10.027	10.027	(0.924)	391704	200.000	180
	85	1,3,5-Trimethylbenzene	105	10.122	10.110	(0.932)	1174455	200.000	180
	86	4-Chlorotoluene	126	10.145	10.146	(0.935)	411337	200.000	180
M	94	Xylene (Total)	106				1765690	600.000	560
	87	tert-Butylbenzene	119	10.453	10.453	(0.963)	1400405	200.000	180
	88	1,2,4-Trimethylbenzene	105	10.500	10.500	(0.967)	1200519	200.000	180
	89	sec-Butylbenzene	105	10.678	10.678	(0.984)	1396146	200.000	180
	90	1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	731627	200.000	180
	91	4-Isopropyltoluene	119	10.820	10.820	(0.997)	1214694	200.000	180
*	92	1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	188540	50.0000	
	93	1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	745712	200.000	180
	95	n-Butylbenzene	91	11.222	11.222	(1.034)	1079770	200.000	180
	96	1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	714176	200.000	180
	97	Hexachloroethane	117	11.482	11.483	(1.058)	287412	200.000	220(A)
	98	1,2-Dibromo-3-chloropropane	75	11.979	11.980	(1.104)	82341	200.000	190
	141	1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	398839	200.000	200(A)
	99	1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	414138	200.000	190
	100	Hexachlorobutadiene	225	12.855	12.855	(1.184)	170744	200.000	190
	101	Naphthalene	128	12.938	12.938	(1.192)	957621	200.000	170
	102	1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	359558	200.000	180

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V6.i\120413.B\V6I6069.D
Date : 13-APR-2012 12:21
Client ID: VSTD2006L
Instrument: V6.i
Sample Info: 5ML,VSTD2006L,VSTD2006L
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120413.B\V6I6070.D
Report Date: 19-Apr-2012 13:05

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120413.B\V6I6070.D
Lab Smp Id: VSTD1006L Client Smp ID: VSTD1006L
Inj Date : 13-APR-2012 12:45
Operator : AM   SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD1006L,VSTD1006L
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413.B\v68260Gadd-6lvl.m
Meth Date : 19-Apr-2012 13:04 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 34 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	1.744	1.744	(0.324)	252467	100.000	100
2	Freon114	85	1.862	1.863	(0.346)	254197	100.000	100
3	Chloromethane	50	1.933	1.922	(0.360)	347200	100.000	97
4	Vinyl Chloride	62	2.028	2.028	(0.377)	267221	100.000	100
5	Bromomethane	94	2.324	2.324	(0.432)	141840	100.000	91
6	Chloroethane	64	2.407	2.407	(0.448)	149487	100.000	100
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	302099	100.000	100
126	Ethanol	46	2.726	2.715	(0.507)	94945	10000.0	13000(A)
8	Ether	59	2.797	2.809	(0.520)	147988	100.000	100
9	Acrolein	56	2.915	2.916	(0.542)	196754	500.000	540(A)
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	194556	100.000	100
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	209413	100.000	100
12	Acetone	58	3.034	3.034	(0.564)	28457	100.000	100
13	Iodomethane	142	3.164	3.164	(0.588)	292483	100.000	110
14	Carbon Disulfide	76	3.211	3.211	(0.597)	561181	100.000	96
15	Acetonitrile	41	3.282	3.282	(0.610)	556331	1000.00	960(A)
16	Allyl Chloride	39	3.282	3.282	(0.610)	279911	100.000	98
17	Methyl Acetate	43	3.282	3.282	(0.610)	154209	100.000	97
18	Methylene Chloride	84	3.401	3.401	(0.633)	196508	100.000	94
19	tert-Butanol	59	3.448	3.436	(0.641)	40578	200.000	210(A)
20	Acrylonitrile	53	3.566	3.566	(0.663)	76754	100.000	100
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	179551	100.000	100

Data File: \\avogadro\organics\V6.i\120413.B\V6I6070.D
Report Date: 19-Apr-2012 13:05

	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	3.578	3.578	(0.665)	483438	100.000	97
	23 1,1-Dichloroethane	63	3.921	3.921	(0.729)	310524	100.000	94
	24 Vinyl acetate	43	3.945	3.945	(0.734)	711862	100.000	96
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	633251	100.000	96
	26 2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.745)	296369	100.000	100
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	538616	100.000	96
	29 2,2-Dichloropropane	77	4.395	4.395	(0.817)	157664	100.000	96
	28 cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	188165	100.000	95
	30 2-Butanone	72	4.395	4.395	(0.817)	26102	100.000	110
	32 Propionitrile	54	4.454	4.454	(0.828)	280749	1000.00	1000(A)
	33 Methacrylonitrile	41	4.584	4.572	(0.853)	233654	200.000	200
	34 Bromochloromethane	128	4.596	4.596	(0.855)	102710	100.000	98
	31 Tetrahydrofuran	72	4.631	4.631	(0.861)	45616	200.000	210(A)
	35 Chloroform	83	4.655	4.643	(0.866)	310101	100.000	97
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	116173	50.0000	50
	37 1,1,1-Trichloroethane	97	4.820	4.821	(0.897)	268886	100.000	100
	38 Cyclohexane	56	4.868	4.868	(0.905)	316358	100.000	100
	39 1,1-Dichloropropene	110	4.951	4.951	(0.921)	91558	100.000	100
	40 Carbon Tetrachloride	117	4.962	4.963	(0.923)	247042	100.000	100
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	185797	2000.00	2000(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	25052	50.0000	50
	43 Benzene	78	5.140	5.140	(0.956)	636695	100.000	95
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	268926	100.000	97
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	496495	100.000	97
M	50 1,2-Dichloroethene (Total)	96				367716	200.000	200
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	400320	50.0000	
	47 Trichloroethene	130	5.696	5.696	(1.059)	198744	100.000	98
	48 Methylcyclohexane	83	5.885	5.886	(1.095)	275397	100.000	100
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	183723	100.000	97
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	135668	100.000	100
	52 Dibromomethane	93	6.027	6.028	(1.121)	124894	100.000	98
	53 1,4-Dioxane	88	6.027	6.028	(1.121)	45891	2000.00	2200(A)
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	252909	100.000	98
	55 2-Chloroethyl vinyl ether	63	6.418	6.418	(1.194)	49136	100.000	110
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	291902	100.000	97
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	188183	100.000	100
$	58 Toluene-d8	98	6.856	6.856	(0.819)	384855	50.0000	50
	59 Toluene	91	6.915	6.915	(1.286)	687590	100.000	94
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	284280	100.000	98
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	194613	100.000	100
	62 1,1,2-Trichloroethane	97	7.317	7.317	(1.361)	162716	100.000	97
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	154983	100.000	98
	64 1,3-Dichloropropane	76	7.507	7.495	(0.897)	265856	100.000	98
	65 2-Hexanone	43	7.566	7.566	(0.904)	153249	100.000	100
	66 Dibromochloromethane	129	7.743	7.743	(0.925)	220251	100.000	100
	67 1,2-Dibromoethane	107	7.873	7.874	(0.941)	186841	100.000	100
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	233171	100.000	100
*	68 Chlorobenzene-d5	117	8.370	8.371	(1.000)	326560	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	480826	100.000	95
	71 1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	198550	100.000	97
	72 Ethylbenzene	106	8.512	8.513	(1.017)	252064	100.000	98
	73 m,p-Xylene	106	8.642	8.643	(1.033)	596860	200.000	190
	74 o-Xylene	106	9.092	9.092	(1.086)	303620	100.000	97
	75 Styrene	104	9.104	9.104	(1.088)	514429	100.000	98

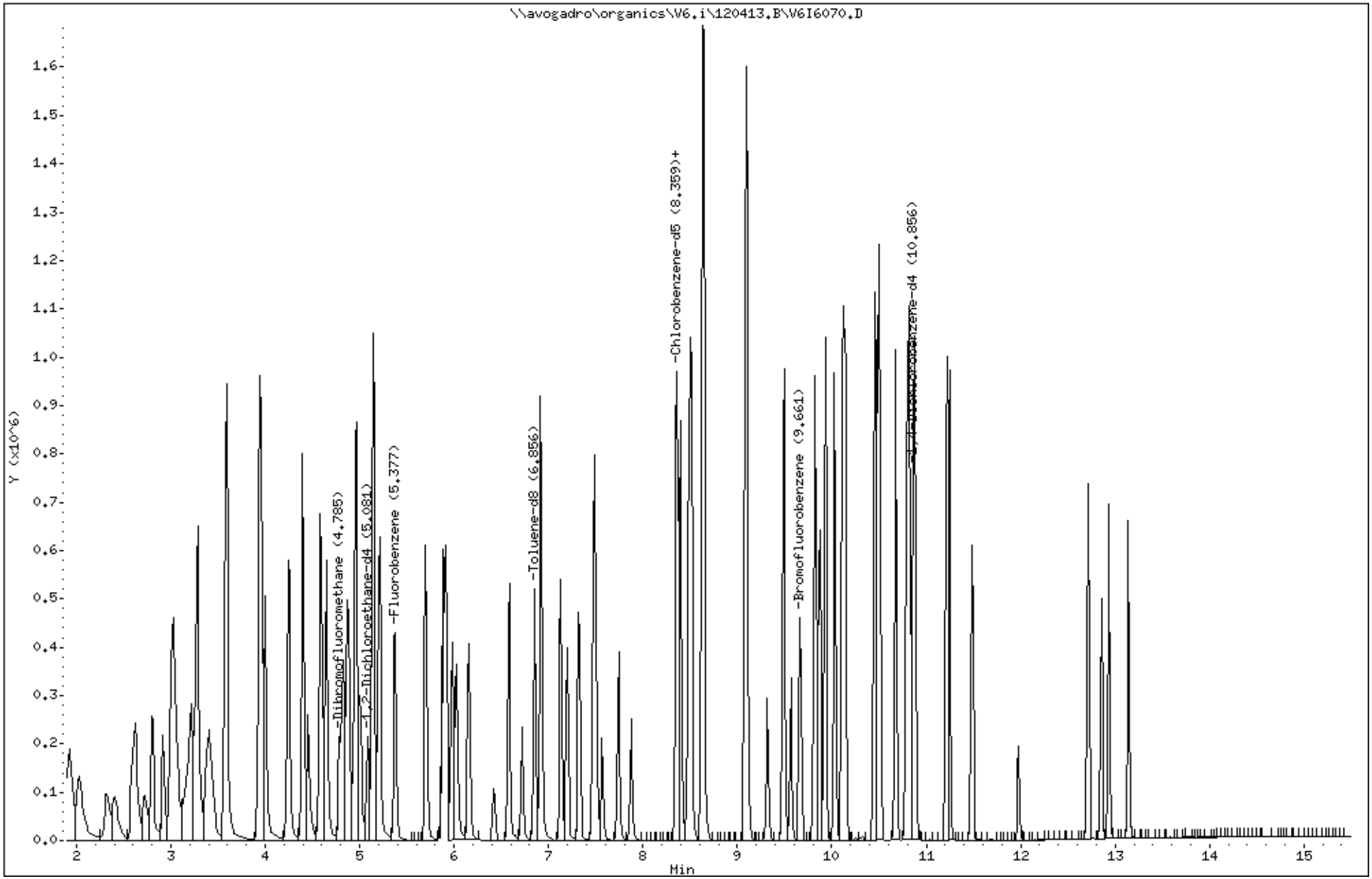
Data File: \\avogadro\organics\V6.i\120413.B\V6I6070.D
Report Date: 19-Apr-2012 13:05

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76	Bromoform	173	9.317	9.317	(1.113)	147944	100.000	100
	77	Isopropylbenzene	105	9.494	9.495	(1.134)	725054	100.000	95
	78	trans-1,4-Dichloro-2-butene	75	9.565	9.566	(1.143)	75301	100.000	110
$	79	Bromofluorobenzene	95	9.660	9.660	(1.154)	165099	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	220464	100.000	100
	81	Bromobenzene	156	9.826	9.826	(0.905)	211752	100.000	98
	82	1,2,3-Trichloropropane	75	9.873	9.873	(0.910)	282562	100.000	100
	83	n-Propylbenzene	120	9.932	9.933	(0.915)	207552	100.000	99
	84	2-Chlorotoluene	126	10.027	10.027	(0.924)	194864	100.000	98
	85	1,3,5-Trimethylbenzene	105	10.122	10.110	(0.932)	589032	100.000	96
	86	4-Chlorotoluene	126	10.145	10.146	(0.935)	205272	100.000	99
M	94	Xylene (Total)	106				900480	300.000	290
	87	tert-Butylbenzene	119	10.453	10.453	(0.963)	700420	100.000	99
	88	1,2,4-Trimethylbenzene	105	10.500	10.500	(0.967)	599445	100.000	96
	89	sec-Butylbenzene	105	10.678	10.678	(0.984)	699170	100.000	96
	90	1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	365130	100.000	97
	91	4-Isopropyltoluene	119	10.820	10.820	(0.997)	586371	100.000	95
*	92	1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	171585	50.0000	
	93	1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	374074	100.000	96
	95	n-Butylbenzene	91	11.222	11.222	(1.034)	513666	100.000	95
	96	1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	359586	100.000	96
	97	Hexachloroethane	117	11.482	11.483	(1.058)	133996	100.000	100
	98	1,2-Dibromo-3-chloropropane	75	11.979	11.980	(1.104)	44857	100.000	110
	141	1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	182685	100.000	90(A)
	99	1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	191726	100.000	95
	100	Hexachlorobutadiene	225	12.855	12.855	(1.184)	77249	100.000	92
	101	Naphthalene	128	12.938	12.938	(1.192)	531116	100.000	99
	102	1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	172848	100.000	93

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V6.i\120413.B\V6I6070.D
Date : 13-APR-2012 12:45
Client ID: VSTD1006L
Instrument: V6.i
Sample Info: 5ML,VSTD1006L,VSTD1006L
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Report Date: 23-Apr-2012 07:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Lab Smp Id: VICV0506M Client Smp ID: VICV0506M
Inj Date : 13-APR-2012 14:30
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VICV0506M,VICV0506M
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413A.B\v68260Gadd-6lvl.m
Meth Date : 23-Apr-2012 07:38 amarquis Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 38 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	1.744	1.744	(0.324)	120786	50.0000	48
2	Freon114	85	1.863	1.863	(0.346)	124641	50.0000	51
3	Chloromethane	50	1.934	1.934	(0.360)	169576	50.0000	48
4	Vinyl Chloride	62	2.028	2.028	(0.377)	127303	50.0000	48
5	Bromomethane	94	2.324	2.324	(0.432)	69134	50.0000	45
6	Chloroethane	64	2.407	2.407	(0.448)	70835	50.0000	48
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	143724	50.0000	49
126	Ethanol	46	2.726	2.726	(0.507)	35449	5000.00	5000(A)
8	Ether	59	2.797	2.797	(0.520)	73601	50.0000	50
9	Acrolein	56	2.916	2.916	(0.542)	97551	250.000	270(A)
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	91914	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	97456	50.0000	49
12	Acetone	58	3.034	3.034	(0.564)	14307	50.0000	51
13	Iodomethane	142	3.164	3.164	(0.589)	138664	50.0000	52
14	Carbon Disulfide	76	3.212	3.212	(0.597)	264656	50.0000	46
15	Acetonitrile	41	3.283	3.283	(0.611)	272136	500.000	480(A)
16	Allyl Chloride	39	3.283	3.283	(0.611)	133585	50.0000	47
17	Methyl Acetate	43	3.283	3.283	(0.611)	79925	50.0000	51
18	Methylene Chloride	84	3.413	3.413	(0.635)	99036	50.0000	48
19	tert-Butanol	59	3.448	3.448	(0.641)	20820	100.000	110
20	Acrylonitrile	53	3.567	3.567	(0.663)	39132	50.0000	53
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	84302	50.0000	48
22	Methyl tert-butyl ether	73	3.578	3.578	(0.666)	250977	50.0000	51

Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Report Date: 23-Apr-2012 07:39

	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	3.922	3.922	(0.729)	152230	50.0000	47
	24 Vinyl acetate	43	3.945	3.945	(0.734)	365050	50.0000	50
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	314293	50.0000	48
	26 2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.745)	141300	50.0000	49
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	273139	50.0000	50
	29 2,2-Dichloropropane	77	4.395	4.395	(0.817)	78417	50.0000	49
	28 cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	92623	50.0000	48
	30 2-Butanone	72	4.395	4.395	(0.817)	13262	50.0000	55
	32 Propionitrile	54	4.454	4.454	(0.828)	142966	500.000	520(A)
	33 Methacrylonitrile	41	4.572	4.572	(0.850)	118517	100.000	100
	34 Bromochloromethane	128	4.596	4.596	(0.855)	50400	50.0000	49
	31 Tetrahydrofuran	72	4.643	4.643	(0.864)	24280	100.000	110
	35 Chloroform	83	4.643	4.643	(0.864)	150155	50.0000	48
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	113185	50.0000	50
	37 1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	131270	50.0000	50
	38 Cyclohexane	56	4.868	4.868	(0.905)	151648	50.0000	50
	39 1,1-Dichloropropene	110	4.951	4.951	(0.921)	43453	50.0000	49
	40 Carbon Tetrachloride	117	4.963	4.963	(0.923)	118509	50.0000	50
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	94535	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	25126	50.0000	51
	43 Benzene	78	5.140	5.140	(0.956)	318033	50.0000	48
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	132414	50.0000	48
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	251634	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				176925	100.000	95
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	393908	50.0000	
	47 Trichloroethene	130	5.696	5.696	(1.059)	94979	50.0000	48
	48 Methylcyclohexane	83	5.886	5.886	(1.095)	130832	50.0000	50
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	89148	50.0000	48
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	71999	50.0000	54
	52 Dibromomethane	93	6.028	6.028	(1.121)	62552	50.0000	50
	53 1,4-Dioxane	88	6.028	6.028	(1.121)	18312	1000.00	890(A)
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	122666	50.0000	48
	55 2-Chloroethyl vinyl ether	63	6.418	6.418	(1.194)	22211	50.0000	52
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	145040	50.0000	49
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	97668	50.0000	53
$	58 Toluene-d8	98	6.856	6.856	(0.819)	386732	50.0000	50
	59 Toluene	91	6.915	6.915	(1.286)	345996	50.0000	48
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	137918	50.0000	49
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	99212	50.0000	53
	62 1,1,2-Trichloroethane	97	7.318	7.318	(1.361)	80604	50.0000	49
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	78490	50.0000	49
	64 1,3-Dichloropropane	76	7.495	7.495	(0.895)	134576	50.0000	49
	65 2-Hexanone	43	7.566	7.566	(0.904)	80046	50.0000	53
	66 Dibromochloromethane	129	7.744	7.744	(0.925)	107116	50.0000	48
	67 1,2-Dibromoethane	107	7.874	7.874	(0.941)	93892	50.0000	50
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	110133	50.0000	47
*	68 Chlorobenzene-d5	117	8.371	8.371	(1.000)	329168	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	239802	50.0000	47
	71 1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	99060	50.0000	48
	72 Ethylbenzene	106	8.513	8.513	(1.017)	124122	50.0000	48
	73 m,p-Xylene	106	8.631	8.631	(1.031)	301375	100.000	95
	74 o-Xylene	106	9.081	9.081	(1.085)	150441	50.0000	48
	75 Styrene	104	9.104	9.104	(1.088)	255869	50.0000	48
	76 Bromoform	173	9.317	9.317	(1.113)	72603	50.0000	50

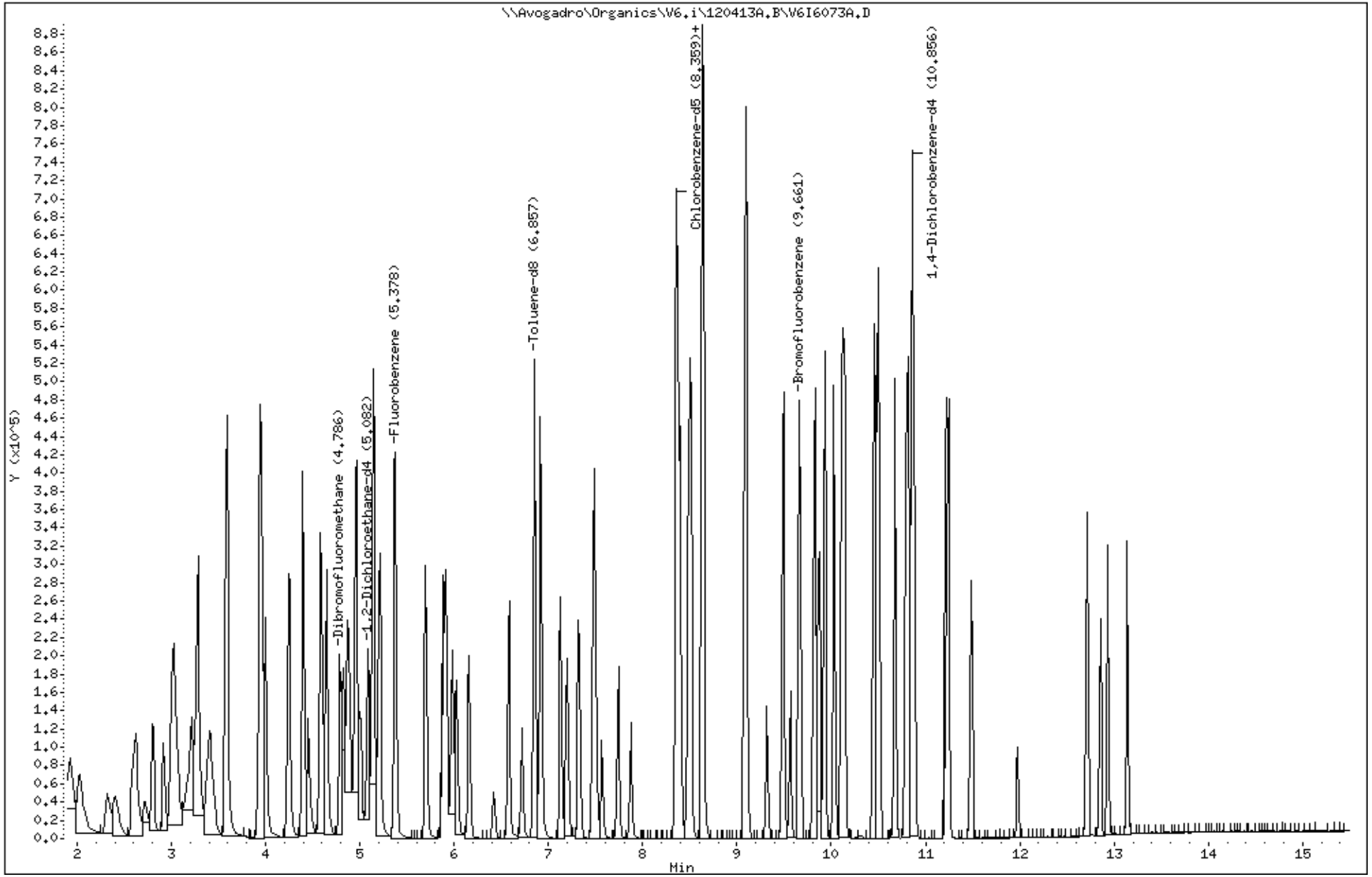
Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Report Date: 23-Apr-2012 07:39

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77	Isopropylbenzene	105	9.495	9.495	(1.134)	368595	50.0000	48
	78	trans-1,4-Dichloro-2-butene	75	9.566	9.566	(1.143)	36647	50.0000	53
$	79	Bromofluorobenzene	95	9.660	9.660	(1.154)	170377	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	114653	50.0000	50
	81	Bromobenzene	156	9.826	9.826	(0.905)	108285	50.0000	48
	82	1,2,3-Trichloropropane	75	9.862	9.862	(0.908)	141144	50.0000	50
	83	n-Propylbenzene	120	9.933	9.933	(0.915)	102921	50.0000	47
	84	2-Chlorotoluene	126	10.027	10.027	(0.924)	98318	50.0000	47
	85	1,3,5-Trimethylbenzene	105	10.110	10.110	(0.931)	301910	50.0000	47
	86	4-Chlorotoluene	126	10.146	10.146	(0.935)	102727	50.0000	47
M	94	Xylene (Total)	106				451816	150.000	140
	87	tert-Butylbenzene	119	10.453	10.453	(0.963)	347849	50.0000	47
	88	1,2,4-Trimethylbenzene	105	10.501	10.501	(0.967)	307962	50.0000	47
	89	sec-Butylbenzene	105	10.678	10.678	(0.984)	357964	50.0000	47
	90	1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	188934	50.0000	48
	91	4-Isopropyltoluene	119	10.820	10.820	(0.997)	295736	50.0000	46
*	92	1,4-Dichlorobenzene-d4	152	10.856	10.856	(1.000)	178814	50.0000	
	93	1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	191880	50.0000	47
	95	n-Butylbenzene	91	11.222	11.222	(1.034)	256637	50.0000	45
	96	1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	187513	50.0000	48
	97	Hexachloroethane	117	11.483	11.483	(1.058)	61020	50.0000	46
	98	1,2-Dibromo-3-chloropropane	75	11.980	11.980	(1.104)	23642	50.0000	55
	141	1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	88691	50.0000	44(A)
	99	1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	93884	50.0000	45
	100	Hexachlorobutadiene	225	12.855	12.855	(1.184)	37669	50.0000	43
	101	Naphthalene	128	12.938	12.938	(1.192)	267827	50.0000	48
	102	1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	84785	50.0000	44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Date : 13-APR-2012 14:30
Client ID: VICV0506M
Instrument: V6.i
Sample Info: 5ML,VICV0506M,VICV0506M
Purge Volume: 5.0
Operator: AM SRC: AM
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.: L0731 Mod. Ref No.: SDG No.: SL0731

Instrument ID: V6 Calibration Date: 04/19/2012 Time: 10:04

Lab File ID: V6I6121.D Init. Calib. Date(s): 04/13/2012 04/13/2012

EPA Sample No.(VSTD#####) VSTD0506O Init. Calib. Time(s): 8:57 12:45

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	0.316	0.187	0.100	-40.7	20.0
Chloromethane	0.445	0.379	0.010	-14.8	20.0
Vinyl chloride	0.333	0.296	0.010	-11.2	20.0
Bromomethane	0.194	0.161	0.010	-16.8	20.0
Chloroethane	0.187	0.176	0.010	-6.1	20.0
Trichlorofluoromethane	0.372	0.329	0.010	-11.6	20.0
1,1-Dichloroethene	0.241	0.223	0.100	-7.4	20.0
Acetone	0.036	0.021	0.010	-40.2	20.0
Iodomethane	0.341	0.299	0.010	-12.1	20.0
Carbon disulfide	0.728	0.642	0.010	-11.9	20.0
Methylene chloride	0.261	0.249	0.010	-4.5	20.0
trans-1,2-Dichloroethene	0.224	0.217	0.010	-3.5	20.0
Methyl tert-butyl ether	0.624	0.601	0.010	-3.7	20.0
1,1-Dichloroethane	0.414	0.392	0.010	-5.3	20.0
Vinyl acetate	0.923	0.916	0.010	-0.7	20.0
2-Butanone	0.030	0.025	0.010	-18.3	20.0
cis-1,2-Dichloroethene	0.246	0.237	0.010	-4.0	20.0
2,2-Dichloropropane	0.204	0.180	0.010	-11.9	20.0
Bromochloromethane	0.131	0.125	0.010	-4.1	20.0
Chloroform	0.400	0.384	0.010	-4.0	20.0
1,1,1-Trichloroethane	0.335	0.308	0.010	-8.0	20.0
1,1-Dichloropropene	0.113	0.109	0.010	-3.3	20.0
Carbon tetrachloride	0.300	0.268	0.010	-10.5	20.0
1,2-Dichloroethane	0.346	0.327	0.010	-5.6	20.0
Benzene	0.834	0.818	0.010	-1.9	20.0
Trichloroethene	0.253	0.240	0.010	-5.4	20.0
1,2-Dichloropropane	0.237	0.230	0.010	-3.2	20.0
Dibromomethane	0.159	0.158	0.010	-0.9	20.0
Bromodichloromethane	0.321	0.310	0.010	-3.5	20.0
cis-1,3-Dichloropropene	0.376	0.379	0.010	0.9	20.0
4-Methyl-2-pentanone	0.235	0.236	0.010	0.3	20.0
Toluene	0.915	0.894	0.010	-2.2	20.0
trans-1,3-Dichloropropene	0.360	0.348	0.010	-3.4	20.0
1,1,2-Trichloroethane	0.209	0.209	0.010	-0.1	20.0
1,3-Dichloropropane	0.417	0.384	0.010	-7.9	20.0
Tetrachloroethene	0.243	0.210	0.010	-13.7	20.0
2-Hexanone	0.228	0.189	0.010	-17.3	20.0
Dibromochloromethane	0.339	0.312	0.010	-8.0	20.0
1,2-Dibromoethane	0.286	0.264	0.010	-7.8	20.0
Chlorobenzene	0.773	0.707	0.010	-8.5	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Instrument ID: V6 Calibration Date: 04/19/2012 Time: 10:04

Lab File ID: V6I6121.D Init. Calib. Date(s): 04/13/2012 04/13/2012

EPA Sample No.(VSTD#####) VSTD0506O Init. Calib. Time(s): 8:57 12:45

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	0.314	0.288	0.010	-8.5	20.0
Ethylbenzene	0.395	0.361	0.010	-8.6	20.0
m,p-Xylene	0.480	0.434	0.010	-9.5	20.0
o-Xylene	0.480	0.436	0.010	-9.0	20.0
Xylene (Total)	0.480	0.435	0.010	-9.3	20.0
Styrene	0.804	0.747	0.010	-7.0	20.0
Bromoform	0.222	0.215	0.010	-2.8	20.0
Isopropylbenzene	1.163	1.070	0.300	-8.0	20.0
1,1,2,2-Tetrachloroethane	0.635	0.618	0.300	-2.7	20.0
Bromobenzene	0.629	0.615	0.010	-2.2	20.0
1,2,3-Trichloropropane	0.786	0.937	0.010	19.3	20.0
n-Propylbenzene	0.612	0.556	0.010	-9.2	20.0
2-Chlorotoluene	0.580	0.534	0.010	-8.0	20.0
1,3,5-Trimethylbenzene	1.787	1.644	0.010	-8.0	20.0
4-Chlorotoluene	0.606	0.559	0.010	-7.8	20.0
tert-Butylbenzene	2.061	1.885	0.010	-8.5	20.0
1,2,4-Trimethylbenzene	1.817	1.662	0.010	-8.5	20.0
sec-Butylbenzene	2.122	1.919	0.010	-9.5	20.0
4-Isopropyltoluene	1.791	1.598	0.010	-10.8	20.0
1,3-Dichlorobenzene	1.101	1.011	0.010	-8.2	20.0
1,4-Dichlorobenzene	1.130	1.033	0.010	-8.6	20.0
n-Butylbenzene	1.580	1.358	0.100	-14.0	20.0
1,2-Dichlorobenzene	1.089	0.985	0.010	-9.5	20.0
1,2-Dibromo-3-chloropropane	0.121	0.113	0.010	-6.5	20.0
1,2,4-Trichlorobenzene	0.588	0.478	0.010	-18.8	20.0
Hexachlorobutadiene	0.244	0.191	0.010	-21.7	20.0
1,2,3-Trichlorobenzene	0.539	0.408	0.010	-24.4	20.0
Naphthalene	1.558	1.198	0.010	-23.2	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Instrument ID: V6 Calibration Date: 04/19/2012 Time: 10:04

Lab File ID: V6I6121.D Init. Calib. Date(s): 04/13/2012 04/13/2012

EPA Sample No.(VSTD#####) VSTD0506O Init. Calib. Time(s): 8:57 12:45

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	0.287	0.292	0.010	1.5	20.0
1,2-Dichloroethane-d4	0.062	0.064	0.010	3.2	20.0
Toluene-d8	1.172	1.151	0.010	-1.7	20.0
Bromofluorobenzene	0.514	0.514	0.010	0.1	20.0

Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Report Date: 23-Apr-2012 07:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Lab Smp Id: VICV0506M Client Smp ID: VICV0506M
Inj Date : 13-APR-2012 14:30
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VICV0506M,VICV0506M
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120413A.B\v68260Gadd-6lvl.m
Meth Date : 23-Apr-2012 07:38 amarquis Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 38 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	1.744	1.744	(0.324)	120786	50.0000	48
2	Freon114	85	1.863	1.863	(0.346)	124641	50.0000	51
3	Chloromethane	50	1.934	1.934	(0.360)	169576	50.0000	48
4	Vinyl Chloride	62	2.028	2.028	(0.377)	127303	50.0000	48
5	Bromomethane	94	2.324	2.324	(0.432)	69134	50.0000	45
6	Chloroethane	64	2.407	2.407	(0.448)	70835	50.0000	48
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	143724	50.0000	49
126	Ethanol	46	2.726	2.726	(0.507)	35449	5000.00	5000(A)
8	Ether	59	2.797	2.797	(0.520)	73601	50.0000	50
9	Acrolein	56	2.916	2.916	(0.542)	97551	250.000	270(A)
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	91914	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	97456	50.0000	49
12	Acetone	58	3.034	3.034	(0.564)	14307	50.0000	51
13	Iodomethane	142	3.164	3.164	(0.589)	138664	50.0000	52
14	Carbon Disulfide	76	3.212	3.212	(0.597)	264656	50.0000	46
15	Acetonitrile	41	3.283	3.283	(0.611)	272136	500.000	480(A)
16	Allyl Chloride	39	3.283	3.283	(0.611)	133585	50.0000	47
17	Methyl Acetate	43	3.283	3.283	(0.611)	79925	50.0000	51
18	Methylene Chloride	84	3.413	3.413	(0.635)	99036	50.0000	48
19	tert-Butanol	59	3.448	3.448	(0.641)	20820	100.000	110
20	Acrylonitrile	53	3.567	3.567	(0.663)	39132	50.0000	53
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	84302	50.0000	48
22	Methyl tert-butyl ether	73	3.578	3.578	(0.666)	250977	50.0000	51

Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Report Date: 23-Apr-2012 07:39

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.922	3.922	(0.729)	152230	50.0000	47
	24 Vinyl acetate	43	3.945	3.945	(0.734)	365050	50.0000	50
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	314293	50.0000	48
	26 2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.745)	141300	50.0000	49
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	273139	50.0000	50
	29 2,2-Dichloropropane	77	4.395	4.395	(0.817)	78417	50.0000	49
	28 cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	92623	50.0000	48
	30 2-Butanone	72	4.395	4.395	(0.817)	13262	50.0000	55
	32 Propionitrile	54	4.454	4.454	(0.828)	142966	500.000	520(A)
	33 Methacrylonitrile	41	4.572	4.572	(0.850)	118517	100.000	100
	34 Bromochloromethane	128	4.596	4.596	(0.855)	50400	50.0000	49
	31 Tetrahydrofuran	72	4.643	4.643	(0.864)	24280	100.000	110
	35 Chloroform	83	4.643	4.643	(0.864)	150155	50.0000	48
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	113185	50.0000	50
	37 1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	131270	50.0000	50
	38 Cyclohexane	56	4.868	4.868	(0.905)	151648	50.0000	50
	39 1,1-Dichloropropene	110	4.951	4.951	(0.921)	43453	50.0000	49
	40 Carbon Tetrachloride	117	4.963	4.963	(0.923)	118509	50.0000	50
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	94535	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	25126	50.0000	51
	43 Benzene	78	5.140	5.140	(0.956)	318033	50.0000	48
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	132414	50.0000	48
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	251634	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				176925	100.000	95
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	393908	50.0000	
	47 Trichloroethene	130	5.696	5.696	(1.059)	94979	50.0000	48
	48 Methylcyclohexane	83	5.886	5.886	(1.095)	130832	50.0000	50
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	89148	50.0000	48
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	71999	50.0000	54
	52 Dibromomethane	93	6.028	6.028	(1.121)	62552	50.0000	50
	53 1,4-Dioxane	88	6.028	6.028	(1.121)	18312	1000.00	890(A)
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	122666	50.0000	48
	55 2-Chloroethyl vinyl ether	63	6.418	6.418	(1.194)	22211	50.0000	52
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	145040	50.0000	49
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	97668	50.0000	53
$	58 Toluene-d8	98	6.856	6.856	(0.819)	386732	50.0000	50
	59 Toluene	91	6.915	6.915	(1.286)	345996	50.0000	48
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	137918	50.0000	49
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	99212	50.0000	53
	62 1,1,2-Trichloroethane	97	7.318	7.318	(1.361)	80604	50.0000	49
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	78490	50.0000	49
	64 1,3-Dichloropropane	76	7.495	7.495	(0.895)	134576	50.0000	49
	65 2-Hexanone	43	7.566	7.566	(0.904)	80046	50.0000	53
	66 Dibromochloromethane	129	7.744	7.744	(0.925)	107116	50.0000	48
	67 1,2-Dibromoethane	107	7.874	7.874	(0.941)	93892	50.0000	50
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	110133	50.0000	47
*	68 Chlorobenzene-d5	117	8.371	8.371	(1.000)	329168	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	239802	50.0000	47
	71 1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	99060	50.0000	48
	72 Ethylbenzene	106	8.513	8.513	(1.017)	124122	50.0000	48
	73 m,p-Xylene	106	8.631	8.631	(1.031)	301375	100.000	95
	74 o-Xylene	106	9.081	9.081	(1.085)	150441	50.0000	48
	75 Styrene	104	9.104	9.104	(1.088)	255869	50.0000	48
	76 Bromoform	173	9.317	9.317	(1.113)	72603	50.0000	50

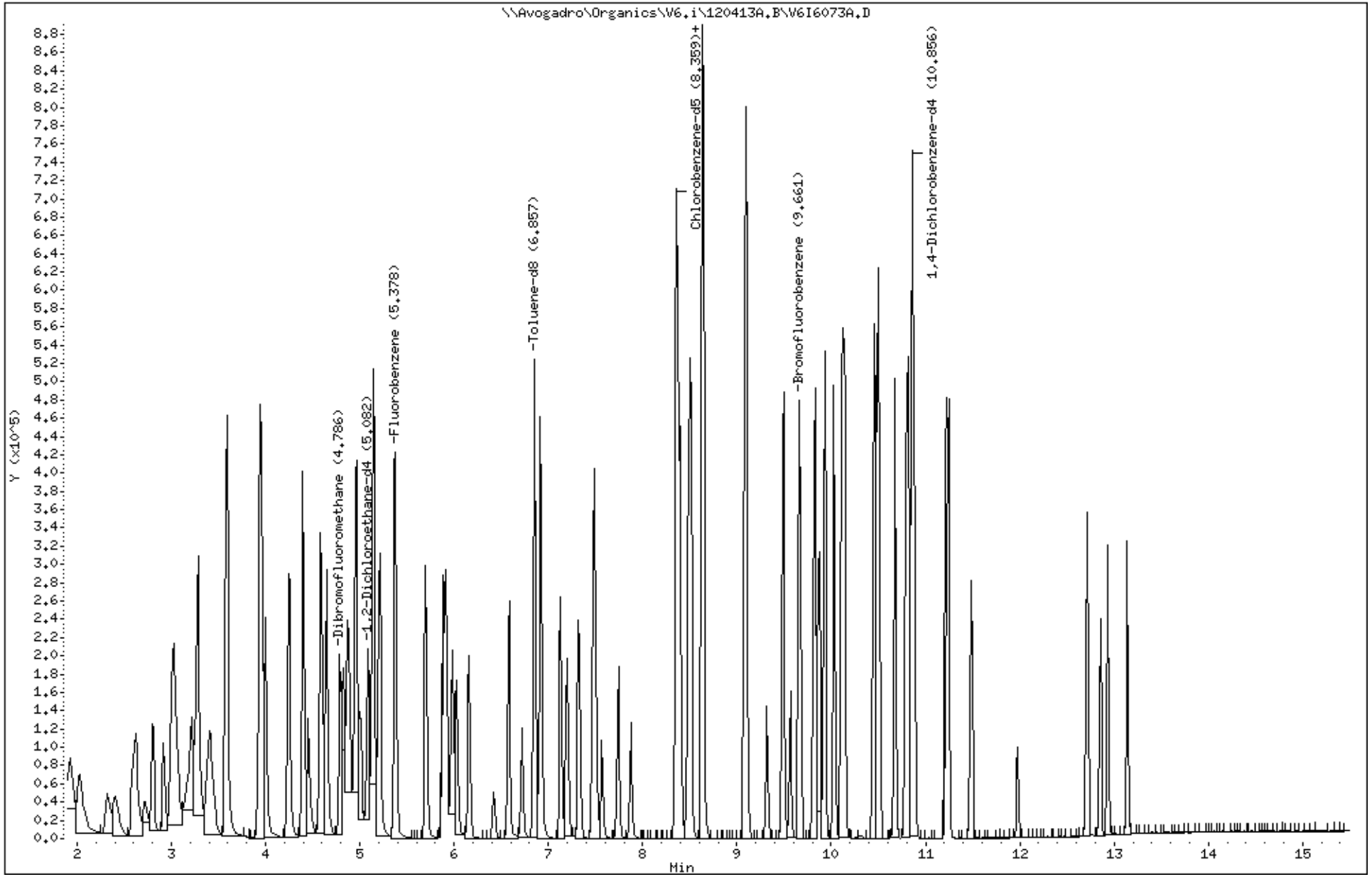
Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Report Date: 23-Apr-2012 07:39

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.495	9.495	(1.134)	368595	50.0000	48
	78	trans-1,4-Dichloro-2-butene	75	9.566	9.566	(1.143)	36647	50.0000	53
$	79	Bromofluorobenzene	95	9.660	9.660	(1.154)	170377	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	114653	50.0000	50
	81	Bromobenzene	156	9.826	9.826	(0.905)	108285	50.0000	48
	82	1,2,3-Trichloropropane	75	9.862	9.862	(0.908)	141144	50.0000	50
	83	n-Propylbenzene	120	9.933	9.933	(0.915)	102921	50.0000	47
	84	2-Chlorotoluene	126	10.027	10.027	(0.924)	98318	50.0000	47
	85	1,3,5-Trimethylbenzene	105	10.110	10.110	(0.931)	301910	50.0000	47
	86	4-Chlorotoluene	126	10.146	10.146	(0.935)	102727	50.0000	47
M	94	Xylene (Total)	106				451816	150.000	140
	87	tert-Butylbenzene	119	10.453	10.453	(0.963)	347849	50.0000	47
	88	1,2,4-Trimethylbenzene	105	10.501	10.501	(0.967)	307962	50.0000	47
	89	sec-Butylbenzene	105	10.678	10.678	(0.984)	357964	50.0000	47
	90	1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	188934	50.0000	48
	91	4-Isopropyltoluene	119	10.820	10.820	(0.997)	295736	50.0000	46
*	92	1,4-Dichlorobenzene-d4	152	10.856	10.856	(1.000)	178814	50.0000	
	93	1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	191880	50.0000	47
	95	n-Butylbenzene	91	11.222	11.222	(1.034)	256637	50.0000	45
	96	1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	187513	50.0000	48
	97	Hexachloroethane	117	11.483	11.483	(1.058)	61020	50.0000	46
	98	1,2-Dibromo-3-chloropropane	75	11.980	11.980	(1.104)	23642	50.0000	55
	141	1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	88691	50.0000	44(A)
	99	1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	93884	50.0000	45
	100	Hexachlorobutadiene	225	12.855	12.855	(1.184)	37669	50.0000	43
	101	Naphthalene	128	12.938	12.938	(1.192)	267827	50.0000	48
	102	1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	84785	50.0000	44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V6.i\120413A.B\V6I6073A.D
Date : 13-APR-2012 14:30
Client ID: VICV0506M
Instrument: V6.i
Sample Info: 5ML,VICV0506M,VICV0506M
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6121.D
Report Date: 20-Apr-2012 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120419.B\V6I6121.D
Lab Smp Id: VSTD0506O Client Smp ID: VSTD0506O
Inj Date : 19-APR-2012 10:04
Operator : AM   SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506O,VSTD0506O
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.743	1.744	(0.324)	78783	50.0000	30
2	Freon114	85	1.861	1.863	(0.346)	90777	50.0000	35
3	Chloromethane	50	1.932	1.922	(0.360)	159752	50.0000	43
4	Vinyl Chloride	62	2.027	2.028	(0.377)	124603	50.0000	44
5	Bromomethane	94	2.323	2.324	(0.432)	67998	50.0000	42
6	Chloroethane	64	2.406	2.407	(0.448)	73959	50.0000	47
7	Trichlorofluoromethane	101	2.595	2.596	(0.483)	138644	50.0000	44
126	Ethanol	46	2.725	2.726	(0.507)	23551	5000.00	3100(AQ)
8	Ether	59	2.808	2.809	(0.522)	76368	50.0000	49(Q)
9	Acrolein	56	2.914	2.916	(0.542)	94393	250.000	240(A)
10	1,1-Dichloroethene	96	3.021	3.022	(0.562)	93874	50.0000	46
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.009	3.010	(0.560)	89499	50.0000	42
12	Acetone	58	3.033	3.034	(0.564)	8956	50.0000	30
13	Iodomethane	142	3.163	3.164	(0.588)	126135	50.0000	44
14	Carbon Disulfide	76	3.210	3.212	(0.597)	270439	50.0000	44
15	Acetonitrile	41	3.281	3.283	(0.610)	286496	500.000	470(A)
16	Allyl Chloride	39	3.281	3.283	(0.610)	144739	50.0000	48
17	Methyl Acetate	43	3.281	3.283	(0.610)	84608	50.0000	50
18	Methylene Chloride	84	3.400	3.401	(0.632)	105084	50.0000	48
19	tert-Butanol	59	3.447	3.448	(0.641)	17990	100.000	89
20	Acrylonitrile	53	3.565	3.567	(0.663)	40656	50.0000	52
21	trans-1,2-Dichloroethene	96	3.589	3.590	(0.668)	91218	50.0000	48
22	Methyl tert-butyl ether	73	3.589	3.578	(0.668)	253379	50.0000	48

Data File: \\avogadro\organics\V6.i\120419.B\V6I6121.D
Report Date: 20-Apr-2012 11:27

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.932	3.933	(0.731)	165065	50.0000	47
	24 Vinyl acetate	43	3.944	3.945	(0.734)	386101	50.0000	50
	25 Diisopropyl Ether	45	3.956	3.957	(0.736)	340878	50.0000	49
	26 2-Chloro-1,3-Butadiene	53	4.003	4.004	(0.745)	147680	50.0000	48
	27 Ethyl tert-butyl ether	59	4.252	4.241	(0.791)	288609	50.0000	49
	29 2,2-Dichloropropane	77	4.405	4.395	(0.820)	75659	50.0000	44
	28 cis-1,2-Dichloroethene	96	4.394	4.395	(0.817)	99675	50.0000	48
	30 2-Butanone	72	4.394	4.395	(0.817)	10453	50.0000	41
	32 Propionitrile	54	4.453	4.454	(0.828)	145885	500.000	490(A)
	33 Methacrylonitrile	41	4.583	4.572	(0.853)	122583	100.000	99
	34 Bromochloromethane	128	4.595	4.596	(0.855)	52846	50.0000	48
	31 Tetrahydrofuran	72	4.642	4.643	(0.864)	23095	100.000	99
	35 Chloroform	83	4.654	4.655	(0.866)	161776	50.0000	48
$	36 Dibromofluoromethane	113	4.784	4.785	(0.890)	122925	50.0000	51
	37 1,1,1-Trichloroethane	97	4.820	4.821	(0.897)	129920	50.0000	46
	38 Cyclohexane	56	4.879	4.868	(0.908)	145280	50.0000	45
	39 1,1-Dichloropropene	110	4.962	4.963	(0.923)	46099	50.0000	48
	40 Carbon Tetrachloride	117	4.962	4.963	(0.923)	113033	50.0000	45
	41 Isobutyl Alcohol	43	4.997	4.998	(0.930)	83343	1000.00	870(A)
$	42 1,2-Dichloroethane-d4	102	5.092	5.081	(0.947)	27151	50.0000	52
	43 Benzene	78	5.139	5.140	(0.956)	344758	50.0000	49
	44 1,2-Dichloroethane	62	5.151	5.152	(0.958)	137629	50.0000	47
	45 tert-Amyl methyl ether	73	5.210	5.211	(0.969)	258582	50.0000	48
M	50 1,2-Dichloroethene (Total)	96				190893	100.000	(a)
*	46 Fluorobenzene	96	5.376	5.377	(1.000)	421287	50.0000	
	47 Trichloroethene	130	5.695	5.697	(1.059)	100961	50.0000	47
	48 Methylcyclohexane	83	5.885	5.886	(1.095)	128720	50.0000	46
	49 1,2-Dichloropropane	63	5.908	5.909	(1.099)	96725	50.0000	48
	51 Methyl Methacrylate	69	5.979	5.980	(1.112)	74894	50.0000	52
	52 Dibromomethane	93	6.027	6.028	(1.121)	66468	50.0000	50
	53 1,4-Dioxane	88	6.027	6.028	(1.121)	13028	1000.00	590(A)
	54 Bromodichloromethane	83	6.157	6.158	(1.145)	130566	50.0000	48
	55 2-Chloroethyl vinyl ether	63	6.417	6.584	(1.194)	6301	50.0000	14
	56 cis-1,3-Dichloropropene	75	6.583	6.584	(1.224)	159752	50.0000	50
	57 4-Methyl-2-pentanone	43	6.725	6.714	(1.251)	99331	50.0000	50
$	58 Toluene-d8	98	6.855	6.856	(0.819)	421900	50.0000	49
	59 Toluene	91	6.914	6.915	(1.286)	376709	50.0000	49
	60 trans-1,3-Dichloropropene	75	7.127	7.128	(1.326)	146623	50.0000	48
	61 Ethyl Methacrylate	69	7.198	7.199	(1.339)	102916	50.0000	51
	62 1,1,2-Trichloroethane	97	7.328	7.318	(1.363)	87894	50.0000	50
	63 Tetrachloroethene	164	7.482	7.483	(0.894)	76822	50.0000	43
	64 1,3-Dichloropropane	76	7.506	7.495	(0.897)	140838	50.0000	46
	65 2-Hexanone	43	7.565	7.566	(0.904)	69183	50.0000	41
	66 Dibromochloromethane	129	7.742	7.744	(0.925)	114296	50.0000	46
	67 1,2-Dibromoethane	107	7.872	7.874	(0.941)	96567	50.0000	46
	69 1-Chlorohexane	91	8.346	8.347	(0.997)	117843	50.0000	45
*	68 Chlorobenzene-d5	117	8.369	8.370	(1.000)	366462	50.0000	
	70 Chlorobenzene	112	8.393	8.394	(1.003)	259260	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	8.488	8.477	(1.014)	105435	50.0000	46
	72 Ethylbenzene	106	8.511	8.512	(1.017)	132412	50.0000	46
	73 m,p-Xylene	106	8.642	8.631	(1.033)	318407	100.000	90
	74 o-Xylene	106	9.091	9.092	(1.086)	159956	50.0000	45
	75 Styrene	104	9.103	9.104	(1.088)	273903	50.0000	46
	76 Bromoform	173	9.316	9.317	(1.113)	78959	50.0000	48

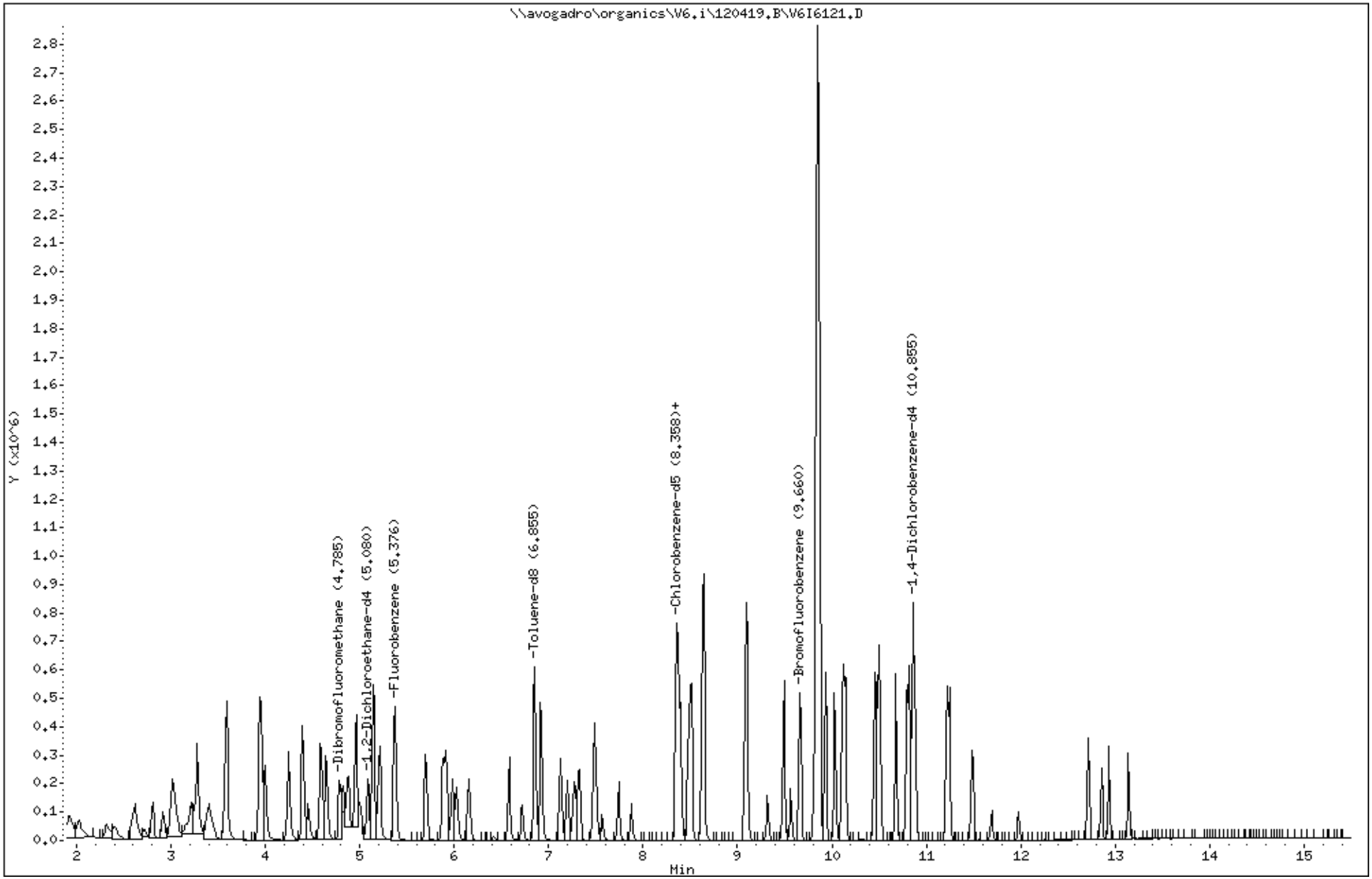
Data File: \\avogadro\organics\V6.i\120419.B\V6I6121.D
Report Date: 20-Apr-2012 11:27

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.494	9.494	(1.134)	392186	50.0000	46
	78	trans-1,4-Dichloro-2-butene	75	9.565	9.566	(1.143)	40910	50.0000	53
$	79	Bromofluorobenzene	95	9.659	9.660	(1.154)	188497	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.813	9.814	(0.904)	124085	50.0000	49
	81	Bromobenzene	156	9.837	9.826	(0.906)	123470	50.0000	49
	82	1,2,3-Trichloropropane	75	9.872	9.862	(0.910)	188190	50.0000	60
	83	n-Propylbenzene	120	9.931	9.932	(0.915)	111675	50.0000	45
	84	2-Chlorotoluene	126	10.026	10.027	(0.924)	107165	50.0000	46
	85	1,3,5-Trimethylbenzene	105	10.121	10.110	(0.932)	330040	50.0000	46
	86	4-Chlorotoluene	126	10.144	10.146	(0.935)	112197	50.0000	46
M	94	Xylene (Total)	106				478363	150.000	(a)
	87	tert-Butylbenzene	119	10.452	10.453	(0.963)	378509	50.0000	46
	88	1,2,4-Trimethylbenzene	105	10.499	10.500	(0.967)	333829	50.0000	46
	89	sec-Butylbenzene	105	10.677	10.678	(0.984)	385405	50.0000	45
	90	1,3-Dichlorobenzene	146	10.795	10.796	(0.995)	202952	50.0000	46
	91	4-Isopropyltoluene	119	10.819	10.820	(0.997)	320800	50.0000	45
*	92	1,4-Dichlorobenzene-d4	152	10.854	10.855	(1.000)	200800	50.0000	
	93	1,4-Dichlorobenzene	146	10.878	10.879	(1.002)	207406	50.0000	46
	95	n-Butylbenzene	91	11.221	11.222	(1.034)	272786	50.0000	43
	96	1,2-Dichlorobenzene	146	11.245	11.246	(1.036)	197783	50.0000	45
	97	Hexachloroethane	117	11.481	11.483	(1.058)	73102	50.0000	49
	98	1,2-Dibromo-3-chloropropane	75	11.978	11.980	(1.104)	22704	50.0000	47
	141	1,3,5-Trichlorobenzene	182	12.712	12.713	(2.365)	91293	50.0000	43(A)
	99	1,2,4-Trichlorobenzene	180	12.712	12.713	(1.171)	95946	50.0000	41
	100	Hexachlorobutadiene	225	12.854	12.855	(1.184)	38398	50.0000	39
	101	Naphthalene	128	12.937	12.938	(1.192)	240472	50.0000	38
	102	1,2,3-Trichlorobenzene	180	13.138	13.139	(1.210)	81873	50.0000	38

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120419.B\V6I6121.D
Date : 19-APR-2012 10:04
Client ID: VSTD05060
Instrument: V6.i
Sample Info: 5ML,VSTD05060,VSTD05060
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120413.B\V6I6060.D
Lab Smp Id: BFB6L Client Smp ID: BFB6L
Inj Date : 13-APR-2012 08:07
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 2UL,BFB6L,BFB6L
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120413.B\bfb8260.m
Meth Date : 19-Apr-2012 13:05 adatta Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: 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		
6.357	6.300 (0.000)		95	20176			0.00- 100.00	100.00
6.357	6.300 (0.000)		50	3882			15.00- 40.00	19.24
6.357	6.300 (0.000)		75	9418			30.00- 60.00	46.68
6.357	6.300 (0.000)		96	1373			5.00- 9.00	6.81
6.357	6.300 (0.000)		173	0	0.0	0.0	0.00- 2.00	0.00
6.357	6.300 (0.000)		174	17760			50.00- 100.00	88.03
6.357	6.300 (0.000)		175	1327			5.00- 9.00	7.47
6.357	6.300 (0.000)		176	17024			95.00- 101.00	95.86
6.357	6.300 (0.000)		177	1291			5.00- 9.00	7.58

Data File: \\avogadro\organics\V6.i\120413.B\V6I6060.D

Date : 13-APR-2012 08:07

Client ID: BFB6L

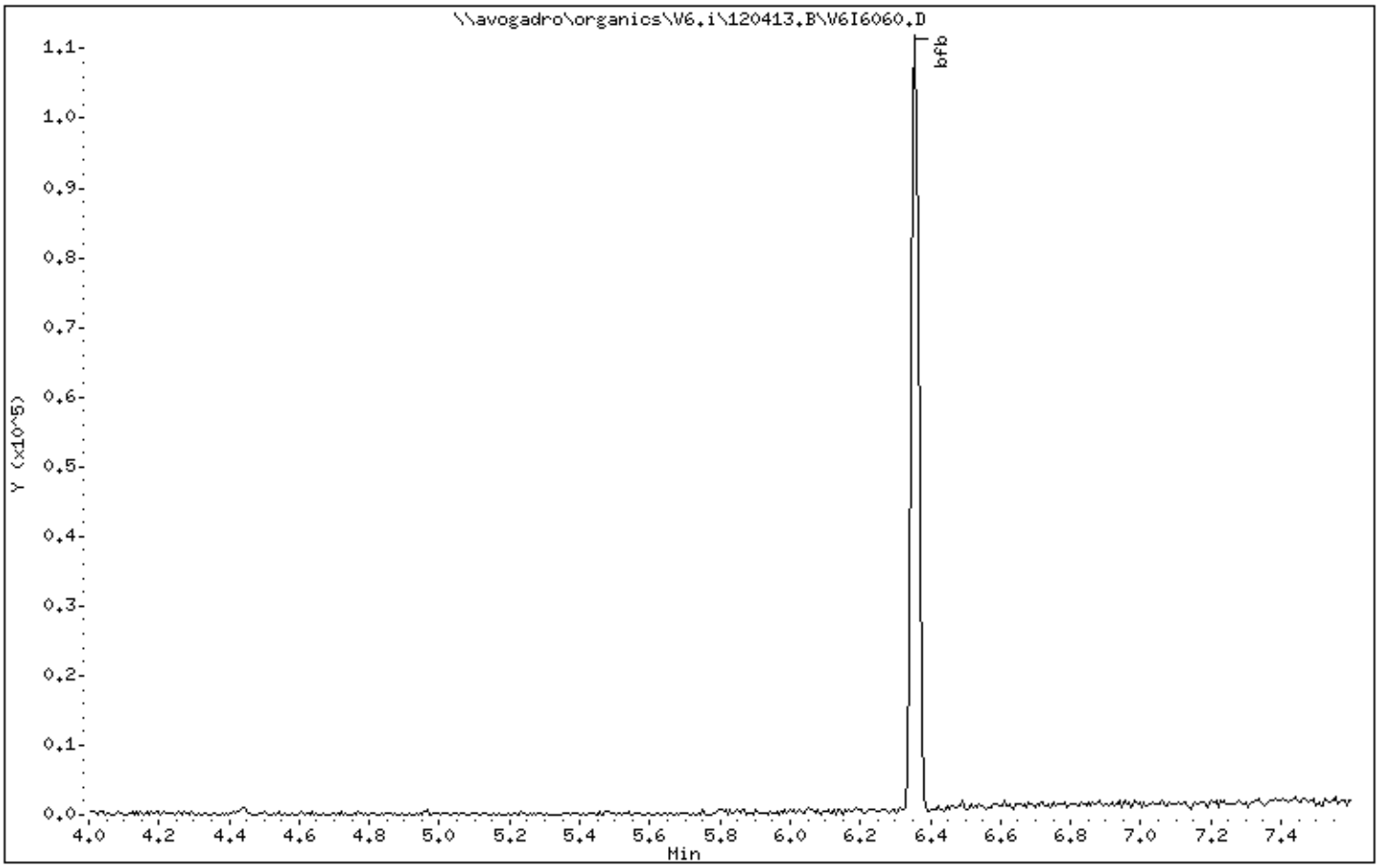
Instrument: V6.i

Sample Info: 2UL,BFB6L,BFB6L

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120413.B\V6I6060.D

Date : 13-APR-2012 08:07

Client ID: BFB6L

Instrument: V6.i

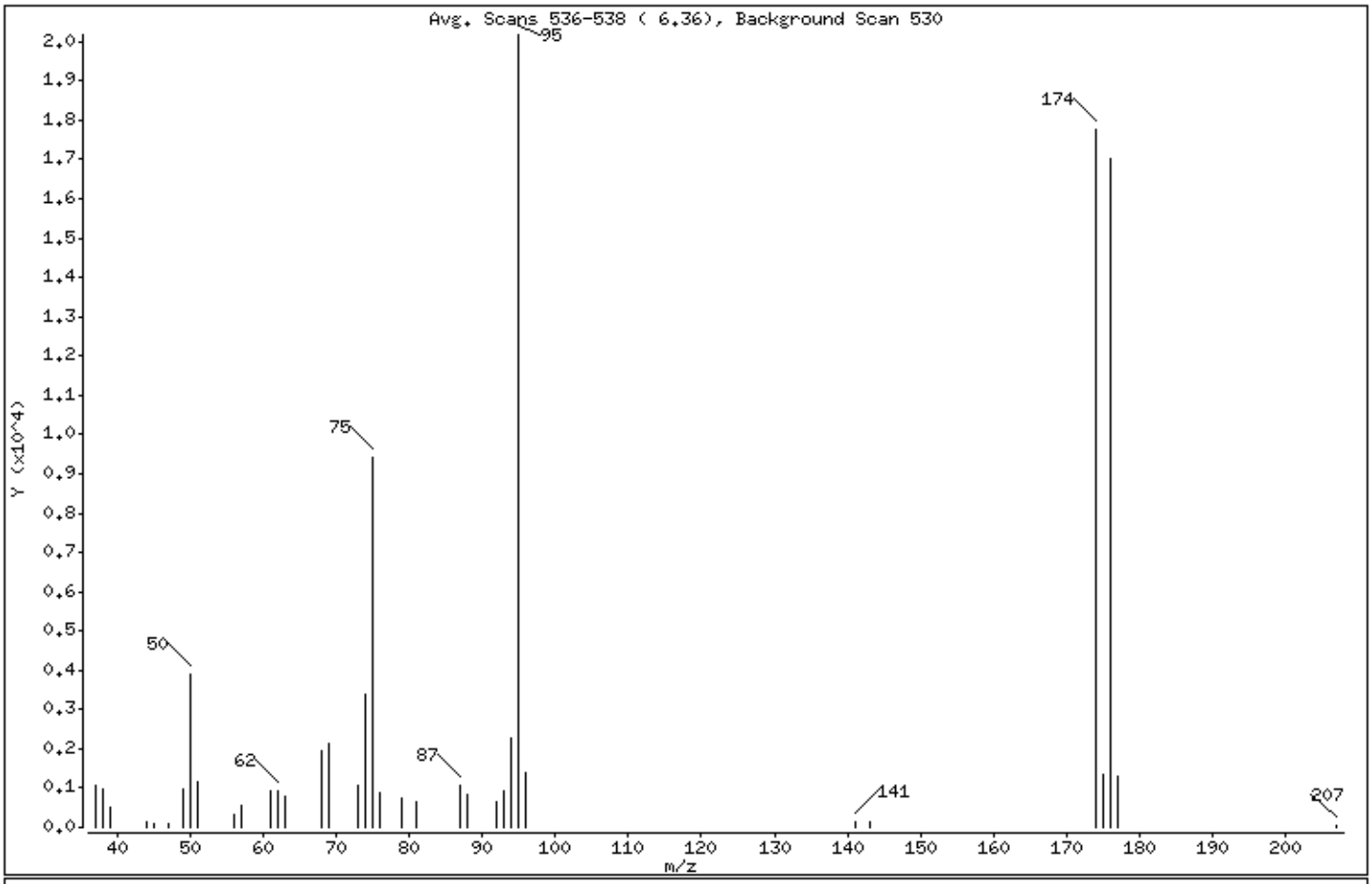
Sample Info: 2UL,BFB6L,BFB6L

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.24
75	30.00 - 60.00% of mass 95	46.68
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	88.03
175	5.00 - 9.00% of mass 174	6.58 (7.47)
176	95.00 - 101.00% of mass 174	84.38 (95.86)
177	5.00 - 9.00% of mass 176	6.40 (7.58)

Date : 13-APR-2012 08:07

Client ID: BFB6L Instrument: V6.i

Sample Info: 2UL,BFB6L,BFB6L

Operator: AM SRC: AM

Column phase: DB-624 Column diameter: 0.25

Data File: V6I6060.D
Spectrum: Avg. Scans 536-538 (6.36), Background Scan 530
Location of Maximum: 95.00
Number of points: 36

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1046	57.00	552	79.00	729	143.00	117
38.00	962	61.00	914	81.00	666	174.00	17760
39.00	522	62.00	934	87.00	1062	175.00	1327
44.00	138	63.00	784	88.00	829	176.00	17024
45.00	113	68.00	1968	92.00	672	177.00	1291
47.00	106	69.00	2114	93.00	939	207.00	33
49.00	976	73.00	1049	94.00	2258		
50.00	3882	74.00	3381	95.00	20176		
51.00	1179	75.00	9418	96.00	1373		
56.00	325	76.00	882	141.00	128		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120419.B\V6I6120.D
Lab Smp Id: BFB6O Client Smp ID: BFB6O
Inj Date : 19-APR-2012 09:34
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 2UL,BFB6O,BFB6O
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120419.B\bfb8260.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

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		
6.476	6.300	(0.000)	95	29312			0.00- 100.00	100.00
6.476	6.300	(0.000)	50	5141			15.00- 40.00	17.54
6.476	6.300	(0.000)	75	13667			30.00- 60.00	46.63
6.476	6.300	(0.000)	96	2136			5.00- 9.00	7.29
6.476	6.300	(0.000)	173	111			0.00- 2.00	0.46
6.476	6.300	(0.000)	174	24280			50.00- 100.00	82.83
6.476	6.300	(0.000)	175	1767			5.00- 9.00	7.28
6.476	6.300	(0.000)	176	23824			95.00- 101.00	98.12
6.476	6.300	(0.000)	177	1773			5.00- 9.00	7.44

Data File: \\avogadro\organics\V6.i\120419.B\V6I6120.D

Date : 19-APR-2012 09:34

Client ID: BFB60

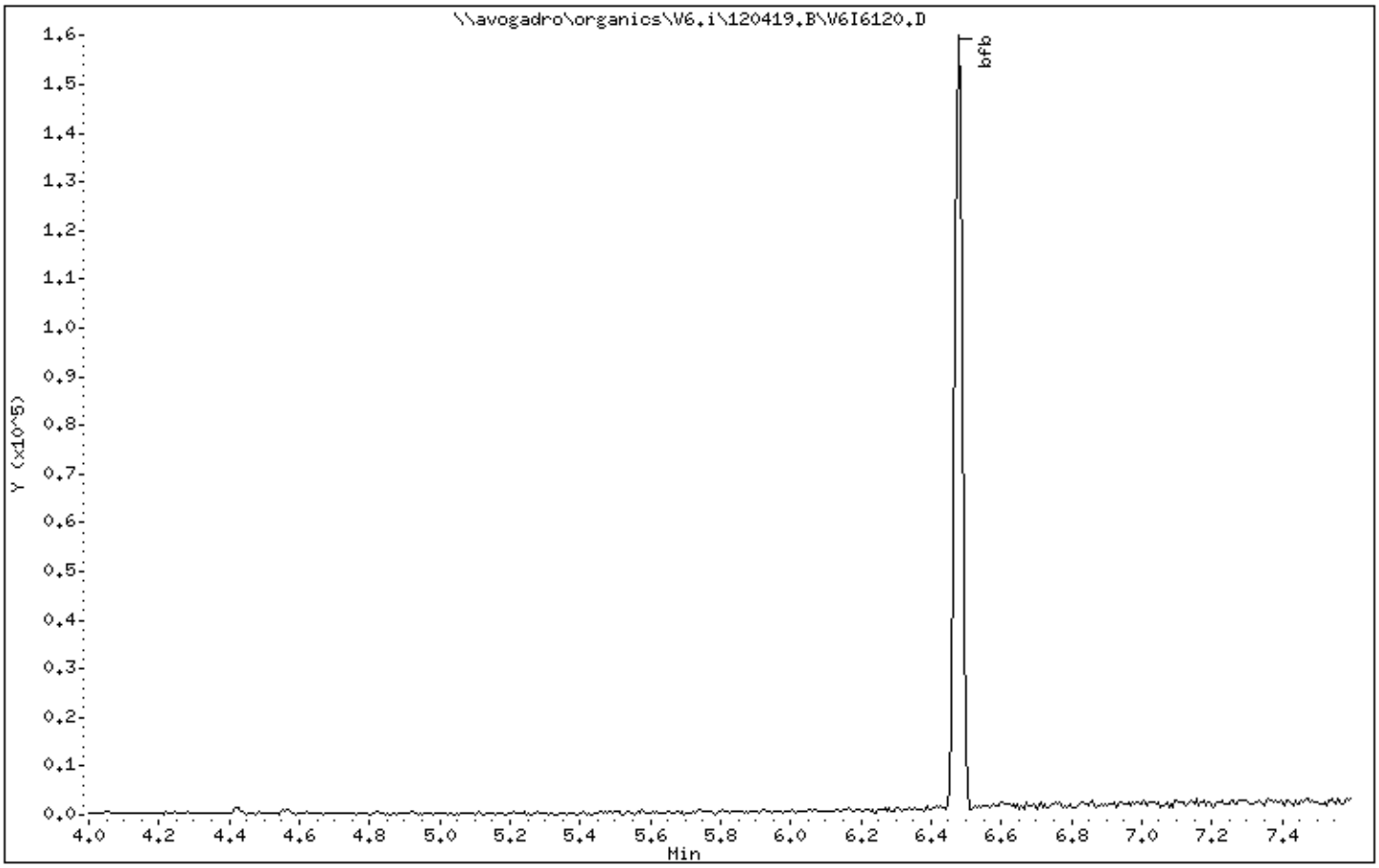
Instrument: V6.i

Sample Info: 2UL,BFB60,BFB60

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120419.B\V6I6120.D

Date : 19-APR-2012 09:34

Client ID: BFB60

Instrument: V6.i

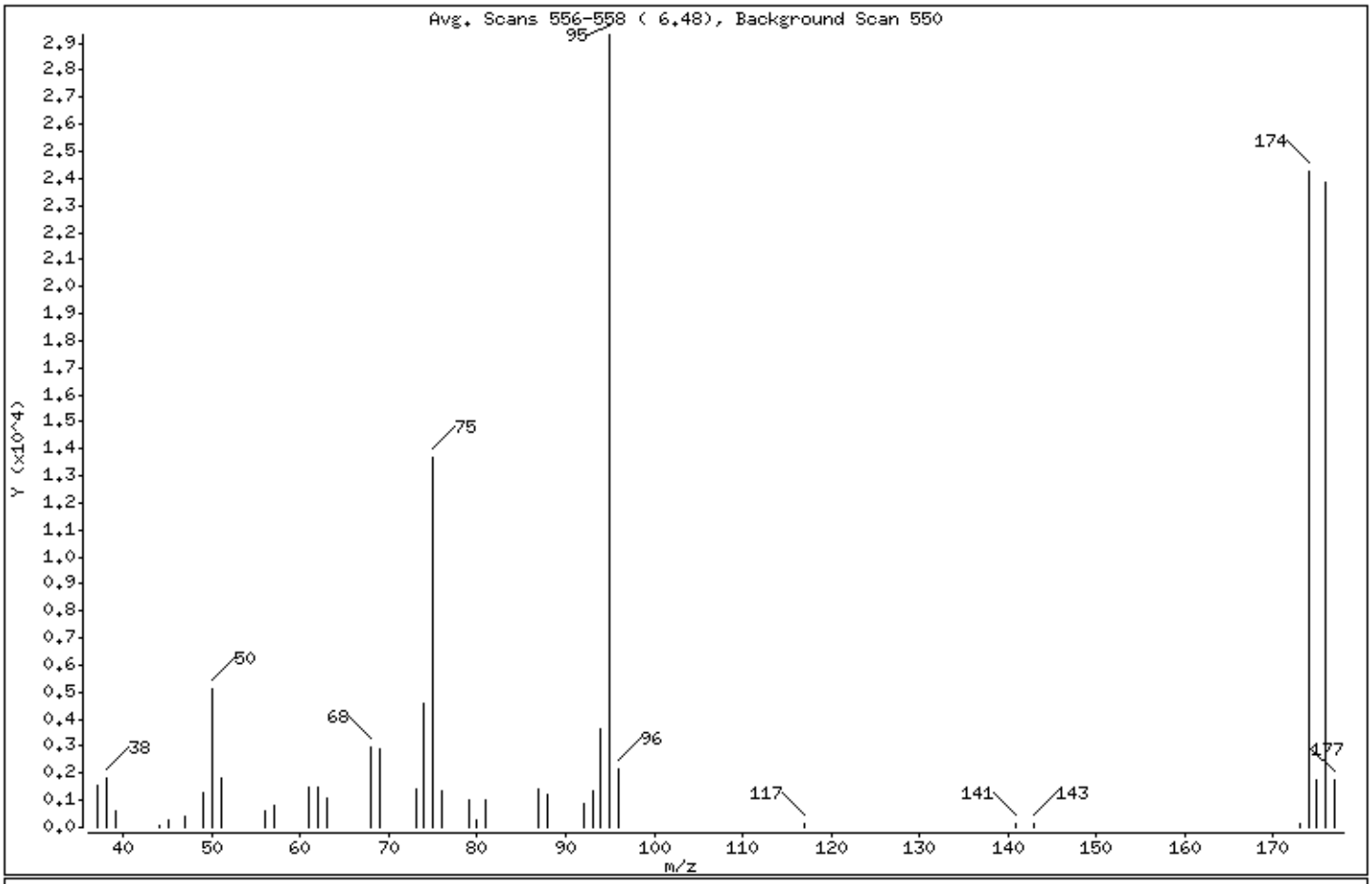
Sample Info: 2UL,BFB60,BFB60

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.54
75	30.00 - 60.00% of mass 95	46.63
96	5.00 - 9.00% of mass 95	7.29
173	Less than 2.00% of mass 174	0.38 (0.46)
174	50.00 - 100.00% of mass 95	82.83
175	5.00 - 9.00% of mass 174	6.03 (7.28)
176	95.00 - 101.00% of mass 174	81.28 (98.12)
177	5.00 - 9.00% of mass 176	6.05 (7.44)

Date : 19-APR-2012 09:34

Client ID: BFB60 Instrument: V6.i

Sample Info: 2UL,BFB60,BFB60

Operator: AM SRC: AM

Column phase: DB-624 Column diameter: 0.25

Data File: V6I6120.D
Spectrum: Avg. Scans 556-558 (6.48), Background Scan 550
Location of Maximum: 95.00
Number of points: 38

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1532	57.00	817	79.00	1020	117.00	105
38.00	1792	61.00	1469	80.00	244	141.00	113
39.00	609	62.00	1457	81.00	1028	143.00	153
44.00	81	63.00	1077	87.00	1393	173.00	111
45.00	242	68.00	2995	88.00	1191	174.00	24280
47.00	381	69.00	2912	92.00	854	175.00	1767
49.00	1272	73.00	1445	93.00	1362	176.00	23824
50.00	5141	74.00	4615	94.00	3671	177.00	1773
51.00	1844	75.00	13667	95.00	29312		
56.00	591	76.00	1326	96.00	2136		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-65685

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6125.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-65685

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6125.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V6.i\120419.B\V6I6125.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

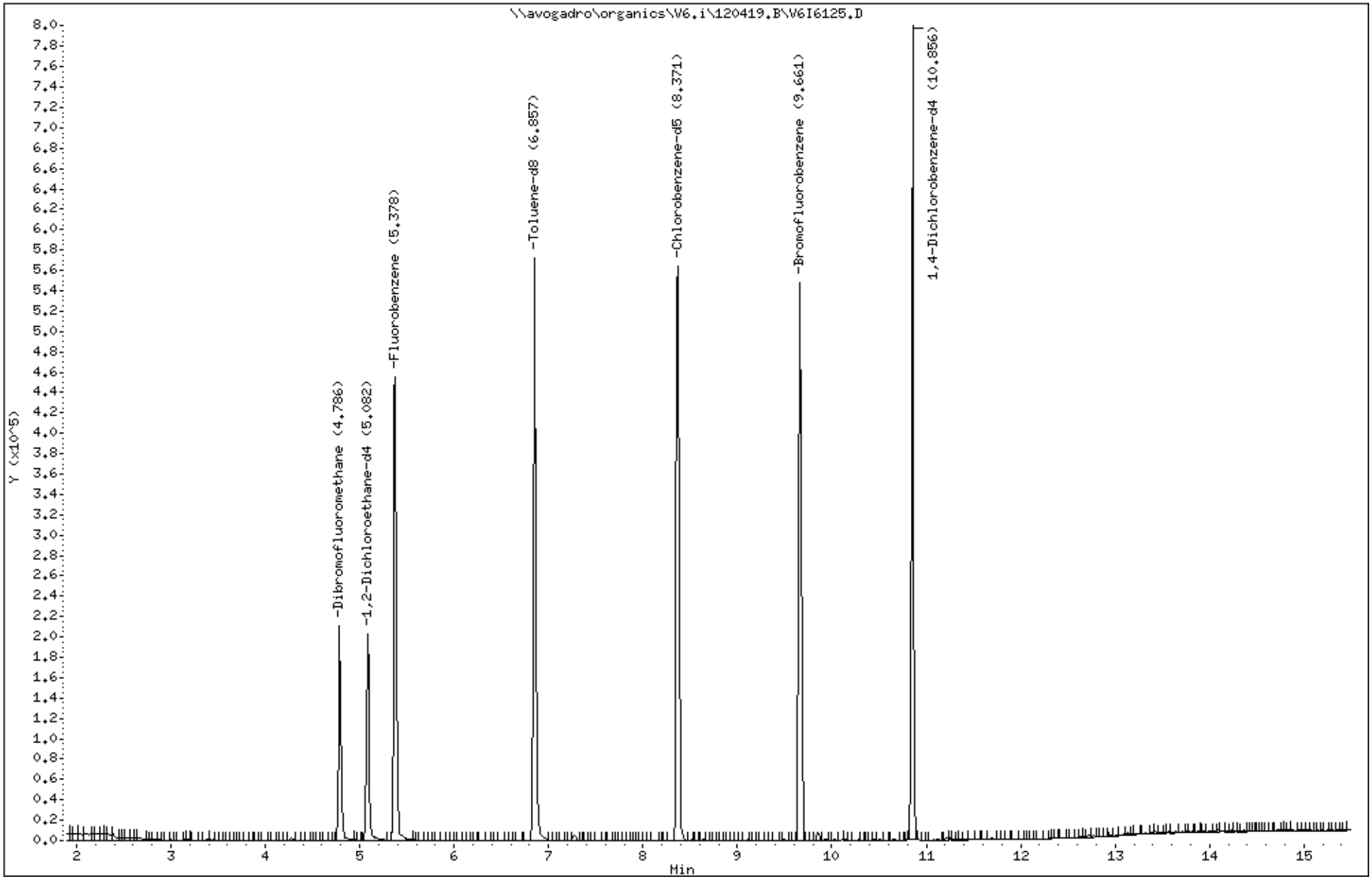
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Lab Smp Id: MB-65685 Client Smp ID: MB-65685
Inj Date : 19-APR-2012 12:19
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,MB-65685,MB-65685,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 36 Dibromofluoromethane	113	4.785	4.785	(0.890)	122498	49.6214	50
$ 42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	26346	49.1107	49
* 46 Fluorobenzene	96	5.377	5.377	(1.000)	429485	50.0000	
$ 58 Toluene-d8	98	6.856	6.856	(0.819)	427486	48.2918	48
* 68 Chlorobenzene-d5	117	8.371	8.370	(1.000)	377781	50.0000	
$ 79 Bromofluorobenzene	95	9.660	9.660	(1.154)	192058	49.4546	49
* 92 1,4-Dichlorobenzene-d4	152	10.856	10.855	(1.000)	197409	50.0000	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6125.D
Date : 19-APR-2012 12:19
Client ID: MB-65685
Instrument: V6.i
Sample Info: 5ML,MB-65685,MB-65685,65685
Purge Volume: 5.0
Operator: AM SRC: AM
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-041612MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6138.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	29	
74-87-3	Chloromethane	35	
75-01-4	Vinyl chloride	37	
74-83-9	Bromomethane	34	
75-00-3	Chloroethane	38	
75-69-4	Trichlorofluoromethane	39	
75-35-4	1,1-Dichloroethene	39	
67-64-1	Acetone	24	
74-88-4	Iodomethane	38	
75-15-0	Carbon disulfide	38	
75-09-2	Methylene chloride	40	
156-60-5	trans-1,2-Dichloroethene	40	
1634-04-4	Methyl tert-butyl ether	43	
75-34-3	1,1-Dichloroethane	39	
108-05-4	Vinyl acetate	39	
78-93-3	2-Butanone	32	
156-59-2	cis-1,2-Dichloroethene	40	
594-20-7	2,2-Dichloropropane	35	
74-97-5	Bromochloromethane	42	
67-66-3	Chloroform	41	
71-55-6	1,1,1-Trichloroethane	40	
563-58-6	1,1-Dichloropropene	38	
56-23-5	Carbon tetrachloride	39	
107-06-2	1,2-Dichloroethane	40	
71-43-2	Benzene	41	
79-01-6	Trichloroethene	140	
78-87-5	1,2-Dichloropropane	41	
74-95-3	Dibromomethane	43	
75-27-4	Bromodichloromethane	42	
10061-01-5	cis-1,3-Dichloropropene	40	
108-10-1	4-Methyl-2-pentanone	43	
108-88-3	Toluene	40	
10061-02-6	trans-1,3-Dichloropropene	41	
79-00-5	1,1,2-Trichloroethane	44	
142-28-9	1,3-Dichloropropane	39	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-041612MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6138.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	37	
591-78-6	2-Hexanone	33	
124-48-1	Dibromochloromethane	39	
106-93-4	1,2-Dibromoethane	40	
108-90-7	Chlorobenzene	37	
630-20-6	1,1,1,2-Tetrachloroethane	38	
100-41-4	Ethylbenzene	37	
179601-23-1	m,p-Xylene	74	
95-47-6	o-Xylene	37	
1330-20-7	Xylene (Total)	110	
100-42-5	Styrene	37	
75-25-2	Bromoform	41	
98-82-8	Isopropylbenzene	38	
79-34-5	1,1,2,2-Tetrachloroethane	40	
108-86-1	Bromobenzene	37	
96-18-4	1,2,3-Trichloropropane	38	
103-65-1	n-Propylbenzene	36	
95-49-8	2-Chlorotoluene	36	
108-67-8	1,3,5-Trimethylbenzene	37	
106-43-4	4-Chlorotoluene	37	
98-06-6	tert-Butylbenzene	37	
95-63-6	1,2,4-Trimethylbenzene	37	
135-98-8	sec-Butylbenzene	37	
99-87-6	4-Isopropyltoluene	36	
541-73-1	1,3-Dichlorobenzene	38	
106-46-7	1,4-Dichlorobenzene	38	
104-51-8	n-Butylbenzene	35	
95-50-1	1,2-Dichlorobenzene	38	
96-12-8	1,2-Dibromo-3-chloropropane	37	
120-82-1	1,2,4-Trichlorobenzene	34	
87-68-3	Hexachlorobutadiene	32	
87-61-6	1,2,3-Trichlorobenzene	32	
91-20-3	Naphthalene	32	

Data File: \\Avogadro\Organics\V6.i\120419.B\V6I6138.D
Report Date: 30-Apr-2012 08:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\120419.B\V6I6138.D
Lab Smp Id: L0731-03AMS Client Smp ID: MW-5-041612MS
Inj Date : 19-APR-2012 17:34
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-03AMS,,65685
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 30-Apr-2012 08:49 amarquis Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 42 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	1.744	1.744	(0.324)	77486	50.0000	29
2	Freon114	85	1.863	1.863	(0.346)	81941	50.0000	31
3	Chloromethane	50	1.922	1.922	(0.357)	133626	50.0000	35
4	Vinyl Chloride	62	2.028	2.028	(0.377)	104437	50.0000	37
5	Bromomethane	94	2.324	2.324	(0.432)	56053	50.0000	34
6	Chloroethane	64	2.407	2.407	(0.448)	60917	50.0000	38
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	123990	50.0000	39
126	Ethanol	46	2.715	2.715	(0.505)	8179	5000.00	1000(AQ)
8	Ether	59	2.809	2.809	(0.523)	66083	50.0000	42(Q)
9	Acrolein	56	2.916	2.916	(0.542)	68466	250.000	180
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	79260	50.0000	38
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	81624	50.0000	38
12	Acetone	58	3.034	3.034	(0.564)	7207	50.0000	24
13	Iodomethane	142	3.164	3.164	(0.589)	109556	50.0000	38
14	Carbon Disulfide	76	3.212	3.212	(0.597)	233702	50.0000	38
15	Acetonitrile	41	3.283	3.283	(0.611)	225794	500.000	370(A)
16	Allyl Chloride	39	3.283	3.283	(0.611)	108768	50.0000	36
17	Methyl Acetate	43	3.283	3.283	(0.611)	64855	50.0000	38
18	Methylene Chloride	84	3.401	3.401	(0.633)	88526	50.0000	40
19	tert-Butanol	59	3.436	3.436	(0.639)	8798	100.000	43
20	Acrylonitrile	53	3.567	3.567	(0.663)	35322	50.0000	44
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	76350	50.0000	40
22	Methyl tert-butyl ether	73	3.578	3.578	(0.666)	226967	50.0000	42

Data File: \\Avogadro\Organics\V6.i\120419.B\V6I6138.D
Report Date: 30-Apr-2012 08:49

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.933	3.933	(0.732)	139471	50.0000	39
	24 Vinyl acetate	43	3.945	3.945	(0.734)	310598	50.0000	39
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	294854	50.0000	42
	26 2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.745)	121844	50.0000	39
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	257044	50.0000	43
	29 2,2-Dichloropropane	77	4.395	4.395	(0.817)	60436	50.0000	35
	28 cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	83193	50.0000	40
	30 2-Butanone	72	4.395	4.395	(0.817)	8210	50.0000	32
	32 Propionitrile	54	4.454	4.454	(0.828)	109444	500.000	370(A)
	33 Methacrylonitrile	41	4.572	4.572	(0.850)	109152	100.000	87
	34 Bromochloromethane	128	4.596	4.596	(0.855)	46573	50.0000	42
	31 Tetrahydrofuran	72	4.643	4.643	(0.864)	19339	100.000	82
	35 Chloroform	83	4.655	4.655	(0.866)	138441	50.0000	40
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	124774	50.0000	51
	37 1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	114005	50.0000	40
	38 Cyclohexane	56	4.868	4.868	(0.905)	129124	50.0000	39
	39 1,1-Dichloropropene	110	4.951	4.951	(0.921)	36922	50.0000	38
	40 Carbon Tetrachloride	117	4.963	4.963	(0.923)	100039	50.0000	39
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	41406	1000.00	430(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	27285	50.0000	51
	43 Benzene	78	5.140	5.140	(0.956)	289583	50.0000	41
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	119646	50.0000	40
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	232813	50.0000	43
M	50 1,2-Dichloroethene (Total)	96				159543	100.000	79
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	426969	50.0000	
	47 Trichloroethene	130	5.696	5.696	(1.059)	298274	50.0000	140
	48 Methylcyclohexane	83	5.886	5.886	(1.095)	112738	50.0000	40
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	83831	50.0000	41
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	65527	50.0000	45
	52 Dibromomethane	93	6.028	6.028	(1.121)	58848	50.0000	43
	53 1,4-Dioxane	88	6.028	6.028	(1.121)	4346	1000.00	190
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	114035	50.0000	42
	55 2-Chloroethyl vinyl ether	63	6.584	6.584	(1.224)	563	50.0000	1(TQ)
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	128978	50.0000	40
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	86140	50.0000	43
$	58 Toluene-d8	98	6.856	6.856	(0.819)	426981	50.0000	48
	59 Toluene	91	6.915	6.915	(1.286)	311049	50.0000	40
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	127131	50.0000	41
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	90385	50.0000	44
	62 1,1,2-Trichloroethane	97	7.318	7.318	(1.361)	78463	50.0000	44
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	68359	50.0000	37
	64 1,3-Dichloropropane	76	7.495	7.495	(0.895)	124272	50.0000	39
	65 2-Hexanone	43	7.566	7.566	(0.904)	57140	50.0000	33
	66 Dibromochloromethane	129	7.744	7.744	(0.925)	99910	50.0000	39
	67 1,2-Dibromoethane	107	7.874	7.874	(0.941)	86911	50.0000	40
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	96529	50.0000	36
*	68 Chlorobenzene-d5	117	8.371	8.371	(1.000)	377317	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	218706	50.0000	37
	71 1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	91188	50.0000	38
	72 Ethylbenzene	106	8.513	8.513	(1.017)	109024	50.0000	36
	73 m,p-Xylene	106	8.643	8.643	(1.033)	266453	100.000	74
	74 o-Xylene	106	9.081	9.081	(1.085)	134734	50.0000	37
	75 Styrene	104	9.104	9.104	(1.088)	225462	50.0000	37
	76 Bromoform	173	9.317	9.317	(1.113)	68701	50.0000	41

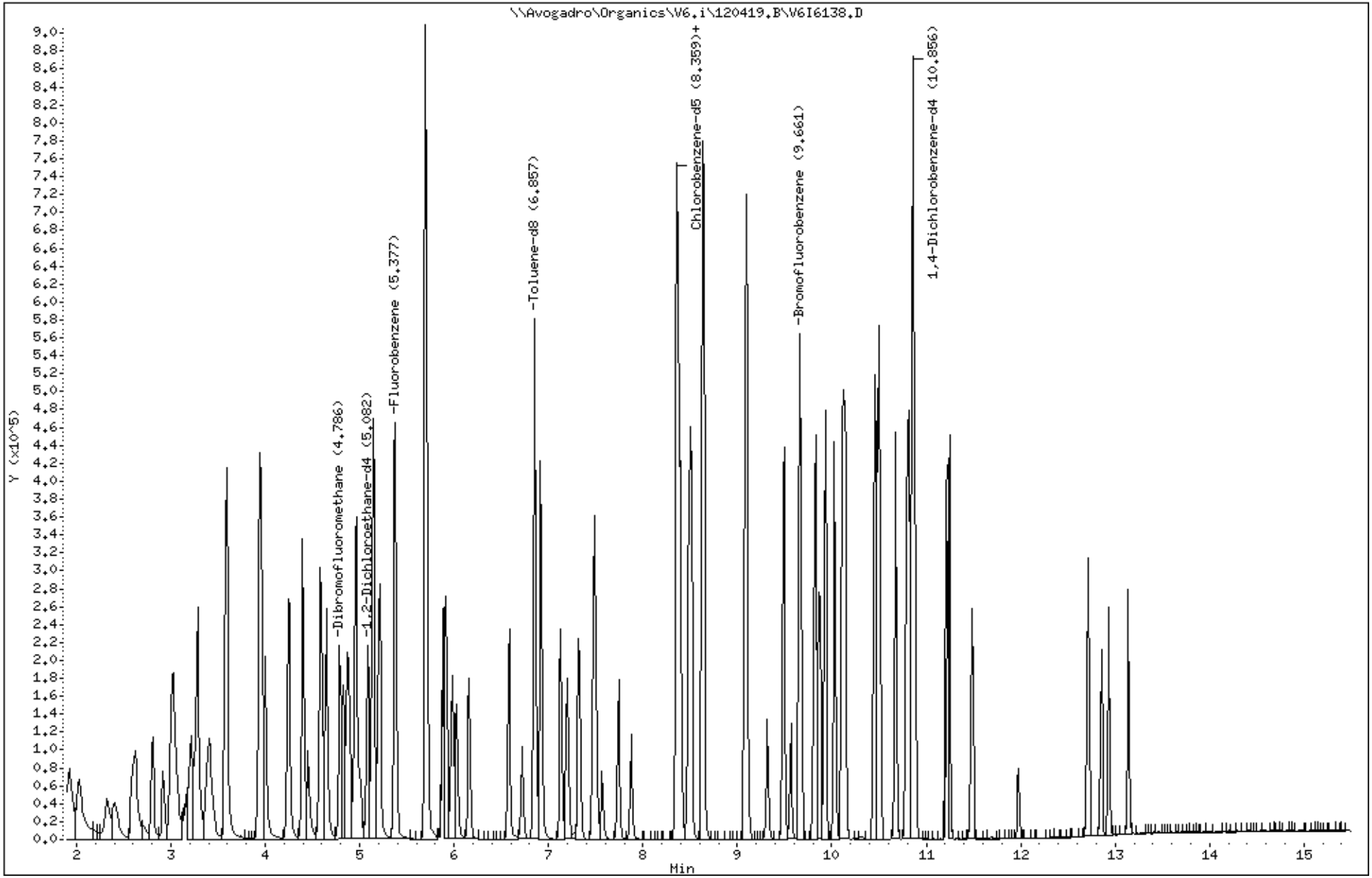
Data File: \\Avogadro\Organics\V6.i\120419.B\V6I6138.D
Report Date: 30-Apr-2012 08:49

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.495	9.495	(1.134)	332837	50.0000	38
	78 trans-1,4-Dichloro-2-butene	75	9.566	9.566	(1.143)	29119	50.0000	37
$	79 Bromofluorobenzene	95	9.660	9.660	(1.154)	193685	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	107423	50.0000	40
	81 Bromobenzene	156	9.826	9.826	(0.905)	98373	50.0000	37
	82 1,2,3-Trichloropropane	75	9.862	9.862	(0.908)	125283	50.0000	38
	83 n-Propylbenzene	120	9.933	9.933	(0.915)	91099	50.0000	36
	84 2-Chlorotoluene	126	10.027	10.027	(0.924)	88068	50.0000	36
	85 1,3,5-Trimethylbenzene	105	10.110	10.110	(0.931)	278969	50.0000	37
	86 4-Chlorotoluene	126	10.146	10.146	(0.935)	92894	50.0000	37
M	94 Xylene (Total)	106				401187	150.000	110
	87 tert-Butylbenzene	119	10.453	10.453	(0.963)	318965	50.0000	37
	88 1,2,4-Trimethylbenzene	105	10.501	10.501	(0.967)	281623	50.0000	37
	89 sec-Butylbenzene	105	10.678	10.678	(0.984)	329284	50.0000	37
	90 1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	174012	50.0000	38
	91 4-Isopropyltoluene	119	10.820	10.820	(0.997)	271635	50.0000	36
*	92 1,4-Dichlorobenzene-d4	152	10.856	10.856	(1.000)	209366	50.0000	
	93 1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	178544	50.0000	38
	95 n-Butylbenzene	91	11.211	11.211	(1.033)	231169	50.0000	35
	96 1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	172255	50.0000	38
	97 Hexachloroethane	117	11.483	11.483	(1.058)	54860	50.0000	35
	98 1,2-Dibromo-3-chloropropane	75	11.980	11.980	(1.104)	18895	50.0000	37
	141 1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	78731	50.0000	36(A)
	99 1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	82820	50.0000	34
	100 Hexachlorobutadiene	225	12.855	12.855	(1.184)	32297	50.0000	32
	101 Naphthalene	128	12.938	12.938	(1.192)	208035	50.0000	32
	102 1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	71763	50.0000	32

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\V6.i\120419.B\V6I6138.D
Date : 19-APR-2012 17:34
Client ID: MW-5-041612MS
Instrument: V6.i
Sample Info: 5ML,L0731-03AMS,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-041612MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6139.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	32	
74-87-3	Chloromethane	41	
75-01-4	Vinyl chloride	44	
74-83-9	Bromomethane	41	
75-00-3	Chloroethane	45	
75-69-4	Trichlorofluoromethane	46	
75-35-4	1,1-Dichloroethene	45	
67-64-1	Acetone	22	
74-88-4	Iodomethane	46	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	46	
75-34-3	1,1-Dichloroethane	46	
108-05-4	Vinyl acetate	40	
78-93-3	2-Butanone	37	
156-59-2	cis-1,2-Dichloroethene	46	
594-20-7	2,2-Dichloropropane	41	
74-97-5	Bromochloromethane	46	
67-66-3	Chloroform	46	
71-55-6	1,1,1-Trichloroethane	47	
563-58-6	1,1-Dichloropropene	47	
56-23-5	Carbon tetrachloride	47	
107-06-2	1,2-Dichloroethane	45	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	140	
78-87-5	1,2-Dichloropropane	46	
74-95-3	Dibromomethane	47	
75-27-4	Bromodichloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	45	
108-10-1	4-Methyl-2-pentanone	44	
108-88-3	Toluene	46	
10061-02-6	trans-1,3-Dichloropropene	44	
79-00-5	1,1,2-Trichloroethane	45	
142-28-9	1,3-Dichloropropane	42	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-041612MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6139.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	44	
591-78-6	2-Hexanone	34	
124-48-1	Dibromochloromethane	43	
106-93-4	1,2-Dibromoethane	43	
108-90-7	Chlorobenzene	43	
630-20-6	1,1,1,2-Tetrachloroethane	43	
100-41-4	Ethylbenzene	43	
179601-23-1	m,p-Xylene	86	
95-47-6	o-Xylene	43	
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	43	
108-86-1	Bromobenzene	43	
96-18-4	1,2,3-Trichloropropane	40	
103-65-1	n-Propylbenzene	44	
95-49-8	2-Chlorotoluene	43	
108-67-8	1,3,5-Trimethylbenzene	44	
106-43-4	4-Chlorotoluene	43	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	44	
135-98-8	sec-Butylbenzene	45	
99-87-6	4-Isopropyltoluene	44	
541-73-1	1,3-Dichlorobenzene	44	
106-46-7	1,4-Dichlorobenzene	43	
104-51-8	n-Butylbenzene	42	
95-50-1	1,2-Dichlorobenzene	44	
96-12-8	1,2-Dibromo-3-chloropropane	40	
120-82-1	1,2,4-Trichlorobenzene	39	
87-68-3	Hexachlorobutadiene	39	
87-61-6	1,2,3-Trichlorobenzene	38	
91-20-3	Naphthalene	38	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6139.D
Report Date: 20-Apr-2012 11:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120419.B\V6I6139.D
Lab Smp Id: L0731-03AMSD Client Smp ID: MW-5-041612MSD
Inj Date : 19-APR-2012 17:58
Operator : AM   SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0731-03AMSD,,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 43 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	1.744	1.744	(0.324)	88488	50.0000	32
2	Freon114	85	1.863	1.863	(0.346)	106537	50.0000	39
3	Chloromethane	50	1.922	1.922	(0.357)	160998	50.0000	41
4	Vinyl Chloride	62	2.028	2.028	(0.377)	128422	50.0000	44
5	Bromomethane	94	2.324	2.324	(0.432)	69303	50.0000	41
6	Chloroethane	64	2.407	2.407	(0.448)	73622	50.0000	45
7	Trichlorofluoromethane	101	2.596	2.596	(0.483)	150713	50.0000	46
126	Ethanol	46	2.726	2.726	(0.507)	20592	5000.00	2600(AQ)
8	Ether	59	2.809	2.809	(0.523)	71225	50.0000	44(Q)
9	Acrolein	56	2.916	2.916	(0.542)	72482	250.000	180
10	1,1-Dichloroethene	96	3.022	3.022	(0.562)	95430	50.0000	45
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.010	3.010	(0.560)	102141	50.0000	46
12	Acetone	58	3.034	3.034	(0.564)	6942	50.0000	22
13	Iodomethane	142	3.164	3.164	(0.589)	137646	50.0000	46
14	Carbon Disulfide	76	3.212	3.212	(0.597)	283660	50.0000	45
15	Acetonitrile	41	3.283	3.283	(0.611)	259761	500.000	410(A)
16	Allyl Chloride	39	3.283	3.283	(0.611)	132832	50.0000	42
17	Methyl Acetate	43	3.283	3.283	(0.611)	65605	50.0000	38
18	Methylene Chloride	84	3.401	3.401	(0.633)	101775	50.0000	45
19	tert-Butanol	59	3.448	3.448	(0.641)	14981	100.000	72
20	Acrylonitrile	53	3.567	3.567	(0.663)	34531	50.0000	42
21	trans-1,2-Dichloroethene	96	3.590	3.590	(0.668)	92265	50.0000	47
22	Methyl tert-butyl ether	73	3.578	3.578	(0.666)	251130	50.0000	46

Data File: \\avogadro\organics\V6.i\120419.B\V6I6139.D
Report Date: 20-Apr-2012 11:28

	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	3.933	3.933	(0.732)	164815	50.0000	46
	24 Vinyl acetate	43	3.945	3.945	(0.734)	322868	50.0000	40
	25 Diisopropyl Ether	45	3.957	3.957	(0.736)	332271	50.0000	46
	26 2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.745)	146676	50.0000	46
	27 Ethyl tert-butyl ether	59	4.241	4.241	(0.789)	278165	50.0000	46
	29 2,2-Dichloropropane	77	4.395	4.395	(0.817)	72987	50.0000	41
	28 cis-1,2-Dichloroethene	96	4.395	4.395	(0.817)	99234	50.0000	46
	30 2-Butanone	72	4.395	4.395	(0.817)	9819	50.0000	37
	32 Propionitrile	54	4.454	4.454	(0.828)	119392	500.000	390(A)
	33 Methacrylonitrile	41	4.572	4.572	(0.850)	111944	100.000	88
	34 Bromochloromethane	128	4.596	4.596	(0.855)	52872	50.0000	46
	31 Tetrahydrofuran	72	4.643	4.643	(0.864)	20242	100.000	84
	35 Chloroform	83	4.655	4.655	(0.866)	160173	50.0000	46
$	36 Dibromofluoromethane	113	4.785	4.785	(0.890)	127082	50.0000	51
	37 1,1,1-Trichloroethane	97	4.821	4.821	(0.897)	138122	50.0000	47
	38 Cyclohexane	56	4.868	4.868	(0.905)	157073	50.0000	47
	39 1,1-Dichloropropene	110	4.963	4.963	(0.923)	46196	50.0000	47
	40 Carbon Tetrachloride	117	4.963	4.963	(0.923)	122034	50.0000	47
	41 Isobutyl Alcohol	43	4.998	4.998	(0.930)	69594	1000.00	700(A)
$	42 1,2-Dichloroethane-d4	102	5.081	5.081	(0.945)	27286	50.0000	50
	43 Benzene	78	5.140	5.140	(0.956)	341084	50.0000	47
	44 1,2-Dichloroethane	62	5.152	5.152	(0.958)	134808	50.0000	45
	45 tert-Amyl methyl ether	73	5.211	5.211	(0.969)	251304	50.0000	45
M	50 1,2-Dichloroethene (Total)	96				191499	100.000	93
*	46 Fluorobenzene	96	5.377	5.377	(1.000)	436058	50.0000	
	47 Trichloroethene	130	5.697	5.697	(1.059)	311409	50.0000	140
	48 Methylcyclohexane	83	5.886	5.886	(1.095)	138186	50.0000	48
	49 1,2-Dichloropropane	63	5.909	5.909	(1.099)	94882	50.0000	46
	51 Methyl Methacrylate	69	5.980	5.980	(1.112)	67963	50.0000	46
	52 Dibromomethane	93	6.028	6.028	(1.121)	64715	50.0000	47
	53 1,4-Dioxane	88	6.028	6.028	(1.121)	11859	1000.00	520(A)
	54 Bromodichloromethane	83	6.158	6.158	(1.145)	130174	50.0000	46
	55 2-Chloroethyl vinyl ether	63	6.584	6.584	(1.224)	728	50.0000	2(TQ)
	56 cis-1,3-Dichloropropene	75	6.584	6.584	(1.224)	147237	50.0000	45
	57 4-Methyl-2-pentanone	43	6.714	6.714	(1.249)	89401	50.0000	44
$	58 Toluene-d8	98	6.856	6.856	(0.819)	435505	50.0000	48
	59 Toluene	91	6.915	6.915	(1.286)	370063	50.0000	46
	60 trans-1,3-Dichloropropene	75	7.128	7.128	(1.326)	138853	50.0000	44
	61 Ethyl Methacrylate	69	7.199	7.199	(1.339)	97252	50.0000	46
	62 1,1,2-Trichloroethane	97	7.318	7.318	(1.361)	82654	50.0000	45
	63 Tetrachloroethene	164	7.483	7.483	(0.894)	82718	50.0000	44
	64 1,3-Dichloropropane	76	7.495	7.495	(0.895)	135605	50.0000	42
	65 2-Hexanone	43	7.566	7.566	(0.904)	60056	50.0000	34
	66 Dibromochloromethane	129	7.744	7.744	(0.925)	111793	50.0000	43
	67 1,2-Dibromoethane	107	7.874	7.874	(0.941)	95162	50.0000	43
	69 1-Chlorohexane	91	8.347	8.347	(0.997)	121457	50.0000	44
*	68 Chlorobenzene-d5	117	8.371	8.370	(1.000)	384066	50.0000	
	70 Chlorobenzene	112	8.394	8.394	(1.003)	254342	50.0000	43
	71 1,1,1,2-Tetrachloroethane	131	8.477	8.477	(1.013)	104057	50.0000	43
	72 Ethylbenzene	106	8.513	8.512	(1.017)	130379	50.0000	43
	73 m,p-Xylene	106	8.631	8.631	(1.031)	317906	100.000	86
	74 o-Xylene	106	9.093	9.092	(1.086)	159629	50.0000	43
	75 Styrene	104	9.104	9.104	(1.088)	265845	50.0000	43
	76 Bromoform	173	9.317	9.317	(1.113)	72426	50.0000	42

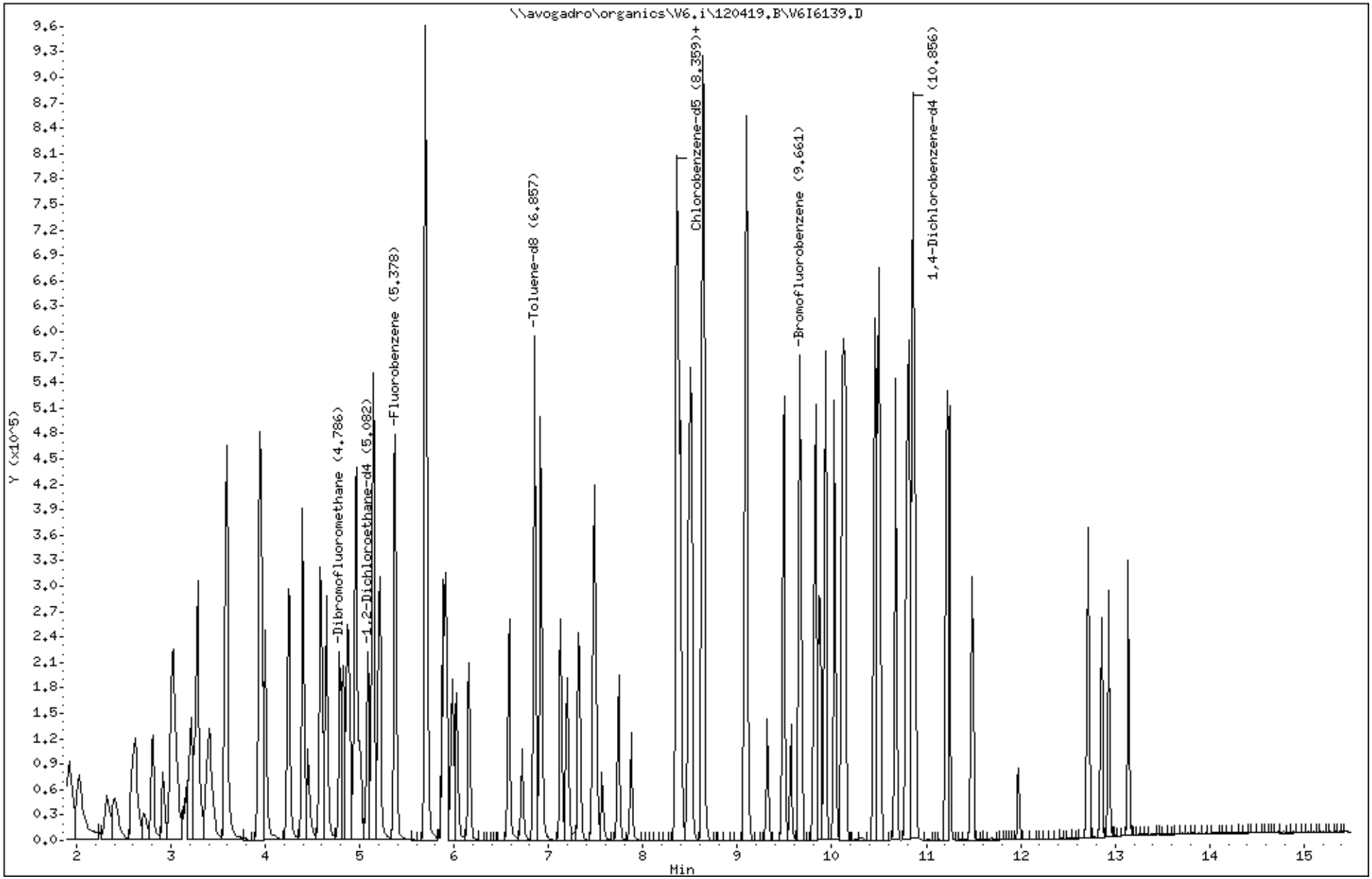
Data File: \\avogadro\organics\V6.i\120419.B\V6I6139.D
Report Date: 20-Apr-2012 11:28

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77	Isopropylbenzene	105	9.495	9.494	(1.134)	396450	50.0000	44
	78	trans-1,4-Dichloro-2-butene	75	9.566	9.566	(1.143)	31311	50.0000	39
$	79	Bromofluorobenzene	95	9.660	9.660	(1.154)	198075	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.814	9.814	(0.904)	113688	50.0000	43
	81	Bromobenzene	156	9.826	9.826	(0.905)	113413	50.0000	43
	82	1,2,3-Trichloropropane	75	9.862	9.862	(0.908)	131817	50.0000	40
	83	n-Propylbenzene	120	9.933	9.932	(0.915)	111788	50.0000	44
	84	2-Chlorotoluene	126	10.027	10.027	(0.924)	104331	50.0000	43
	85	1,3,5-Trimethylbenzene	105	10.110	10.110	(0.931)	328686	50.0000	44
	86	4-Chlorotoluene	126	10.146	10.146	(0.935)	108947	50.0000	43
M	94	Xylene (Total)	106				477535	150.000	130
	87	tert-Butylbenzene	119	10.453	10.453	(0.963)	381507	50.0000	44
	88	1,2,4-Trimethylbenzene	105	10.501	10.500	(0.967)	330853	50.0000	44
	89	sec-Butylbenzene	105	10.678	10.678	(0.984)	396436	50.0000	45
	90	1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	201328	50.0000	44
	91	4-Isopropyltoluene	119	10.820	10.820	(0.997)	328494	50.0000	44
*	92	1,4-Dichlorobenzene-d4	152	10.856	10.855	(1.000)	208685	50.0000	
	93	1,4-Dichlorobenzene	146	10.879	10.879	(1.002)	203847	50.0000	43
	95	n-Butylbenzene	91	11.222	11.222	(1.034)	278322	50.0000	42
	96	1,2-Dichlorobenzene	146	11.246	11.246	(1.036)	200612	50.0000	44
	97	Hexachloroethane	117	11.483	11.483	(1.058)	67099	50.0000	44
	98	1,2-Dibromo-3-chloropropane	75	11.980	11.980	(1.104)	20197	50.0000	40
	141	1,3,5-Trichlorobenzene	182	12.713	12.713	(2.364)	92486	50.0000	42(A)
	99	1,2,4-Trichlorobenzene	180	12.713	12.713	(1.171)	96727	50.0000	39
	100	Hexachlorobutadiene	225	12.855	12.855	(1.184)	40188	50.0000	39
	101	Naphthalene	128	12.938	12.938	(1.192)	244705	50.0000	38
	102	1,2,3-Trichlorobenzene	180	13.139	13.139	(1.210)	85608	50.0000	38

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\V6.i\120419.B\V6I6139.D
Date : 19-APR-2012 17:58
Client ID: MW-5-041612MSD
Instrument: V6.i
Sample Info: 5ML,L0731-03AMSD,,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-65685

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6122.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	33	
74-87-3	Chloromethane	42	
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	43	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	48	
67-64-1	Acetone	26	
74-88-4	Iodomethane	47	
75-15-0	Carbon disulfide	48	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	46	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	47	
78-93-3	2-Butanone	38	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	48	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	46	
71-43-2	Benzene	49	
79-01-6	Trichloroethene	48	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	47	
75-27-4	Bromodichloromethane	49	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	44	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	47	
79-00-5	1,1,2-Trichloroethane	48	
142-28-9	1,3-Dichloropropane	44	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-65685

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-65685

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6122.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	46	
591-78-6	2-Hexanone	36	
124-48-1	Dibromochloromethane	44	
106-93-4	1,2-Dibromoethane	44	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	46	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	46	
75-25-2	Bromoform	45	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	44	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	44	
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	46	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	46	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	46	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	45	
96-12-8	1,2-Dibromo-3-chloropropane	40	
120-82-1	1,2,4-Trichlorobenzene	41	
87-68-3	Hexachlorobutadiene	42	
87-61-6	1,2,3-Trichlorobenzene	38	
91-20-3	Naphthalene	38	

Data File: \\avogadro\organics\V6.i\120419.B\V6I6122.D
Report Date: 20-Apr-2012 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\120419.B\V6I6122.D
Lab Smp Id: LCS-65685 Client Smp ID: LCS-65685
Inj Date : 19-APR-2012 10:48
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,LCS-65685,LCS-65685,65685
Misc Info :
Comment   :
Method   : \\avogadro\organics\V6.i\120419.B\v68260Gadd-6lvl.m
Meth Date : 20-Apr-2012 11:26 adatta Quant Type: ISTD
Cal Date : 13-APR-2012 12:45 Cal File: V6I6070.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.747	1.744	(0.326)	93707	50.0000	33
2	Freon114	85	1.854	1.863	(0.345)	110944	50.0000	40
3	Chloromethane	50	1.925	1.922	(0.359)	168653	50.0000	42
4	Vinyl Chloride	62	2.019	2.028	(0.376)	134847	50.0000	45
5	Bromomethane	94	2.315	2.324	(0.431)	74301	50.0000	43
6	Chloroethane	64	2.410	2.407	(0.449)	78934	50.0000	47
7	Trichlorofluoromethane	101	2.599	2.596	(0.484)	159326	50.0000	48
126	Ethanol	46	2.717	2.726	(0.506)	24880	5000.00	3100(AQ)
8	Ether	59	2.800	2.809	(0.522)	78746	50.0000	47(Q)
9	Acrolein	56	2.918	2.916	(0.544)	84113	250.000	200(A)
10	1,1-Dichloroethene	96	3.025	3.022	(0.564)	103721	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.001	3.010	(0.559)	105838	50.0000	47
12	Acetone	58	3.037	3.034	(0.566)	8190	50.0000	26
13	Iodomethane	142	3.167	3.164	(0.590)	144643	50.0000	47
14	Carbon Disulfide	76	3.214	3.212	(0.599)	310918	50.0000	48
15	Acetonitrile	41	3.273	3.283	(0.610)	287144	500.000	440(A)
16	Allyl Chloride	39	3.285	3.283	(0.612)	144766	50.0000	45
17	Methyl Acetate	43	3.285	3.283	(0.612)	77561	50.0000	44
18	Methylene Chloride	84	3.404	3.401	(0.634)	111946	50.0000	48
19	tert-Butanol	59	3.439	3.448	(0.641)	16799	100.000	78
20	Acrylonitrile	53	3.569	3.567	(0.665)	38604	50.0000	46
21	trans-1,2-Dichloroethene	96	3.593	3.590	(0.669)	99631	50.0000	50
22	Methyl tert-butyl ether	73	3.581	3.578	(0.667)	259996	50.0000	46

Data File: \\avogadro\organics\V6.i\120419.B\V6I6122.D
Report Date: 20-Apr-2012 11:27

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.924	3.933	(0.731)	183303	50.0000	49
	24	Vinyl acetate	43	3.948	3.945	(0.735)	389740	50.0000	47
	25	Diisopropyl Ether	45	3.948	3.957	(0.735)	344843	50.0000	47
	26	2-Chloro-1,3-Butadiene	53	3.995	4.004	(0.744)	160004	50.0000	49
	27	Ethyl tert-butyl ether	59	4.244	4.241	(0.791)	298322	50.0000	48
	29	2,2-Dichloropropane	77	4.398	4.395	(0.819)	89192	50.0000	49
	28	cis-1,2-Dichloroethene	96	4.398	4.395	(0.819)	107817	50.0000	49
	30	2-Butanone	72	4.398	4.395	(0.819)	10407	50.0000	38
	32	Propionitrile	54	4.457	4.454	(0.830)	131451	500.000	420(A)
	33	Methacrylonitrile	41	4.575	4.572	(0.852)	118977	100.000	91
	34	Bromochloromethane	128	4.599	4.596	(0.857)	58313	50.0000	50
	31	Tetrahydrofuran	72	4.634	4.643	(0.863)	22467	100.000	91
	35	Chloroform	83	4.646	4.655	(0.866)	174589	50.0000	49
$	36	Dibromofluoromethane	113	4.788	4.785	(0.892)	130248	50.0000	50
	37	1,1,1-Trichloroethane	97	4.824	4.821	(0.899)	145091	50.0000	48
	38	Cyclohexane	56	4.871	4.868	(0.907)	169610	50.0000	49
	39	1,1-Dichloropropene	110	4.954	4.963	(0.923)	50575	50.0000	50
	40	Carbon Tetrachloride	117	4.966	4.963	(0.925)	131761	50.0000	49
	41	Isobutyl Alcohol	43	5.001	4.998	(0.932)	77360	1000.00	760(A)
$	42	1,2-Dichloroethane-d4	102	5.084	5.081	(0.947)	28366	50.0000	51
	43	Benzene	78	5.143	5.140	(0.958)	364389	50.0000	49
	44	1,2-Dichloroethane	62	5.155	5.152	(0.960)	143313	50.0000	46
	45	tert-Amyl methyl ether	73	5.202	5.211	(0.969)	266748	50.0000	46
M	50	1,2-Dichloroethene (Total)	96				207448	100.000	98
*	46	Fluorobenzene	96	5.368	5.377	(1.000)	448298	50.0000	
	47	Trichloroethene	130	5.699	5.697	(1.062)	109704	50.0000	48
	48	Methylcyclohexane	83	5.877	5.886	(1.095)	148105	50.0000	50
	49	1,2-Dichloropropane	63	5.912	5.909	(1.101)	102105	50.0000	48
	51	Methyl Methacrylate	69	5.983	5.980	(1.115)	64546	50.0000	42
	52	Dibromomethane	93	6.019	6.028	(1.121)	66843	50.0000	47
	53	1,4-Dioxane	88	6.019	6.028	(1.121)	15246	1000.00	650(A)
	54	Bromodichloromethane	83	6.161	6.158	(1.148)	139812	50.0000	48
	55	2-Chloroethyl vinyl ether	63	6.421	6.584	(1.196)	5902	50.0000	12
	56	cis-1,3-Dichloropropene	75	6.575	6.584	(1.225)	164537	50.0000	49
	57	4-Methyl-2-pentanone	43	6.717	6.714	(1.251)	92748	50.0000	44
$	58	Toluene-d8	98	6.847	6.856	(0.819)	446117	50.0000	49
	59	Toluene	91	6.918	6.915	(1.289)	398172	50.0000	48
	60	trans-1,3-Dichloropropene	75	7.131	7.128	(1.328)	152028	50.0000	47
	61	Ethyl Methacrylate	69	7.202	7.199	(1.342)	101345	50.0000	47
	62	1,1,2-Trichloroethane	97	7.320	7.318	(1.364)	89058	50.0000	48
	63	Tetrachloroethene	164	7.486	7.483	(0.895)	87087	50.0000	46
	64	1,3-Dichloropropane	76	7.498	7.495	(0.897)	144117	50.0000	44
	65	2-Hexanone	43	7.569	7.566	(0.905)	63254	50.0000	36
	66	Dibromochloromethane	129	7.746	7.744	(0.926)	117003	50.0000	44
	67	1,2-Dibromoethane	107	7.876	7.874	(0.942)	97922	50.0000	44
	69	1-Chlorohexane	91	8.350	8.347	(0.999)	132392	50.0000	48
*	68	Chlorobenzene-d5	117	8.362	8.370	(1.000)	388918	50.0000	
	70	Chlorobenzene	112	8.397	8.394	(1.004)	274072	50.0000	46
	71	1,1,1,2-Tetrachloroethane	131	8.480	8.477	(1.014)	113296	50.0000	46
	72	Ethylbenzene	106	8.504	8.512	(1.017)	143679	50.0000	47
	73	m,p-Xylene	106	8.634	8.631	(1.033)	347179	100.000	93
	74	o-Xylene	106	9.083	9.092	(1.086)	169819	50.0000	46
	75	Styrene	104	9.107	9.104	(1.089)	290285	50.0000	46
	76	Bromoform	173	9.320	9.317	(1.115)	78336	50.0000	45

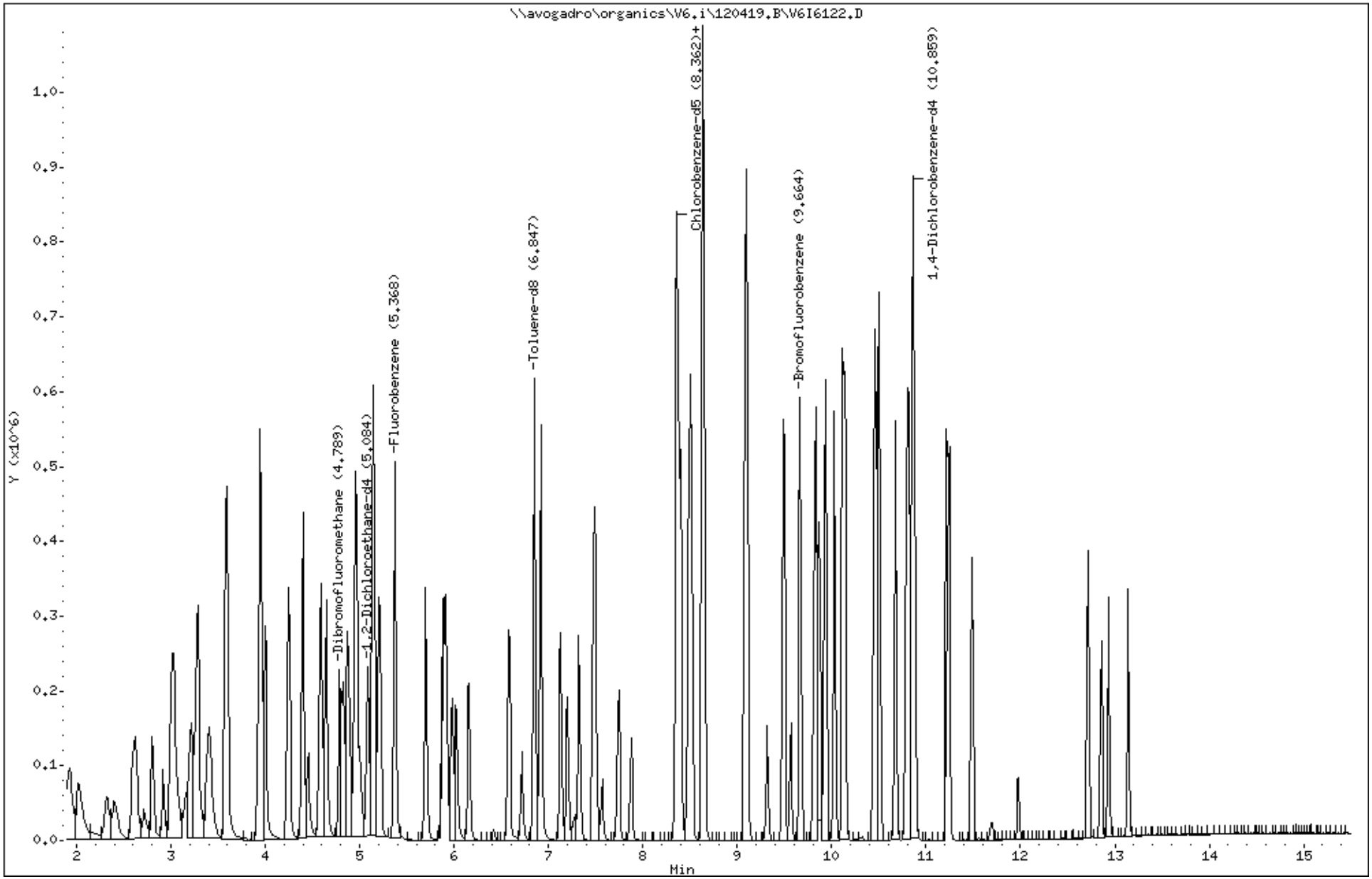
Data File: \\avogadro\organics\V6.i\120419.B\V6I6122.D
Report Date: 20-Apr-2012 11:27

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77	Isopropylbenzene	105	9.486	9.494	(1.134)	427381	50.0000	47
	78	trans-1,4-Dichloro-2-butene	75	9.569	9.566	(1.144)	38606	50.0000	47
$	79	Bromofluorobenzene	95	9.663	9.660	(1.156)	202720	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.817	9.814	(0.904)	119093	50.0000	44
	81	Bromobenzene	156	9.829	9.826	(0.905)	122633	50.0000	45
	82	1,2,3-Trichloropropane	75	9.864	9.862	(0.908)	148405	50.0000	44
	83	n-Propylbenzene	120	9.935	9.932	(0.915)	119921	50.0000	46
	84	2-Chlorotoluene	126	10.030	10.027	(0.924)	113548	50.0000	46
	85	1,3,5-Trimethylbenzene	105	10.113	10.110	(0.931)	353073	50.0000	46
	86	4-Chlorotoluene	126	10.148	10.146	(0.935)	120043	50.0000	46
M	94	Xylene (Total)	106				516998	150.000	140
	87	tert-Butylbenzene	119	10.456	10.453	(0.963)	412367	50.0000	46
	88	1,2,4-Trimethylbenzene	105	10.503	10.500	(0.967)	361496	50.0000	46
	89	sec-Butylbenzene	105	10.681	10.678	(0.984)	426324	50.0000	47
	90	1,3-Dichlorobenzene	146	10.787	10.796	(0.993)	217212	50.0000	46
	91	4-Isopropyltoluene	119	10.823	10.820	(0.997)	354088	50.0000	46
*	92	1,4-Dichlorobenzene-d4	152	10.858	10.855	(1.000)	214936	50.0000	
	93	1,4-Dichlorobenzene	146	10.882	10.879	(1.002)	222636	50.0000	46
	95	n-Butylbenzene	91	11.213	11.222	(1.033)	299354	50.0000	44
	96	1,2-Dichlorobenzene	146	11.249	11.246	(1.036)	212359	50.0000	45
	97	Hexachloroethane	117	11.485	11.483	(1.058)	78592	50.0000	50
	98	1,2-Dibromo-3-chloropropane	75	11.971	11.980	(1.102)	20969	50.0000	40
	141	1,3,5-Trichlorobenzene	182	12.716	12.713	(2.369)	99116	50.0000	44(A)
	99	1,2,4-Trichlorobenzene	180	12.716	12.713	(1.171)	103808	50.0000	41
	100	Hexachlorobutadiene	225	12.858	12.855	(1.184)	43739	50.0000	42
	101	Naphthalene	128	12.929	12.938	(1.191)	254644	50.0000	38
	102	1,2,3-Trichlorobenzene	180	13.142	13.139	(1.210)	89061	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\V6.i\120419.B\V6I6122.D
Date : 19-APR-2012 10:48
Client ID: LCS-65685
Instrument: V6.i
Sample Info: 5ML,LCS-65685,LCS-65685,65685
Purge Volume: 5.0
Operator: AM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



[redacted] INJECTION LOG [redacted] VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory

METHOD: 8260 W
ICAL DATE: 4/13/12
ANALYST: AED
BATCH: 120413.B
Start: 13-APR-12 08:07
End: 13-APR-12 13:17

Comments:

Standards: BFB VWB204042A 2 uL
IS/SS VW120326A AND uL
STD VW120329A 20 uL
ICV VW120329B 20 uL

Reviewed By: 4/18/12 Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
																ICV Run Next Day	
V6I6060	08:07	BFB6L	BFB6L		AQ									1		OK	
V6I6062	08:57	VSTD0506L	VSTD0506L		AQ		100	100	100					1		OK	
V6I6063	09:34	VSTD0206L	VSTD0206L		AQ		101	100	100					1		OK	
V6I6064	09:58	VSTD0056L	VSTD0056L		AQ		100	100	96					1		OK	
V6I6069	12:21	VSTD2006L	VSTD2006L		AQ		101	103	106					1		OK	
V6I6070	12:45	VSTD1006L	VSTD1006L		AQ		104	102	97					1		OK	
V6I6071	13:17	VICV0506L	VICV0506L		AQ		104	105	102	101	104	100	100	1	ER	NOT USED	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 4/13/12

160

[redacted] SPE[redacted]UM [redacted]YT[redacted], INC [redacted]IVI[redacted]

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 4/13/12

ANALYST: AED

BATCH: 120419.B

Start: 19-APR-12 09:34
End: 19-APR-12 20:46

Comments:

Standards: BFB VW120404A 2 uL
IS/SS VW120326A AUTO uL
STD VW120329A 20 uL
uL

Reviewed By: [signature]

Manual Integration: N/A

MI Review: N/A

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
V6I6120	09:34	BFB60	BFB60		AQ									1		OK	
V6I6121	10:04	VSTD0506O	VSTD0506O		AQ		100	100	100					1		OK	
V6I6122	10:48	LCS-65685	LCS-65685	65685	AQ		106	106	107	101	101	98	101	1	ER	OK	
V6I6123	11:31	MB-65685	MB-65685	65685	AQ		105	106	98	101	100	97	98	1	E	NOT USED	
V6I6124	11:55	MB-65685	MB-65685	65685	AQ		102	104	98	101	100	97	98	1		NOT USED	
V6I6125	12:19	MB-65685	MB-65685	65685	AQ		102	103	98	99	98	96	99	1		OK	
V6I6126	12:44	L0731-07A	TB041612	65685	AQ	1	100	101	96	100	100	96	99	1		OK	2
V6I6127	13:08	L0731-12A	TB041712	65685	AQ	1	99	101	96	100	104	96	98	1		OK	
V6I6128	13:32	L0731-01A	MW-1-041612	65685	AQ	1	100	101	94	100	100	96	98	1		OK	
V6I6129	13:56	L0731-02A	MW-2-041612	65685	AQ	1	99	101	96	101	100	97	97	1		OK	
V6I6130	14:20	L0731-03A	MW-5-041612	65685	AQ	1	100	101	96	100	100	97	97	1		OK	
V6I6131	14:45	L0731-04A	MW-6-041612	65685	AQ	1	99	101	95	101	101	97	96	1		OK	
V6I6132	15:09	L0731-05A	MW-9-041612	65685	AQ	1	99	101	96	103	100	98	97	1		OK	
V6I6133	15:33	L0731-06A	DUP-1-041612	65685	AQ	1	100	101	94	100	103	98	97	1		OK	
V6I6134	15:57	L0731-08A	MW-4-041712	65685	AQ	1	100	102	95	101	100	96	96	1		OK	
V6I6135	16:21	L0731-09A	MW-7-041712	65685	AQ	1	99	102	94	102	102	96	96	1		OK	
V6I6136	16:46	L0731-10A	MW-8-041712	65685	AQ	1	100	101	95	99	99	98	97	1		OK	
V6I6137	17:10	L0731-11A	MW-3R-041712	65685	AQ	1	99	101	95	101	96	96	97	1		OK	
V6I6138	17:34	L0731-03AMS	MW-5-041612MS	65685	AQ	2	101	103	104	102	102	96	100	1	ER	RR @ 1X	
V6I6139	17:58	L0731-03AMSD	MW-5-041612MSD	65685	AQ	3	104	105	104	101	100	97	100	1	ER	OK	2
V6I6140	18:22	L0707-02AMS	MW-15RMS	65685	AQ	4	104	108	106	102	103	108	99	1	R	OK	
V6I6141	18:46	VBLK	VBLK		AQ		105	108	102	102	102	97	97	1	E	NOT USED	
V6I6142	19:10	VBLK	VBLK		AQ		104	106	101	102	98	98	98	1	E	NOT USED	
V6I6143	19:35	IR12041905	IR12041905		AQ		105	106	99	101	98	96	97	1		OK, TCLP FLUID CHECK	
V6I6144	19:58	IR12041906	IR12041906		AQ		102	105	98	102	98	96	98	1		OK, TCLP FLUID CHECK	
V6I6145	20:22	VBLK	VBLK		AQ		102	104	97	101	98	97	98	1		NOT USED	
V6I6146	20:46	VBLK	VBLK		AQ		103	104	98	100	99	97	97	1		NOT USED	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit

AED 4/20/12

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
~~4/12/12~~ ~~L0707~~ VEB 4/13/12	L0707	Labella	01-05	VEB	★	H	R9	
	L0709	Spectrum	02-03			M	R10	
	L0698	CH2M	01-07			H	R9	
	L0699	CH2M	01-02			H	R9	
4/12/12	L0710	RIRRC	01-06	VEB		H	R9	
4/13/12	L0714	Malcolm	01-03	VEB		H	R9	
4/13/12	L0716	Nobis	01-06	VEB		UA	R10	
4/13/12	L0718	RIRRC	01	VEB		H	R9	
4/16/12	L0721	D+B	01-12	VEB		H	R10	
4/16/12	L0724	Ventek	01-02	VEB		H	R9	
4/16/12	L0725	Ensafe	01-12	VEB		H	R9	
4/17/12	L0728	RIRRC	01-08	VEB		H	R9	
4/17/12	L0729	Svenson	01	VEB		US	R9	
4/17/12	L0731	GZA	01-07	VEB	★	H	R10	

Logbook ID 90.0191-07/11

Reviewed By: 4/20/12 GJA

"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

* Wet Chemistry *

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: L0731

SM 3500D

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times with the following exceptions:

Please note that hold time could not be determined for sample DUP-1-041612 (L0731-06B) as a time of collection was not listed on the COC.

B. Sample Analysis:

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

III. METHODS

Samples were analyzed following procedures in laboratory test code: SM 3500D

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SM 3500D

V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: SPEC2
Instrument Type: SP
Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recovery for lab control sample was within the QC limits.

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

Matrix spike was performed on samples: MW-4-041712 (L0731-08BMS) and MW-5-041612 (L0731-03BMS).

Percent recovery was within the QC limits for both samples.

D. Duplicate sample:

Duplicate analysis was performed on samples: MW-4-041712 (L0731-08BDUP) and MW-5-041612 (L0731-03BDUP).

Percent RPD was within the QC limits for both samples.

E. Dilutions:

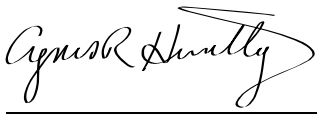
The following samples were analyzed at dilution:

MW-5-041612 (L0731-03B), dilution factor: 10 for Chromium, Hexavalent
MW-5-041612 (L0731-03BDUP), dilution factor: 10 for Chromium, Hexavalent
MW-5-041612 (L0731-03BMS), dilution factor: 10 for Chromium, Hexavalent

F. Samples:

No other unusual occurrences were noted during sample analysis.

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

Signed: 

Date: 05/03/12

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

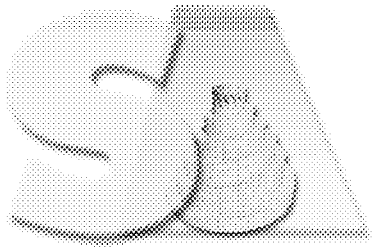
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-041612
Lab ID: L0731-01
Project: Maple Street
Collection Date: 04/16/12 16:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:34	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-041612
Lab ID: L0731-02
Project: Maple Street
Collection Date: 04/16/12 16:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:35	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-041612
Lab ID: L0731-03
Project: Maple Street
Collection Date: 04/16/12 15:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	2.9		0.30	mg/L	10	04/17/2012 10:36	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-041612
Lab ID: L0731-04
Project: Maple Street
Collection Date: 04/16/12 16:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:40	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-041612
Lab ID: L0731-05
Project: Maple Street
Collection Date: 04/16/12 15:45

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:41	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-041612
Lab ID: L0731-06
Project: Maple Street
Collection Date: 04/16/12 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:42	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-041712
Lab ID: L0731-08
Project: Maple Street
Collection Date: 04/17/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/18/2012 11:40	65661

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-041712
Lab ID: L0731-09
Project: Maple Street
Collection Date: 04/17/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/18/2012 11:48	65661

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-041712
Lab ID: L0731-10
Project: Maple Street
Collection Date: 04/17/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.038		0.030	mg/L	1	04/18/2012 11:51	65661

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-041712
Lab ID: L0731-11
Project: Maple Street
Collection Date: 04/17/12 16:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/18/2012 11:53	65661

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: GZA GeoEnvironmental of NY Buffalo
Work Order: L0731
Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+
SM 3500D -- CR VI by Colorimetric Method

Sample ID: **MB-65640** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **04/17/12 10:30** Run ID: **SPEC2_120417A**
Client ID: **MB-65640** Batch ID: **65640** Units: **mg/L** Analysis Date: **04/17/12 10:32** SeqNo: **1720513**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030									

Sample ID: **MB-65661** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **04/18/12 11:30** Run ID: **SPEC2_120418A**
Client ID: **MB-65661** Batch ID: **65661** Units: **mg/L** Analysis Date: **04/18/12 11:35** SeqNo: **1720945**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030									

Sample ID: **LCS-65640** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **04/17/12 10:30** Run ID: **SPEC2_120417A**
Client ID: **LCS-65640** Batch ID: **65640** Units: **mg/L** Analysis Date: **04/17/12 10:33** SeqNo: **1720514**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3906	0.030	0.030	0.4000	0	97.6	80	120	0			

Sample ID: **LCS-65661** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **04/18/12 11:30** Run ID: **SPEC2_120418A**
Client ID: **LCS-65661** Batch ID: **65661** Units: **mg/L** Analysis Date: **04/18/12 11:38** SeqNo: **1720946**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3518	0.030	0.030	0.4000	0	88.0	80	120	0			

Sample ID: **L0731-03BDUP** SampType: **DUP** TestCode: **SM3500_CR+** Prep Date: **04/17/12 10:30** Run ID: **SPEC2_120417A**
Client ID: **MW-5-041612** Batch ID: **65640** Units: **mg/L** Analysis Date: **04/17/12 10:38** SeqNo: **1720518**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	2.911	0.30	0.30	0	0	0	0	0	2.911	0	20	

Sample ID: **L0731-08BDUP** SampType: **DUP** TestCode: **SM3500_CR+** Prep Date: **04/18/12 11:30** Run ID: **SPEC2_120418A**
Client ID: **MW-4-041712** Batch ID: **65661** Units: **mg/L** Analysis Date: **04/18/12 11:43** SeqNo: **1720948**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030	0	0	0	0	0	0	0	20	

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

mm11.12.11.A

CLIENT: GZA GeoEnvironmental of NY Buffalo
Work Order: L0731
Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+
SM 3500D -- CR VI by Colorimetric Method

Sample ID: **L0731-03BMS**	SampType: **MS**	TestCode: **SM3500_CR+**			Prep Date: **04/17/12 10:30**				Run ID: **SPEC2_120417A**			
Client ID: **MW-5-041612**	Batch ID: **65640**	Units: **mg/L**			Analysis Date: **04/17/12 10:39**				SeqNo: **1720519**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	7.047	0.30	0.30	4.000	2.911	103	75	125	0			

Sample ID: **L0731-08BMS**	SampType: **MS**	TestCode: **SM3500_CR+**			Prep Date: **04/18/12 11:30**				Run ID: **SPEC2_120418A**			
Client ID: **MW-4-041712**	Batch ID: **65661**	Units: **mg/L**			Analysis Date: **04/18/12 11:46**				SeqNo: **1720949**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.4242	0.030	0.030	0.4000	0	106	75	125	0			

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

SpecC2_120417A

MITKEM LABORATORIES — **Hexavalent Chromium Analysis Logbook**

Analysis Date: 4/17/12 10:30 - 10:45 **Analyst:** JLC

Sample ID		pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
SO	-	1	25	0.000	-0.009	-	ND		
SO.2	+	1	0.4/25	0.154	0.190		0.190	95%	
MB 656640	-	1	25	0.000	-0.009		ND		
LCS 656640	-	1	1.0/25	0.309	0.391		0.391	98%	
L07731	01B	1	25	0.006	-0.001	↓	ND		
↓	02B	1	25	0.003	-0.005	-	ND		
	03B	1	2.5/25	0.232	0.291	10x	~~0~~ 4/17/12 JLC 2.911		
	03B DUP	1	2.5/25	0.232	0.291	10X	2.911		
	03B MS	1	2.5/25	0.552	0.705	10X	7.047	104%	spiked after 10x DL
	04B	1	25	0.002	-0.006	-	ND		
↓	05B	1	↓	0.002	-0.006		ND		
L07731	06B	1	25	0.006	-0.001	↓	ND		00H
SO.4	+	1	0.8/25	0.312	0.394	-	0.394	99%	
					4/17/12 JLC				

Wavelength= 540NM
Pathlength= 1.0cm
MRL= 0.03mg/L

Method# : SM3500 Cr D / SW7196A (circle one)

+IWP100112A (12.5mg/L)

Conc of Analyte = (Abs-b)/m

m= 0.77371
b= 0.000679
r= 0.9995

LCS IWI120327C1 TV= 0.4mg/L

MS: IWP101227E 10uL/25mL TV= 0.4mg/L

Logbook ID: 100.0056-12/10

LIMS entry: JE 4/19/12

Reviewed By: HZA 4/17/12

181

MITKEM LABORATORIES — **Hexavalent Chromium Analysis Logbook**

Analysis Date: 4/18/12 — 11:30 – 12:00 — **Analyst:** HZA

Sample ID	pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
SO	1	25	0.000	-0.009	1	ND		
SO.2 +	1	0.4/25	0.158	0.195		0.195	98%	
MB-65661	1	25	0.000	-0.009		ND		
LCS-65661	1	1/25	0.279	0.352		0.352	88%	
L0731-08B	1	25	0.002	-0.006		ND		
08BDUP	1		0.001	-0.007		ND		
08BMS	1		0.335	0.424		0.424	106%	
09B	1		0.026	0.025		ND		
10B	1		0.036	0.038		0.038		
L0731-11B	1	25	0.227 - 0.201 > 0.026	0.025		ND		sample has brown color background corrected
SO.4 +	1	0.8/25	0.320	0.405	1	0.405	101%	

Wavelength= 540nm
Pathlength= 1.0cm
MRL= 0.03mg/L

Method# : SM3500 Cr D / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

m= 0.7737
b= 0.0079
r= 0.9995
3/27/12

PIWP 100112A (1.25mg/L)
LCS: IWI 120327 01 TV = 0.4mg/L
MS: IWP 101227E
10ml/25ml TV = 0.4mg/L

Pillow Pack: IC 111118E

LIMS entry: _____

Reviewed By: ~~HZ~~ BS 1/19/12

Logbook ID: 100.0056-12/10

Client: GZA_BUFFALO

Work Order: L0731 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
01A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
01B	001	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
01B	001	SM3500_CR+	Out	Jill L Cartwright	4/17/2012 10:28:57 AM
01B	001	SM3500_CR+	In	Jill L Cartwright	4/17/2012 5:04:20 PM
02A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
02A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
02B	001	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
02B	001	SM3500_CR+	Out	Jill L Cartwright	4/17/2012 10:28:57 AM
02B	001	SM3500_CR+	In	Jill L Cartwright	4/17/2012 5:04:20 PM
03A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03A	003	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03A	004	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03A	005	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03A	006	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03B	001	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03B	001	SM3500_CR+	Out	Jill L Cartwright	4/17/2012 10:28:57 AM
03B	001	SM3500_CR+	In	Jill L Cartwright	4/17/2012 5:04:20 PM
03B	002	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
03B	003	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
04A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
04A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
04B	001	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
04B	001	SM3500_CR+	Out	Jill L Cartwright	4/17/2012 10:28:57 AM
04B	001	SM3500_CR+	In	Jill L Cartwright	4/17/2012 5:04:20 PM
05A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
05A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
05B	001	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
05B	001	SM3500_CR+	Out	Jill L Cartwright	4/17/2012 10:28:57 AM
05B	001	SM3500_CR+	In	Jill L Cartwright	4/17/2012 5:04:20 PM
06A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
06A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM

Client: GZA_BUFFALO

Work Order: L0731 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
06B	001	SM3500_CR+	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
06B	001	SM3500_CR+	Out	Jill L Cartwright	4/17/2012 10:28:57 AM
06B	001	SM3500_CR+	In	Jill L Cartwright	4/17/2012 5:04:20 PM
07A	001	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
07A	002	SW8260_W	In	LOGIN: kpierce	4/17/2012 10:27:00 AM
08A	001	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
08A	002	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
08B	001	SM3500_CR+	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
09A	001	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
09A	002	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
09B	001	SM3500_CR+	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
10A	001	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
10A	002	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
10B	001	SM3500_CR+	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
11A	001	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
11A	002	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
11B	001	SM3500_CR+	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
12A	001	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM
12A	002	SW8260_W	In	LOGIN: kpierce	4/18/2012 11:10:00 AM

Last Page of Data Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

November 26, 2013

Daniel Troy
GZA GeoEnvironmental of New York
535 Washington St. 11th Floor
Buffalo, NY 14203

RE: DUSR Validation of Data Packages for the 312 Maple Street Site
Spectrum Analytical, Inc SDG Nos. M0731

Dear Mr. Troy:

Review has been completed for the data package generated by Spectrum Analytical, Inc that pertain to samples collected 04/16/12 and 04/17/12 at the 312 Maple Street site. Nine aqueous samples and a field duplicate were processed for a full list of volatile analytes, and hexavalent chromium. The analytical methodologies utilized are those of the USEPA SW846 method 8260B and the Standard Methods SM3200B.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOP HW-24 and the USEPA CLP National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Case Narratives
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Preparation/Calibration Blanks
* Laboratory Control Samples
* Instrumental Tunes and IDLs
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR review level.

In summary, sample results are usable either as reported or with minor edit/qualification.

Copies of the NYSDEC Sample Identification and Analytical Requirement Summary Forms are attached to this text. Included with this report are qualified laboratory results forms.

The following text discusses quality issues of concern.

Chain-of-Custody

The custody forms do not have a field for the relinquish date and time entries.

Field Duplicates

The blind field duplicate evaluation was performed on MW-1-041612. Correlations are within validation guidelines.

Volatiles by EPA 8260B

The detections of 1,1,1-trichloroethane in MW-2-041612 and MW-5-041612 are qualified as tentative in identification and estimated in value due to poor mass spectral quality.

Matrix spikes of MW-5-041612 show acceptable recoveries and duplicate correlations, with the exception of the low recoveries for trichloroethene (69% and 68%). The result for that compound has been qualified as estimated in the parent sample.

Surrogate and internal standard recoveries are within required ranges. Blanks show no contamination.

Calibrations standards showed responses within analytical protocol and validation guidelines, with the exception of the following, results for which are qualified as estimated in the indicated samples:

- acetone and 2-butanone (low RRFs) in all samples
- 1,2,3-trichlorobenzene, dichlorodifluoromethane, acetone, hexachlorobutadiene, and naphthalene (22%D to 41%D) in all samples

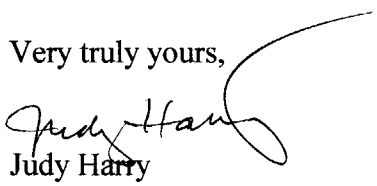
Hexavalent Chromium by SM3200B

Matrix spike/laboratory duplicate evaluations were performed on MW-4-041712 and MW-5-041612, and show recoveries and correlations within recommended ranges.

Blanks show no contamination above the reporting limits, and calibration standards show compliant responses.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,



Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

Report Date:
03-May-12 17:39

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: L0731
Project : Maple Street
Project #:

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L0731-01	MW-1-041612	Aqueous	16-Apr-12 16:30	17-Apr-12 09:48
L0731-02	MW-2-041612	Aqueous	16-Apr-12 16:15	17-Apr-12 09:48
L0731-03	MW-5-041612	Aqueous	16-Apr-12 15:20	17-Apr-12 09:48
L0731-04	MW-6-041612	Aqueous	16-Apr-12 16:00	17-Apr-12 09:48
L0731-05	MW-9-041612	Aqueous	16-Apr-12 15:45	17-Apr-12 09:48
L0731-06	DUP-1-041612	Aqueous	16-Apr-12 00:00	17-Apr-12 09:48
L0731-07	TB041612	Aqueous	16-Apr-12 00:00	17-Apr-12 09:48
L0731-08	MW-4-041712	Aqueous	17-Apr-12 13:30	18-Apr-12 10:03
L0731-09	MW-7-041712	Aqueous	17-Apr-12 14:00	18-Apr-12 10:03
L0731-10	MW-8-041712	Aqueous	17-Apr-12 14:30	18-Apr-12 10:03
L0731-11	MW-3R-041712	Aqueous	17-Apr-12 16:00	18-Apr-12 10:03
L0731-12	TB041712	Aqueous	17-Apr-12 00:00	18-Apr-12 10:03

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 is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

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

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

Project Name : Maple Street

SDG : L0731

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-1-041612	L0731-01	SW8260_W				SEE DATA
MW-2-041612	L0731-02	SW8260_W				SEE DATA
MW-5-041612	L0731-03	SW8260_W				SEE DATA
MW-6-041612	L0731-04	SW8260_W				SEE DATA
MW-9-041612	L0731-05	SW8260_W				SEE DATA
DUP-1-041612	L0731-06	SW8260_W				SEE DATA
TB041612	L0731-07	SW8260_W				
MW-4-041712	L0731-08	SW8260_W				SEE DATA
MW-7-041712	L0731-09	SW8260_W				SEE DATA
MW-8-041712	L0731-10	SW8260_W				SEE DATA
MW-3R-041712	L0731-11	SW8260_W				SEE DATA
TB041712	L0731-12	SW8260_W				

QUALIFIED RESULTS FORMS

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6128.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	40	
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

EPA SAMPLE NO.

MW-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6128.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6129.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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	6.6	J
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 UJ
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	0.97	J NJ
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	23	
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

EPA SAMPLE NO.

MW-2-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6129.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6130.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	1.8	J NJ
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	110	J
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

EPA SAMPLE NO.

MW-5-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6130.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6131.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	5.8	
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

EPA SAMPLE NO.

MW-6-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6131.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6132.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	0.72	J
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	1.5	J
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

EPA SAMPLE NO.

MW-9-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6132.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6133.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	40	
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

EPA SAMPLE NO.

DUP-1-041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6133.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6126.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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

EPA SAMPLE NO.

TB041612

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6126.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/17/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6134.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	9.6	
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

EPA SAMPLE NO.

MW-4-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6134.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6135.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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	5.9	J
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 UJ
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	13	
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

EPA SAMPLE NO.

MW-7-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6135.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6136.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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	9.6	J
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 UJ
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	1.2	J
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	130	
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

EPA SAMPLE NO.

MW-8-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6136.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6137.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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	21	
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

EPA SAMPLE NO.

MW-3R-041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6137.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6127.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
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

EPA SAMPLE NO.

TB041712

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L0731 Mod. Ref No.: SDG No.: SL0731

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0731-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I6127.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/18/2012

% Moisture: not dec. Date Analyzed: 04/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-041612
Lab ID: L0731-01

Project: Maple Street
Collection Date: 04/16/12 16:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:34	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-041612
Lab ID: L0731-02

Project: Maple Street
Collection Date: 04/16/12 16:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:35	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-041612
Lab ID: L0731-03

Project: Maple Street
Collection Date: 04/16/12 15:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	2.9		0.30	mg/L	10	04/17/2012 10:36	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-041612
Lab ID: L0731-04
Project: Maple Street
Collection Date: 04/16/12 16:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:40	65640

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-041612
Lab ID: L0731-05

Project: Maple Street
Collection Date: 04/16/12 15:45

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:41	65640

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-041612
Lab ID: L0731-06
Project: Maple Street
Collection Date: 04/16/12 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/17/2012 10:42	65640

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-041712
Lab ID: L0731-08
Project: Maple Street
Collection Date: 04/17/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/18/2012 11:40	65661

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-041712
Lab ID: L0731-09

Project: Maple Street
Collection Date: 04/17/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/18/2012 11:48	65661

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-041712
Lab ID: L0731-10
Project: Maple Street
Collection Date: 04/17/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.038		0.030	mg/L	1	04/18/2012 11:51	65661

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

04/26/2012

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-041712
Lab ID: L0731-11

Project: Maple Street
Collection Date: 04/17/12 16:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/18/2012 11:53	65661

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

2013 POST-BIOREMEDIATION APPLICATION GROUNDWATER SAMPLING AND DATA REPORT 312 MAPLE STREET SITE ENDICOTT, NEW YORK NYSDEC SITE # B-00168-7

PREPARED FOR:
Broome County Department of Planning
and Economic Development
Binghamton, New York

PREPARED BY:
GZA GeoEnvironmental of New York
Buffalo, New York

December 2013
GZA File No. 21.0056127.10

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GZA
GeoEnvironmental
of New York

*Engineers and
Scientists*

December 5, 2013
File No. 21.0056127.10

Mr. Frank Evangelisti
Chief Planner
Broome Co. Dept. of Planning and Economic Development
44 Hawley Street, 5th Floor
Binghamton, New York 13902

Re: Post-Bioremediation Application Groundwater Monitoring
ERP#B00168-7
312 Maple St., Endicott, NY

Dear Mr. Evangelisti:

535 Washington Street
11th Floor
Buffalo, New York
14203
716-685-2300
Fax: 716-685-3629
www.gza.com

GZA GeoEnvironmental of New York (GZA) is submitting this report that summarizes the analytical results of the groundwater sampling event conducted in April 2013 at the above referenced Site. The objective of the sampling event was to collect and analyze groundwater samples from the on-site and off-site monitoring wells associated with the 312 Maple Street Site in Endicott, NY (Site) about one year after the enhanced anaerobic bioremediation application was done at the Site. The post-application sampling was required to compare groundwater conditions to pre-application conditions at the Site as required by New York State Department of Environmental Conservation (NYSDEC), Record of Decision (ROD) dated January 2011.

The Post-Bioremediation Application sampling event identified several volatile organic compounds (VOCs) and hexavalent chromium (Cr^{+6}) detected at concentrations above respective NYSDEC Class GA criteria[1]. The most prominently detected VOC was trichloroethylene (TCE) although at concentrations significantly less than those identified from the pre-application sampling done in April 2012. Additionally, this sampling round identified the presence of two daughter compounds which implies the bioremediation application is working as designed.

Subsequent annual groundwater sampling events will be completed for two more years (springtime of 2014 and 2015) in an effort to monitor the Site groundwater. Should you have any questions or require additional information following your review, please contact Daniel Troy at 716-844-7046.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

John Beninati
Project Manager

Daniel J. Troy, P.E.
Senior Project Manager

Bart A. Klettke, P.E.
Principal

[1] Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

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TABLE OF CONTENTS

1.00 INTRODUCTION 1

1.10 BACKGROUND AND SITE HISTORY 1

2.00 PURPOSE AND SCOPE OF WORK 1

3.00 FIELD STUDIES 2

3.10 GROUNDWATER SAMPLING PROCEDURES 2

3.20 GROUNDWATER COLLECTION 3

4.00 ANALYTICAL LABORATORY TESTING 4

5.00 ANALYTICAL TEST RESULTS 4

5.00 ANALYTICAL TEST RESULTS 4

6.00 SUMMARY 6

TABLES

TABLE 1	SUMMARY OF PRE- AND POST-BIOREMEDIATION APPLICATION GROUNDWATER ANALYTICAL TEST RESULTS (2013)
TABLE 2	GRAPHICAL SUMMARY OF TCE AND DCE CONCENTRATION TRENDS

FIGURES

FIGURE 1	SITE PLAN/GROUNDWATER CONTOUR MAP

APPENDICES

APPENDIX A	LIMITATIONS
APPENDIX B	2013 WELL DEVELOPMENT FORMS
APPENDIX C	2013 ANALYTICAL TEST RESULTS AND DATA USABILITY SUMMARY REPORT

1.00 INTRODUCTION

In accordance with the January 2011 Record of Decision (ROD) established by the New York State Department of Environmental Conservation (NYSDEC) for the 312 Maple Street site in Endicott, New York (Site), GZA GeoEnvironmental of New York (GZA) collected groundwater samples at nine (9) monitoring wells associated with the Site. The sampling was done on April 23 and 24, 2013 and was completed about one year after implementation of remedial activities (i.e., enhanced anaerobic bioremediation applications) were completed at the Site. A Site Plan is attached as Figure 1.

1.10 BACKGROUND AND SITE HISTORY

As part of the January 2011 ROD issued by NYSDEC for the Site, the chosen remedial option included enhanced anaerobic bioremediation applications to remediate groundwater impacted with volatile organic compounds (VOCs) (specifically trichloroethylene (TCE)) and hexavalent chromium (Cr^{+6}). As part of the remedial remedy, nine (9) groundwater monitoring wells were to be sampled and analyzed for VOCs and Cr^{+6} to assess the effectiveness of the bioremediation efforts on the Site groundwater. The assessment included a pre-remedial round of sampling done in 2012 for baseline conditions and annual sampling afterwards for a period of three years (years 2013, 2014 and 2015).

2.00 PURPOSE AND SCOPE OF WORK

The purpose of the post remediation sampling event was to collect groundwater samples from the nine (9) groundwater monitoring wells associated with the Site to assess conditions one year after completion of the enhanced anaerobic bioremediation application injections were completed at the Site. To accomplish this, the following activities were done.

- Coordinated with Spectrum Analytical Inc. located in Warwick, Rhode Island prior to the commencement of field activities to obtain the analytical sample containers.

- Collected one (1) groundwater sample from each of the nine (9) monitoring well locations for chemical analysis of VOCs via EPA Method 8260 Target Compound List and Cr^{+6} via Method SM3200D.

- Prepared this report, which summarizes the data collected during this sampling event. This data will be used in future annual groundwater sampling events for comparative purposes to evaluate the effectiveness of planned remedial activities at the Site.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or any other party.

3.00 FIELD STUDIES

This section describes the field activities of GZA's groundwater sampling event.

3.10 GROUNDWATER SAMPLING PROCEDURES

Equipment Cleaning

Prior to GZA's arrival to the Site, the sampling equipment (water level indicator, water quality meter and flow-through cell) was cleaned by rinsing with potable water, washing with a solution of laboratory detergent (alconox) and potable water, and rinsing with de-ionized water.

New, disposable polyethylene tubing (for placement down into the well and connecting to the water quality meter) and silicone tubing (for the peristaltic pump head) was used for groundwater sampling at each location. A variable speed peristaltic pump was used to purge groundwater from most monitoring wells. Groundwater remained within the polyethylene and silicone tubing and did not come in contact with the pump. Therefore, the tubing and pump did not require decontamination between sample locations.

Equipment Calibration

A water quality meter and organic vapor meter (OVM) were used during groundwater monitoring. Prior to use each day, the calibration of the water quality meter and OVM were checked to verify that the equipment was in working order.

Monitoring & Purging Methodologies

An OVM, equipped with photoionization detector (PID) and a 10.6 eV ultraviolet lamp, was used to screen the top of the well riser immediately following the removal of each monitoring well riser cap. OVM readings were recorded on each respective monitoring well field sampling log. OVM readings were non-detect and no odors were noted at the top of the nine (9) monitoring wells.

The purging and water quality measurements were done using at the monitoring well locations as discussed below. The nine (9) monitoring wells had measured water level depths generally less than 20 feet below top of each respective well riser.

Prior to the start of each monitoring and purge event, a static water level was measured from the top of the monitoring well riser and recorded on the monitoring well sampling log. At each monitoring well location, new polyethylene tubing (0.25-inch O.D. by 0.17-inch I.D) was lowered into the monitoring well and positioned at the approximate center of the well screen. Information about the wells was taken from the monitoring well logs previously generated.

The peristaltic pump was started and operated at a flow rate that minimized draw-down of the water column within the well. The first set of water quality readings were collected when the flow-through cell was full and water began to flow out. Once a constant head was established, the pumping flow rate was not altered. Sampling flow rates were kept consistent with purging/monitoring flow rates. Readings were recorded on well development forms in the field, once a constant head had been established. Readings were continuously recorded every five (5) minutes, until water quality readings stabilized for three successive readings, which generally consisted of ± 0.1 for pH, ±3% for conductivity, ± 10 mV for oxidation reduction potential (ORP) and ± 10% for turbidity, temperature and dissolved oxygen (DO). Copies of the well purging forms are included in Appendix B.

Groundwater analytical samples were collected once a constant head was established, the water quality readings had stabilized and/or at least one well volume was removed. The polyethylene tubing from the peristaltic pump to the water quality meter was disconnected and used to fill the appropriate groundwater sample containers provided by the laboratory. Groundwater collected for analysis did not enter the flow-through cell.

After the appropriate sample containers were filled, the pump was shut off and the tubing was removed from the monitoring well and pump head, and disposed of as a solid waste. The flow-through cell and water quality meter were then rinsed with de-ionized water. Water generated during the purging/monitoring and equipment decontamination was placed on the ground in the vicinity of the monitoring well from which it was generated.

3.20 GROUNDWATER DATA COLLECTION

GZA collected groundwater samples from the nine (9) monitoring wells (designated as MW-1 through MW-9). In addition, a duplicate sample (from MW-9), and matrix spike/matrix spike duplicate (MS/MSD) sample (from MW-5) were collected.

Static groundwater level measurements, referencing the top of well riser were made from the nine (9) monitoring wells listed in the table below prior to sampling. Monitoring point elevation data was available from previous reports completed at the Site. From this data, a groundwater contour map was generated as shown on Figure 2. Based on the available information, groundwater elevations within the Site area are similar to many well locations and is indicative of a flat or level groundwater table with slightly lower elevations observed on the eastern and western most measured wells. Based on previous data collected in April 2012, it appears that the Site groundwater flow direction has a northwesterly flow direction towards the Nanticoke Creek. However, it should be noted that the monitoring well MW-9 located southeast of the Site appears to have groundwater elevations lower than those measured at the Site implying an easterly trending groundwater flow. This flow direction may be influenced a New York State Department of Transportation sump pump reportedly located in the vicinity of the Norfolk Southern railroad track overpass over South Nanticoke Street, located east of the Site. Based on the groundwater measurements, the groundwater table at the vicinity of the Site appears to resemble a saddle like configuration with evidence of stationary or a flat surface (i.e., minimal gradient) within the Site and increasing gradients to the east and west.

Monitoring Well Location	Top of Riser (TOR) Elevation (ft.)	Groundwater Depth below TOR (ft.)	Groundwater Elevation (ft.)
MW-1	102.3	18.7	83.6
MW-2	100.0	16.3	83.7
MW-3R	97.5	13.8	83.7
MW-4	100.0	16.3	83.7
MW-5	97.2	13.6	83.6
MW-6	96.4	12.6	83.8
MW-7	97.5	13.8	83.7
MW-8	96.4	12.9	83.5
MW-9	99.2	15.7	83.5

4.00 ANALYTICAL LABORATORY TESTING

Nine (9) groundwater samples, one (1) duplicate sample (MW-9), and one (1) matrix spike/matrix spike duplicate (MW-4), were submitted for analytical testing. The samples were packed in an ice-filled cooler and, following typical chain-of-custody procedures, sent to Spectrum Analytical Laboratories in Warwick, Rhode Island. Table 1 presents a summary of the samples collected and the analyses completed.

5.00 ANALYTICAL TEST RESULTS

Discussion of the laboratory results for the groundwater samples is presented below. The laboratory report and associated third party Data User Summary Report (completed by Data Validation Services of North Creek, NY) is provided in Appendix C and the data is summarized on Table 1.

The analytical test results for the groundwater samples were compared to NYSDEC Class GA criteria presented in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

The analytical data generated as part of this sampling event has also been provided to NYSDEC electronically for their Environmental Information Management System (EIMS). The data was provided in a standardized electronic data deliverable (EDD) format that uses the database software application EQuIS™ (EQuIS) from EarthSoft® Inc. The laboratory data and required information were imported into the EQuIS Data Processor (EDP) and submitted to NYSDEC.

- MW-1: Five VOCs; TCE (1.1ppb), cis-1,2-Dichloroethene (cis-1,2-DCE) (87 ppb), vinyl chloride (0.86 ppb), toluene (8.9 ppb) and acetone (17 ppb) were the only VOCs detected above method detection limits (MDLs). Of these detections

only cis-1,2-DCE and toluene were identified at concentration that exceeded their respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-2: Five (5) VOCs; TCE (35 ppb), 1,1,1-trichloroethane (1 ppb). Iodomethane (0.78 ppb), cis-1,2-DCE (0.67 ppb) and bromomethane (0.81 ppb) were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample. It should be noted that the third party validation report indicated "the detection of iodomethane was qualified as tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value".

- MW-3R: TCE (1.2 ppb) was the only VOC detected above MDLs and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-4: TCE (9.7 ppb) was the only VOC detected above MDLs and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-5: Five (5) VOCs; TCE (20 ppb), cis-1,2-DCE (130 ppb), trans-1,2-DCE (0.78 ppb), methyl-tert-butyl-ether (MTBE) (4.1 ppb) and 1,1-dichloroethene (0.96 ppb) were detected above MDLs of which only TCE and cis-DCE were identified at a concentrations exceeding their respective Class GA criteria of 5 ppb. Cr^{+6} was detected at a concentration of 920 ppb, which exceeds its NYSDEC Class GA criteria of 50 ppb.

- MW-6: No VOCs were detected above MDLs. Cr^{+6} was not detected in this sample.

- MW-7: TCE (1.7 ppb) was the only VOC detected above MDLs at a concentration below its respective Class GA criteria of 5 ppb. Cr^{+6} was detected in this sample at a concentration of 54 ppb which slightly exceeds its NYSDEC Class GA criteria of 50 ppb.

- MW-8: Three (3) VOCs; TCE (37 ppb), 1,1,1-trichloroethane (0.66 ppb) and MTBE (0.93 ppb) were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was detected at a concentration of 170 ppb at a concentration above its NYSDEC Class GA criteria of 50 ppb.

- MW-9: Two (2) VOCs; TCE (1.8 ppb) and chloroform (0.93 ppb), were detected above MDLs although both detections were identified below their respective Class GA criteria. Cr^{+6} was not detected in this sample.

6.00 SUMMARY

GZA was retained to collect and analyze groundwater samples from nine (9) monitoring wells associated with the 312 Maple Street Site in Endicott New York as required by the January 2011 ROD established for the ERP Site No. B-00168-7. A summary of our findings follows.

- Static groundwater level measurements indicate that groundwater elevations at the Site are consistent between many of the monitoring wells which is indicative of a flat or low gradient. However, based on historic data, groundwater flow direction at the Site is believed to be in a northwesterly direction although groundwater elevation in MW-9 implies a slight easterly flowing gradient. The groundwater flow direction is anticipated to vary slightly during wetter months as compared to during periods of dryer conditions. It does not appear that the slight easterly groundwater gradient observed in MW-9 has an impact on the Site groundwater flow direction.

- TCE, cis-1,2-DCE and toluene were the only VOCs detected at concentrations above their respective NYSDEC Class GA criteria value of 5 ppb in five (5) of the nine (9) monitoring wells sampled. Acetone, bromomethane, 1,1-dichloroethene, trans 1,2-DCE, chloroform, iodomethane, MTBE, 1,1,1-trichloroetahane and vinyl chloride were the only other VOCs detected at select monitoring wells at concentrations above the MDLs but at concentrations below their respective Class GA criteria. It should be noted the DUSR indicated that idenomethane was qualified as "detection being tentative in identification and estimated in value". Cr^{+6} was detected at three well locations including MW-5, MW-7 and MW-8. The detections of these three wells were all identified with concentrations exceeding its respective Class GA criteria on 50 ppb.

The enhanced anaerobic bioremediation application remediation work was completed on May 2012. This work included injections of the enhanced anaerobic bioremediation applications along the western property boundry and within the central portion of the Site. This remedial option was chosen to enhance the anaerobic breakdown of the "parent" chlorinated compounds present (specifically TCE) via reductive dehalogenation into the "daughter" breakdown product (cis-1,2-DCE) and vinyl chloride (VC), which further degrades under aerobic conditions. Additionally, this application was also designed to assist in the remediation of Cr^{+6} into the less hazardous chromium (trivalent chromium) analyte.

As part of the enhanced anerobic bioremediation application, groundwater samples from the nine wells were to be collected and tested for VOCs and Cr^{+6} annually for three years after to injection work was completed. The first annual groundwater sampling completed after completion of the in-situ groundwater treatment has identified a significant reduction in TCE concentration (by an order of magnitude in most locations) as well and an observed increase in daughter breakdown products including cis-1,2-DCE and VC in a select

number of wells of which only the daughter compound cis-1,2-DCE was detected at concentrations exceeding its Class GA criteria at wells MW-1 and MW-5. The identification of both decreased TCE concentrations and increased concentrations of cis-1,2-DCE and VC (TCE daughter compounds) implies the in-situ remedial action is effectively remediating the levels of TCE in the groundwater. Table 2 shows graphical representation of the TCE and cis-1,2-DCE concentration trends between the years 2006 and 2013. Specific dates of importance relative to identified concentrations include: 2006 when the On-Site IRM activities were completed, 2011 when the Off-Site IRM was completed and 2012 when the In-situ Enhanced Bioremediation Remediation was completed. Completion of these activities are anticipated to result in a decreased TCE impacts to Site groundwater and is verified by the general trends observed in most of the on-Site wells. The increase in cis-1.2-DCE concentrations between 2012 and 2013 are indicative of the enhanced anaerobic bioremediation chemical injections breaking down the TCE into the respective daughter compounds. The continued remediation of the TCE and daughter compounds will be monitored in the subsequent monitoring events scheduled for 2014 and 1015.

Several other VOCs were detected within the 2013 round of groundwater sampling, with only toluene being detected at a concentration exceeding its respective Class GA criteria. The remaining VOC detections were below their respective Class GA criteria. The origin of the toluene concentration is unknown and these newly identified VOCs will be further monitored in the remaining two annual groundwater sampling events.

The concentrations of Cr^{+6} have also been reduced by an order of magnitude near its apparent source location (western side of the 312 Maple Street building). However, some concentration increases have been detected in down gradient monitoring wells (MW-7 and -8). It should be noted that the concentrations of Cr^{+6} in these down gradient wells were detected at concentration exceeding its Class GA criteria, although at concentrations less than those identified near its apparent source area (MW-5).

The next annual monitoring event is scheduled for spring 2014 which will be done about two years after enhanced anaerobic bioremediation application remediation activities have been done at the Site.

TABLES

TABLE 1

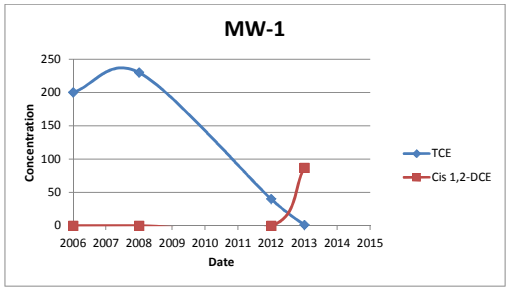
Summary Of Post-Bioremediation Application Groundwater Analytical Test Results (2013)
312 Maple Street
Endicott, New York
ERP Site No. B-00168-7

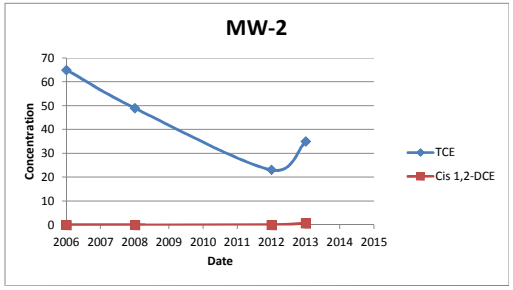
Parameter Sample Date	Class GA Criteria	MW-1 Apr-13	MW-2 Apr-13	MW-3R Apr-13	MW-4 Apr-13	MW-5 Apr-13	MW-6 Apr-13	MW-7 Apr-13	MW-8 Apr-13	MW-9 Apr-13
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)										
Acetone	50	17								
Bromomethane	5		0.81 J							
1,1-Dichloroethene	5					0.96 J				
trans-1,2-DCE	5					0.78 J				
cis-1,2-Dichloroethene	5	87	0.67 J			130				
Chloroform	7									0.95 J
Idomethane	5		0.78 NJ							
MTBE	10					4.1 J			0.6 J	
Toluene	5	8.9 J								
1,1,1-Trichloroethane	5		1 J						0.66 J	
Trichloroethene	5	1.1 J		1.2	9.7	20		1.7 J	37	1.8 J
Vinyl Chloride	2	0.86 J								
Hexavalent Chromium - SM 3500D by colorometric method (mg/L)										
Hexavalent Chromium	0.05					0.92		0.054	0.17	

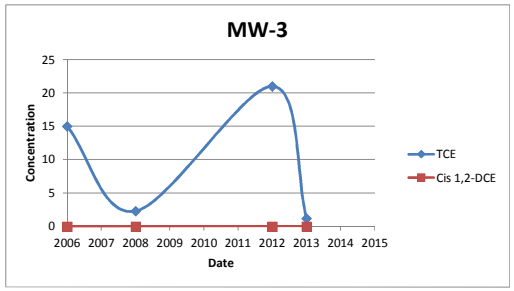
Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to attached laboratory report for list of all compounds included in analysis.
2. Analytical testing completed by Spectrum Analytical Laboratory of Warwick, Rhode Island, data validation completed by Data Validation Services of North Creek, NY.
3. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
4. Results presented for MW-9 are the higher of this sample and its respective duplicate.
5. ug/L = part per billion, mg/L = part per million, J= estimated concentration of analyte, NJ=detection is tentative in identification and estimated in value.
6. Blank cell indicates compound was not detected.
7. Shaded cell indicates concentration exceeds the respective NYSDEC Groundwater Class GA Criteria.

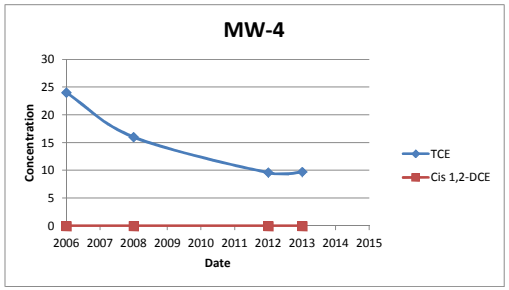
TABLE 2

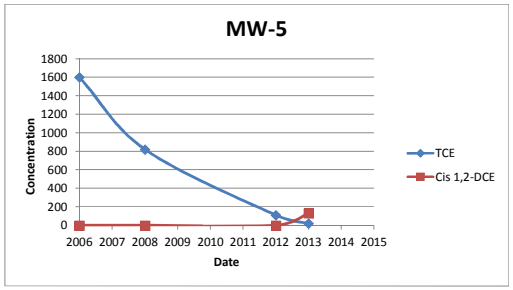
Graphical Summary of TCE and DCE Concentration Trends
312 Maple Street
Endicott, New York
ERP Site No. B-00168-7

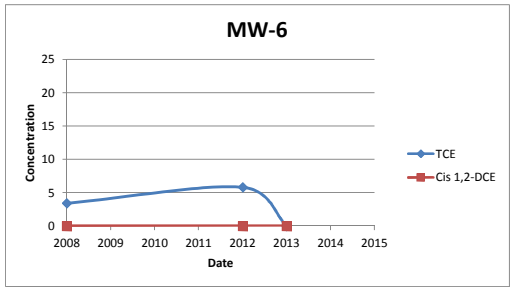


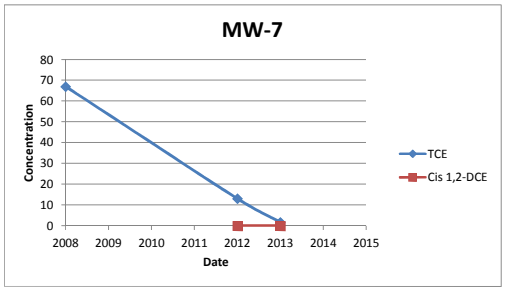


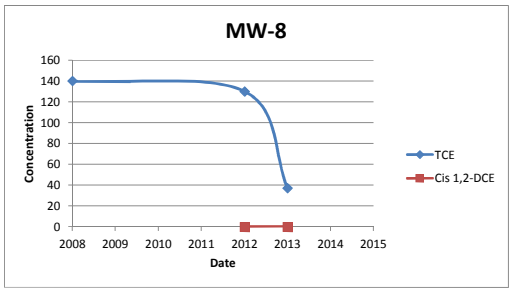


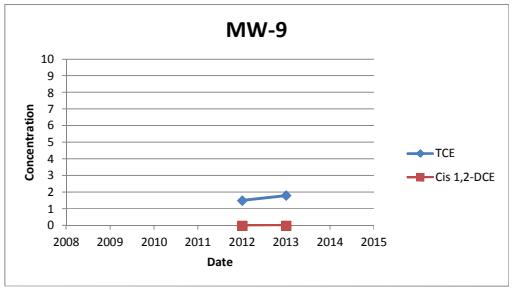








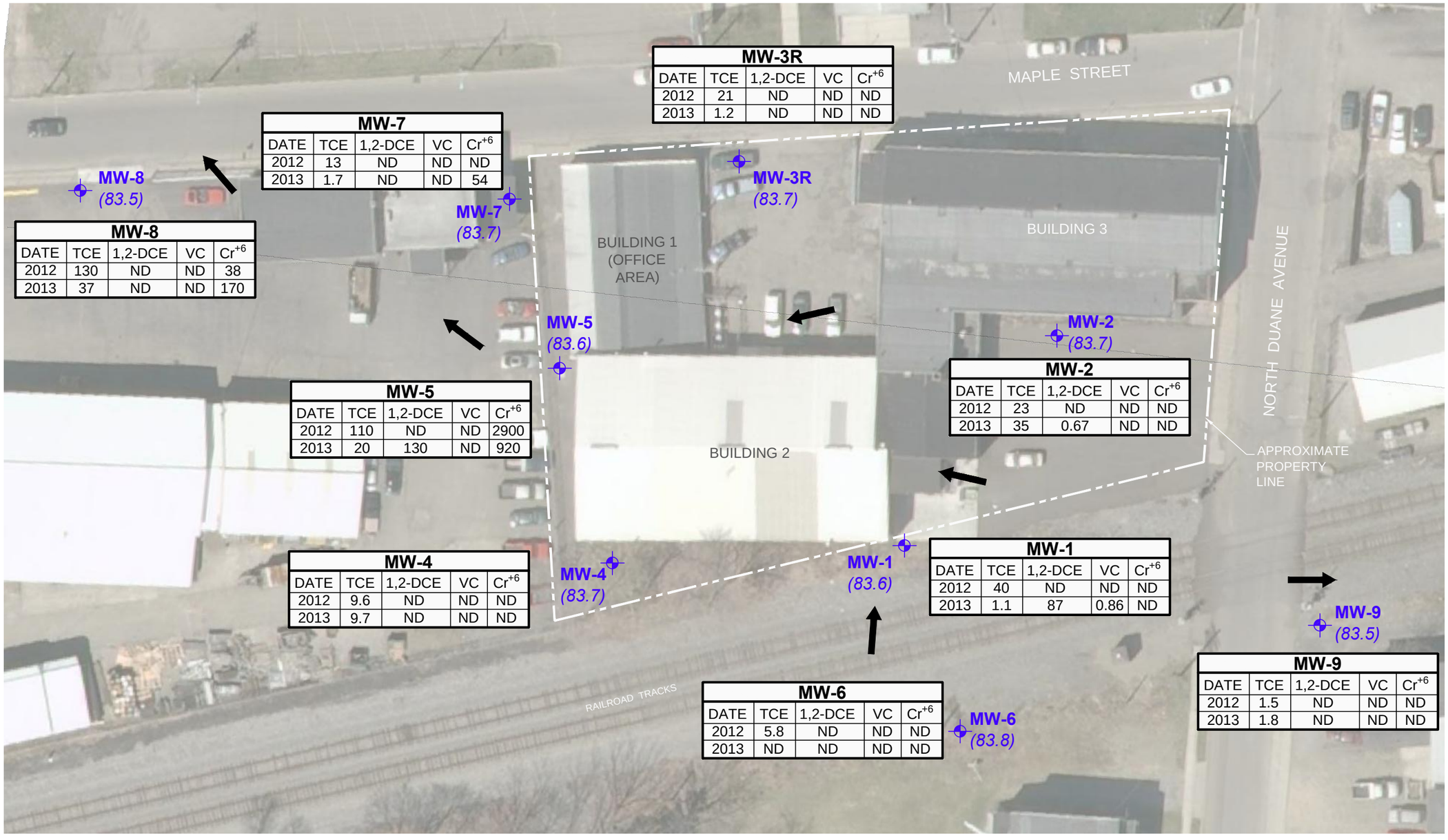




Notes:

1) Concentrations shown in parts per billion (ppb)
2) NYSDEC Class GA groundwater Criteria for TCE and cis-1,2,DCE equals 5 ppb.
3) On-Site IRM completed 2006, Off-Site IRM completed in 2011 and On-Site Insitu Enhanced Bioremediation completed in 2012.

FIGURES



MW-3R

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	21	ND	ND	ND
2013	1.2	ND	ND	ND

MW-7

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	13	ND	ND	ND
2013	1.7	ND	ND	54

MW-8

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	130	ND	ND	38
2013	37	ND	ND	170

MW-5

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	110	ND	ND	2900
2013	20	130	ND	920

MW-2

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	23	ND	ND	ND
2013	35	0.67	ND	ND

MW-4

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	9.6	ND	ND	ND
2013	9.7	ND	ND	ND

MW-1

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	40	ND	ND	ND
2013	1.1	87	0.86	ND

MW-6

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	5.8	ND	ND	ND
2013	ND	ND	ND	ND

MW-9

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	1.5	ND	ND	ND
2013	1.8	ND	ND	ND

LEGEND:

MW-1 (83.9) — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELL, SHOWN WITH GROUNDWATER ELEVATION IN FEET

PRESUMED GROUNDWATER FLOW DIRECTION

TCE = Trichloroethene
1,2-DCE = Trans/cis 1,2 - Dichloroethene
VC = Vinyl Chloride
Cr^{+6} = Hexavalent Chromium

NOTES:

1. BASE MAP ADAPTED FROM AN AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.bing.com AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

3. UNITS ARE LISTED IN MICROGRAMS PER LITER (µg/l) OR PARTS PER BILLION (ppb). ND INDICATES COMPOUND NOT DETECTED ABOVE METHOD DETECTION LIMIT.

NORTH

DRAWN BY: DEW

DATE: NOVEMBER 2013

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET: 0, 20, 40, 80

BROOME COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK

ERP SITE No. B-00168-7

POST REMEDIAL ACTION GROUNDWATER MONITORING YEAR-1 (2013)

PROJECT No.
21.0056127.10

FIGURE No.
1

© 2013 GZA GeoEnvironmental of New York

GZA-T:\PROJECTS\56100s\56127.1 Broome Co 312 Maple StreetGW Monitoring\2013\Figure 1 Concentration plan.dwg [Figure 1] December 03, 2013 - 10:09am daniel.wulf

APPENDIX A

LIMITATIONS

LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs.

6. Water level readings have been made in test holes (as described in the Report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge

rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

WELL DEVELOPMENT FORMS

APPENDIX C

ANALYTICAL TEST RESULTS AND DATA USABILITY SUMMARY REPORT

Report Date:
09-May-13 08:53

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: M0582
Project : Maple Street
Project #:

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0582-01	MW-1-042313	Aqueous	23-Apr-13 11:10	24-Apr-13 10:45
M0582-02	MW-2-042313	Aqueous	23-Apr-13 11:50	24-Apr-13 10:45
M0582-03	MW-9-042313	Aqueous	23-Apr-13 12:50	24-Apr-13 10:45
M0582-04	MW-6-042313	Aqueous	23-Apr-13 13:40	24-Apr-13 10:45
M0582-05	DUP-1-042313	Aqueous	23-Apr-13 00:00	24-Apr-13 10:45
M0582-06	MW-4-042313	Aqueous	23-Apr-13 14:30	24-Apr-13 10:45
M0582-07	MW-5-042313	Aqueous	23-Apr-13 15:40	24-Apr-13 10:45
M0582-08	TRIP BLANK	Aqueous	23-Apr-13 00:00	24-Apr-13 10:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the 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. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : Maple Street **SDG :** M0582

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-1-042313	M0582-01	SW8260_W				SEE DATA
MW-2-042313	M0582-02	SW8260_W				SEE DATA
MW-9-042313	M0582-03	SW8260_W				SEE DATA
MW-6-042313	M0582-04	SW8260_W				SEE DATA
DUP-1-042313	M0582-05	SW8260_W				SEE DATA
MW-4-042313	M0582-06	SW8260_W				SEE DATA
MW-5-042313	M0582-07	SW8260_W				SEE DATA
TRIP BLANK	M0582-08	SW8260_W				

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

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

Project Name : Maple Street **SDG :** M0582

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0582-01A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-02A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-03A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-04A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-05A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-06A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-06AMS	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-06AMSD	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-07A	AQ	4/23/2013	4/24/2013	NA	4/25/2013
M0582-08A	AQ	4/23/2013	4/24/2013	NA	4/25/2013

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

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

Project Name : Maple Street **SDG :** M0582

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0582-01A	AQ	SW8260_W	NA	LOW	1
M0582-02A	AQ	SW8260_W	NA	LOW	1
M0582-03A	AQ	SW8260_W	NA	LOW	1
M0582-04A	AQ	SW8260_W	NA	LOW	1
M0582-05A	AQ	SW8260_W	NA	LOW	1
M0582-06A	AQ	SW8260_W	NA	LOW	1
M0582-06AMS	AQ	SW8260_W	NA	LOW	1
M0582-06AMSD	AQ	SW8260_W	NA	LOW	1
M0582-07A	AQ	SW8260_W	NA	LOW	1
M0582-08A	AQ	SW8260_W	NA	LOW	1

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

WorkOrder: M0582

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE,
Comments: N/A

Case:
SDG:
PO: 21.0056127.00

HC Due: 05/15/13
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0582-01A	MW-1-042313	04/23/2013 11:10	04/24/2013	Aqueous	SW8260_W	/					VOA
M0582-01B	MW-1-042313	04/23/2013 11:10	04/24/2013	Aqueous	SM3500_CR+	/					L1
M0582-02A	MW-2-042313	04/23/2013 11:50	04/24/2013	Aqueous	SW8260_W	/					VOA
M0582-02B	MW-2-042313	04/23/2013 11:50	04/24/2013	Aqueous	SM3500_CR+	/					L1
M0582-03A	MW-9-042313	04/23/2013 12:50	04/24/2013	Aqueous	SW8260_W	/					VOA
M0582-03B	MW-9-042313	04/23/2013 12:50	04/24/2013	Aqueous	SM3500_CR+	/					L1
M0582-04A	MW-6-042313	04/23/2013 13:40	04/24/2013	Aqueous	SW8260_W	/					VOA
M0582-04B	MW-6-042313	04/23/2013 13:40	04/24/2013	Aqueous	SM3500_CR+	/					L1
M0582-05A	DUP-1-042313	04/23/2013 00:00	04/24/2013	Aqueous	SW8260_W	/					VOA
M0582-05B	DUP-1-042313	04/23/2013 00:00	04/24/2013	Aqueous	SM3500_CR+	/					L1
M0582-06A	MW-4-042313	04/23/2013 14:30	04/24/2013	Aqueous	SW8260_W	/			Y		VOA
M0582-06B	MW-4-042313	04/23/2013 14:30	04/24/2013	Aqueous	SM3500_CR+	/			Y		L1
M0582-07A	MW-5-042313	04/23/2013 15:40	04/24/2013	Aqueous	SW8260_W	/					VOA
M0582-07B	MW-5-042313	04/23/2013 15:40	04/24/2013	Aqueous	SM3500_CR+	/					L1
M0582-08A	TRIP BLANK	04/23/2013 00:00	04/24/2013	Aqueous	SW8260_W	/					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: Veronica E Brizard

Sample Transmittal Documentation

M0582

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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: 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: GZA GEOENVIRONMENTAL OF NY
635 WASHINGTON ST. 11TH FL
BUFFALO NY 14203
Telephone #: 716-884-7034
Project Mgr. DANIEL TROY

Invoice To: GZA

P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: ENDICOTT State: NY
Sampler(s): JUAN BENAVIDES

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: 2

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	SVOCs	QA/QC Reporting Level
M0582-01	MW-1-042313	4/23/13	1110	G	GW	2			1	X	X	
-02	MW-2-042313	4/23/13	1150	G	GW	2			1	X	X	
-03	MW-9-042313	4/23/13	1250	G	GW	2			1	X	X	
-04	MW-6-042313	4/23/13	1340	G	GW	2			1	X	X	
-05	DUP-1-042313	4/23/13	-	G	GW	2			1	X	X	
-06	MW-4-042313	4/23/13	1430	G	GW	6			3	X	X	MS/MSD
-07	MW-5-042313	4/23/13	1540	G	GW	2			1	X	X	
M0582-08	TRIP BLANK	4/23/13	-	-	-	1				X		

State-specific reporting standards: ASP CAT B

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

Relinquished by:	Received by:	Date:	Time:	Temp°C
FEDEX	FEDEX	4/23/13	1645	
		4/24/13	10:45	6

☐ EDD Format NYSDEC EQUIS
☒ E-mail to DANIEL.TROY@GZA.COM.

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

Page 3 of 159

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

Received By: MED	Page 01 of 00
Reviewed By: DEC	Log-in Date 04/24/2013
Work Order: M0582	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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 7995 8178 0075
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	6 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	04/24/2013
12. Time Received	10:45

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
M0582-01						H	
M0582-02						H	
M0582-03						H	
M0582-04						H	
M0582-05						H	
M0582-06						H	
M0582-07						H	
M0582-08						H	

Sample Transfer

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

IR Temp Gun ID:MT-1

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 : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: M0582

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

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-71366 in batch 71366, recovery is above criteria for Iodomethane at 125% with criteria of (72-121).

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

Matrix spikes were performed on samples: MW-4-042313 (M0582-06AMS) and MW-4-042313 (M0582-06AMSD).

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

MW-4-042313 (M0582-06AMS), recovery is below criteria for Toluene at 73% with criteria of (75-120) and Xylene (Total) at 80% with criteria of (81-121).

MW-4-042313 (M0582-06AMSD), recovery is below criteria for Toluene at 72% with criteria of (75-120) and Xylene (Total) at 79% with criteria of (81-121).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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:

VSTD00110K 2-Chloroethyl vinyl ether 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: 05/03/13

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71366	102	102	100	101				0
02	MB-71366	102	100	102	99				0
03	TRIP BLANK	102	102	102	99				0
04	MW-1-042313	103	99	100	100				0
05	MW-2-042313	103	100	100	99				0
06	MW-9-042313	105	102	101	99				0
07	MW-6-042313	104	101	100	98				0
08	DUP-1-042313	104	102	100	99				0
09	MW-4-042313	107	102	100	98				0
10	MW-5-042313	106	101	101	98				0
11	MW-4-042313MS	108	98	98	104				0
12	MW-4-042313MSD	107	98	99	103				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

som13.04.24.A

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix Spike - EPA Sample No.: MW-4-042313 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	42.2496	84		30-155
Chloromethane	50.0000	0.0000	43.8169	88		40-125
Vinyl chloride	50.0000	0.0000	47.9480	96		50-145
Bromomethane	50.0000	0.0000	43.5233	87		30-145
Chloroethane	50.0000	0.0000	54.2644	109		60-135
Trichlorofluoromethane	50.0000	0.0000	58.6489	117		60-145
1,1-Dichloroethene	50.0000	0.0000	43.4631	87		70-130
Acetone	50.0000	0.0000	29.0012	58		40-140
Iodomethane	50.0000	0.0000	52.1819	104		72-121
Carbon disulfide	50.0000	0.0000	41.2780	83		35-160
Methylene chloride	50.0000	0.0000	41.3780	83		55-140
trans-1,2-Dichloroethene	50.0000	0.0000	43.3774	87		60-140
Methyl tert-butyl ether	50.0000	0.0000	46.0459	92		65-125
1,1-Dichloroethane	50.0000	0.0000	46.8491	94		70-135
Vinyl acetate	50.0000	0.0000	43.9819	88		38-163
2-Butanone	50.0000	0.0000	35.9425	72		30-150
cis-1,2-Dichloroethene	50.0000	0.0000	43.2997	87		70-125
2,2-Dichloropropane	50.0000	0.0000	42.2687	85		70-135
Bromochloromethane	50.0000	0.0000	46.1930	92		65-130
Chloroform	50.0000	0.0000	48.9811	98		65-135
1,1,1-Trichloroethane	50.0000	0.0000	50.4343	101		65-130
1,1-Dichloropropene	50.0000	0.0000	42.7425	85		75-130
Carbon tetrachloride	50.0000	0.0000	50.9787	102		65-140
1,2-Dichloroethane	50.0000	0.0000	52.7366	105		70-130
Benzene	50.0000	0.0000	41.9822	84		80-120
Trichloroethene	50.0000	9.7212	51.9991	85		70-125
1,2-Dichloropropane	50.0000	0.0000	45.6811	91		75-125
Dibromomethane	50.0000	0.0000	48.0673	96		75-125
Bromodichloromethane	50.0000	0.0000	50.6097	101		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	44.6099	89		70-130
4-Methyl-2-pentanone	50.0000	0.0000	40.8158	82		60-135
Toluene	50.0000	0.0000	36.2503	73	*	75-120
trans-1,3-Dichloropropene	50.0000	0.0000	46.4231	93		55-140
1,1,2-Trichloroethane	50.0000	0.0000	45.3690	91		75-125
1,3-Dichloropropane	50.0000	0.0000	44.8340	90		75-125
Tetrachloroethene	50.0000	0.0000	39.7883	80		45-150
2-Hexanone	50.0000	0.0000	36.4795	73		55-130
Dibromochloromethane	50.0000	0.0000	46.6486	93		60-135
1,2-Dibromoethane	50.0000	0.0000	43.3675	87		80-120
Chlorobenzene	50.0000	0.0000	42.1396	84		80-120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	45.5965	91		80-130
Ethylbenzene	50.0000	0.0000	40.7143	81		75-125
m,p-Xylene	100.0000	0.0000	79.1570	79		75-130
o-Xylene	50.0000	0.0000	40.3794	81		80-120

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix Spike - EPA Sample No.: MW-4-042313 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	119.5364	80	*	81-121
Styrene	50.0000	0.0000	41.5151	83		65-135
Bromoform	50.0000	0.0000	43.7776	88		70-130
Isopropylbenzene	50.0000	0.0000	43.1537	86		75-125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	40.8349	82		65-130
Bromobenzene	50.0000	0.0000	41.1044	82		75-125
1,2,3-Trichloropropane	50.0000	0.0000	39.6084	79		75-125
n-Propylbenzene	50.0000	0.0000	41.2609	83		70-130
2-Chlorotoluene	50.0000	0.0000	41.6144	83		75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	42.8576	86		75-130
4-Chlorotoluene	50.0000	0.0000	41.4215	83		75-130
tert-Butylbenzene	50.0000	0.0000	43.5231	87		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	42.3176	85		75-130
sec-Butylbenzene	50.0000	0.0000	43.4979	87		70-125
4-Isopropyltoluene	50.0000	0.0000	44.2999	89		75-130
1,3-Dichlorobenzene	50.0000	0.0000	42.1821	84		75-125
1,4-Dichlorobenzene	50.0000	0.0000	41.7351	83		75-125
n-Butylbenzene	50.0000	0.0000	45.5222	91		70-135
1,2-Dichlorobenzene	50.0000	0.0000	43.1779	86		70-120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	39.8966	80		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	41.3044	83		65-135
Hexachlorobutadiene	50.0000	0.0000	43.2183	86		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	40.6554	81		55-140
Naphthalene	50.0000	0.0000	35.8259	72		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	43.2884	87		2		0-40	30-155
Chloromethane	50.0000	46.0438	92		5		0-40	40-125
Vinyl chloride	50.0000	49.4234	99		3		0-40	50-145
Bromomethane	50.0000	47.2290	94		8		0-40	30-145
Chloroethane	50.0000	54.4336	109		0		0-40	60-135
Trichlorofluoromethane	50.0000	57.6549	115		2		0-40	60-145
1,1-Dichloroethene	50.0000	43.1584	86		1		0-40	70-130
Acetone	50.0000	29.2682	59		1		0-40	40-140
Iodomethane	50.0000	54.3011	109		4		0-40	72-121
Carbon disulfide	50.0000	41.3086	83		0		0-40	35-160
Methylene chloride	50.0000	41.6698	83		1		0-40	55-140
trans-1,2-Dichloroethene	50.0000	42.8578	86		1		0-40	60-140
Methyl tert-butyl ether	50.0000	46.8478	94		2		0-40	65-125
1,1-Dichloroethane	50.0000	46.1169	92		2		0-40	70-135
Vinyl acetate	50.0000	43.7242	87		1		0-40	38-163
2-Butanone	50.0000	37.1913	74		3		0-40	30-150
cis-1,2-Dichloroethene	50.0000	44.2094	88		2		0-40	70-125
2,2-Dichloropropane	50.0000	41.4422	83		2		0-40	70-135
Bromochloromethane	50.0000	47.0619	94		2		0-40	65-130

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix Spike - EPA Sample No.: MW-4-042313 Level: (TRACE or LOW) LOW

Chloroform	50.0000	48.8728	98		0		0-40	65-135
1,1,1-Trichloroethane	50.0000	48.9231	98		3		0-40	65-130
1,1-Dichloropropene	50.0000	42.7835	86		0		0-40	75-130
Carbon tetrachloride	50.0000	49.9340	100		2		0-40	65-140
1,2-Dichloroethane	50.0000	52.5862	105		0		0-40	70-130
Benzene	50.0000	41.5846	83		1		0-40	80-120
Trichloroethene	50.0000	52.1768	85		0		0-40	70-125
1,2-Dichloropropane	50.0000	45.7451	91		0		0-40	75-125
Dibromomethane	50.0000	48.3308	97		1		0-40	75-125
Bromodichloromethane	50.0000	50.2367	100		1		0-40	75-120
cis-1,3-Dichloropropene	50.0000	45.2997	91		2		0-40	70-130
4-Methyl-2-pentanone	50.0000	42.5658	85		4		0-40	60-135
Toluene	50.0000	35.7734	72	*	1		0-40	75-120
trans-1,3-Dichloropropene	50.0000	47.0655	94		1		0-40	55-140
1,1,2-Trichloroethane	50.0000	45.8915	92		1		0-40	75-125
1,3-Dichloropropane	50.0000	45.6969	91		2		0-40	75-125
Tetrachloroethene	50.0000	40.0010	80		1		0-40	45-150
2-Hexanone	50.0000	36.8040	74		1		0-40	55-130
Dibromochloromethane	50.0000	47.1993	94		1		0-40	60-135
1,2-Dibromoethane	50.0000	44.3761	89		2		0-40	80-120
Chlorobenzene	50.0000	42.2113	84		0		0-40	80-120
1,1,1,2-Tetrachloroethane	50.0000	45.8398	92		1		0-40	80-130
Ethylbenzene	50.0000	40.1087	80		1		0-40	75-125
m,p-Xylene	100.0000	78.6994	79		1		0-40	75-130
o-Xylene	50.0000	40.1878	80		0		0-40	80-120
Xylene (Total)	150.0000	118.8872	79	*	1		0-40	81-121
Styrene	50.0000	41.8711	84		1		0-40	65-135
Bromoform	50.0000	45.0253	90		3		0-40	70-130
Isopropylbenzene	50.0000	43.0407	86		0		0-40	75-125
1,1,2,2-Tetrachloroethane	50.0000	41.3574	83		1		0-40	65-130
Bromobenzene	50.0000	41.3078	83		0		0-40	75-125
1,2,3-Trichloropropane	50.0000	40.2268	80		2		0-40	75-125
n-Propylbenzene	50.0000	40.2227	80		3		0-40	70-130
2-Chlorotoluene	50.0000	40.7987	82		2		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	41.7758	84		3		0-40	75-130
4-Chlorotoluene	50.0000	41.2217	82		0		0-40	75-130
tert-Butylbenzene	50.0000	42.9139	86		1		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	41.4768	83		2		0-40	75-130
sec-Butylbenzene	50.0000	42.3099	85		3		0-40	70-125
4-Isopropyltoluene	50.0000	43.2195	86		2		0-40	75-130
1,3-Dichlorobenzene	50.0000	41.3881	83		2		0-40	75-125
1,4-Dichlorobenzene	50.0000	40.9366	82		2		0-40	75-125
n-Butylbenzene	50.0000	44.1484	88		3		0-40	70-135
1,2-Dichlorobenzene	50.0000	42.7901	86		1		0-40	70-120
1,2-Dibromo-3-chloropropan	50.0000	39.8811	80		0		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	41.1295	82		0		0-40	65-135
Hexachlorobutadiene	50.0000	41.9053	84		3		0-40	50-140

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix Spike - EPA Sample No.: MW-4-042313 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	41.0329	82		1		0-40	55-140
Naphthalene	50.0000	37.5193	75		5		0-40	55-140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 4 out of 136 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Lab Sample ID: LCS-71366 LCS Lot No.:

Date Extracted: 04/25/2013 Date Analyzed (1): 04/25/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	41.9780	84		30 - 155
Chloromethane	50.0000	0.0000	47.7413	95		40 - 125
Vinyl chloride	50.0000	0.0000	51.1057	102		50 - 145
Bromomethane	50.0000	0.0000	46.4617	93		30 - 145
Chloroethane	50.0000	0.0000	54.1726	108		60 - 135
Trichlorofluoromethane	50.0000	0.0000	50.5994	101		60 - 145
1,1-Dichloroethene	50.0000	0.0000	45.7180	91		70 - 130
Acetone	50.0000	0.0000	42.9746	86		40 - 140
Iodomethane	50.0000	0.0000	62.5619	125	*	72 - 121
Carbon disulfide	50.0000	0.0000	44.7571	90		35 - 160
Methylene chloride	50.0000	0.0000	44.2840	89		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	46.2917	93		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	48.3064	97		65 - 125
1,1-Dichloroethane	50.0000	0.0000	48.3534	97		70 - 135
Vinyl acetate	50.0000	0.0000	50.3462	101		38 - 163
2-Butanone	50.0000	0.0000	43.0906	86		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	46.3104	93		70 - 125
2,2-Dichloropropane	50.0000	0.0000	48.8971	98		70 - 135
Bromochloromethane	50.0000	0.0000	48.5244	97		65 - 130
Chloroform	50.0000	0.0000	47.8659	96		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	47.1409	94		65 - 130
1,1-Dichloropropene	50.0000	0.0000	45.3714	91		75 - 130
Carbon tetrachloride	50.0000	0.0000	47.0478	94		65 - 140
1,2-Dichloroethane	50.0000	0.0000	49.1302	98		70 - 130
Benzene	50.0000	0.0000	44.3867	89		80 - 120
Trichloroethene	50.0000	0.0000	45.0757	90		70 - 125
1,2-Dichloropropane	50.0000	0.0000	48.2563	97		75 - 125
Dibromomethane	50.0000	0.0000	48.6874	97		75 - 125
Bromodichloromethane	50.0000	0.0000	50.2441	100		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	49.4468	99		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	46.2647	93		60 - 135
Toluene	50.0000	0.0000	38.5307	77		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.0355	100		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	47.2540	95		75 - 125
1,3-Dichloropropane	50.0000	0.0000	49.3470	99		75 - 125
Tetrachloroethene	50.0000	0.0000	43.8637	88		45 - 150
2-Hexanone	50.0000	0.0000	46.7180	93		55 - 130
Dibromochloromethane	50.0000	0.0000	49.0574	98		60 - 135
1,2-Dibromoethane	50.0000	0.0000	47.7044	95		80 - 120
Chlorobenzene	50.0000	0.0000	46.1289	92		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	47.7146	95		80 - 130
Ethylbenzene	50.0000	0.0000	45.0677	90		75 - 125
m,p-Xylene	100.0000	0.0000	87.5052	88		75 - 130
o-Xylene	50.0000	0.0000	44.6476	89		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Lab Sample ID: LCS-71366 LCS Lot No.:

Date Extracted: 04/25/2013 Date Analyzed (1): 04/25/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	132.1529	88		81 - 121
Styrene	50.0000	0.0000	46.3388	93		65 - 135
Bromoform	50.0000	0.0000	47.3274	95		70 - 130
Isopropylbenzene	50.0000	0.0000	47.7442	95		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	46.5804	93		65 - 130
Bromobenzene	50.0000	0.0000	46.2079	92		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	45.8637	92		75 - 125
n-Propylbenzene	50.0000	0.0000	47.6884	95		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.3395	93		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	47.8552	96		75 - 130
4-Chlorotoluene	50.0000	0.0000	47.1134	94		75 - 130
tert-Butylbenzene	50.0000	0.0000	49.5165	99		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.8671	96		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.9006	100		70 - 125
4-Isopropyltoluene	50.0000	0.0000	51.3437	103		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.5145	95		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.1171	94		75 - 125
n-Butylbenzene	50.0000	0.0000	55.6856	111		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	48.2692	97		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	44.5125	89		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	53.8921	108		65 - 135
Hexachlorobutadiene	50.0000	0.0000	51.4641	103		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	52.4322	105		55 - 140
Naphthalene	50.0000	0.0000	52.7654	106		55 - 140

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

* Values outside of QC limits

Spike Recovery: 1 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Lab File ID: V8B9356.D Lab Sample ID: MB-71366

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/25/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:00

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-71366	LCS-71366	V8B9354.D	12:06
02	TRIP BLANK	M0582-08A	V8B9357.D	13:27
03	MW-1-042313	M0582-01A	V8B9358.D	13:54
04	MW-2-042313	M0582-02A	V8B9359.D	14:22
05	MW-9-042313	M0582-03A	V8B9360.D	14:49
06	MW-6-042313	M0582-04A	V8B9361.D	15:16
07	DUP-1-042313	M0582-05A	V8B9362.D	15:43
08	MW-4-042313	M0582-06A	V8B9363.D	16:11
09	MW-5-042313	M0582-07A	V8B9364.D	16:38
10	MW-4-042313MS	M0582-06AMS	V8B9374.D	21:08
11	MW-4-042313MSD	M0582-06AMSD	V8B9375.D	21:35

COMMENTS:

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

EPA SAMPLE NO.
BFB10K

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Lab File ID: V8B9274.D BFB Injection Date: 04/17/2013

Instrument ID: V10 BFB Injection Time: 11:11

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.0
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	6.6
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 -120% of mass 95	82.8
175	5.0 - 9.0% of mass 174	5.6 (6.8)1
176	95.0 - 101% of mass 174	80.1 (96.8)1
177	5.0 - 9.0% of mass 176	5.1 (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	VSTD05010K	VSTD05010K	V8B9275.D	04/17/2013	12:22
02	VSTD02010K	VSTD02010K	V8B9276.D	04/17/2013	12:49
03	VSTD00510K	VSTD00510K	V8B9277.D	04/17/2013	13:17
04	VSTD00110K	VSTD00110K	V8B9279.D	04/17/2013	14:12
05	VSTD20010K	VSTD20010K	V8B9280.D	04/17/2013	14:39
06	VSTD10010K	VSTD10010K	V8B9281.D	04/17/2013	15:07

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.: M0582 Mod. Ref No.: SDG No.: SM0582

Lab File ID: V8B9352.D BFB Injection Date: 04/25/2013

Instrument ID: V10 BFB Injection Time: 10:12

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 - 80.0% of mass 95	50.4
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	50.0 -120% of mass 95	77.8
175	5.0 - 9.0% of mass 174	5.4 (6.9)1
176	95.0 - 101% of mass 174	75.3 (96.8)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	VSTD05010N	VSTD05010N	V8B9353.D	04/25/2013	10:49
02	LCS-71366	LCS-71366	V8B9354.D	04/25/2013	12:06
03	MB-71366	MB-71366	V8B9356.D	04/25/2013	13:00
04	TRIP BLANK	M0582-08A	V8B9357.D	04/25/2013	13:27
05	MW-1-042313	M0582-01A	V8B9358.D	04/25/2013	13:54
06	MW-2-042313	M0582-02A	V8B9359.D	04/25/2013	14:22
07	MW-9-042313	M0582-03A	V8B9360.D	04/25/2013	14:49
08	MW-6-042313	M0582-04A	V8B9361.D	04/25/2013	15:16
09	DUP-1-042313	M0582-05A	V8B9362.D	04/25/2013	15:43
10	MW-4-042313	M0582-06A	V8B9363.D	04/25/2013	16:11
11	MW-5-042313	M0582-07A	V8B9364.D	04/25/2013	16:38
12	MW-4-042313MS	M0582-06AMS	V8B9374.D	04/25/2013	21:08
13	MW-4-042313MSD	M0582-06AMSD	V8B9375.D	04/25/2013	21:35

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####): VSTD05010N Date Analyzed: 04/25/2013

Lab File ID (Standard): V8B9353.D Time Analyzed: 10:49

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA #	RT #	IS2 (S2) AREA #	RT #	IS3 (S3) AREA #	RT #
	12 HOUR STD	2649134	5.307	1801541	8.294	866192	10.786
	UPPER LIMIT	5298268	5.807	3603082	8.794	1732384	11.286
	LOWER LIMIT	1324567	4.807	900771	7.794	433096	10.286
	EPA SAMPLE NO.						
01	LCS-71366	2493736	5.304	1836619	8.291	882719	10.783
02	MB-71366	2491251	5.307	1774815	8.294	786560	10.786
03	TRIP BLANK	2408010	5.307	1723958	8.294	771825	10.786
04	MW-1-042313	2341459	5.307	1699287	8.294	787880	10.786
05	MW-2-042313	2311904	5.307	1673161	8.294	760239	10.786
06	MW-9-042313	2223272	5.307	1605012	8.294	737356	10.786
07	MW-6-042313	2182989	5.307	1583688	8.291	706425	10.786
08	DUP-1-042313	2113961	5.307	1520207	8.294	688097	10.786
09	MW-4-042313	2024755	5.307	1493305	8.291	666944	10.786
10	MW-5-042313	2012797	5.307	1459865	8.291	650410	10.786
11	MW-4-042313MS	1876554	5.307	1425179	8.294	712446	10.786
12	MW-4-042313MSD	1939077	5.307	1465198	8.294	737156	10.786

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.

MW-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	0.86	J
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	17	
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	87	
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	1.1	J
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	8.9	
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.

MW-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9358.d
Report Date: 30-Apr-2013 09:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9358.d
Lab Smp Id: M0582-01A Client Smp ID: MW-1-042313
Inj Date : 25-APR-2013 13:54
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-01A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14
Processing Host: TARGET115

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

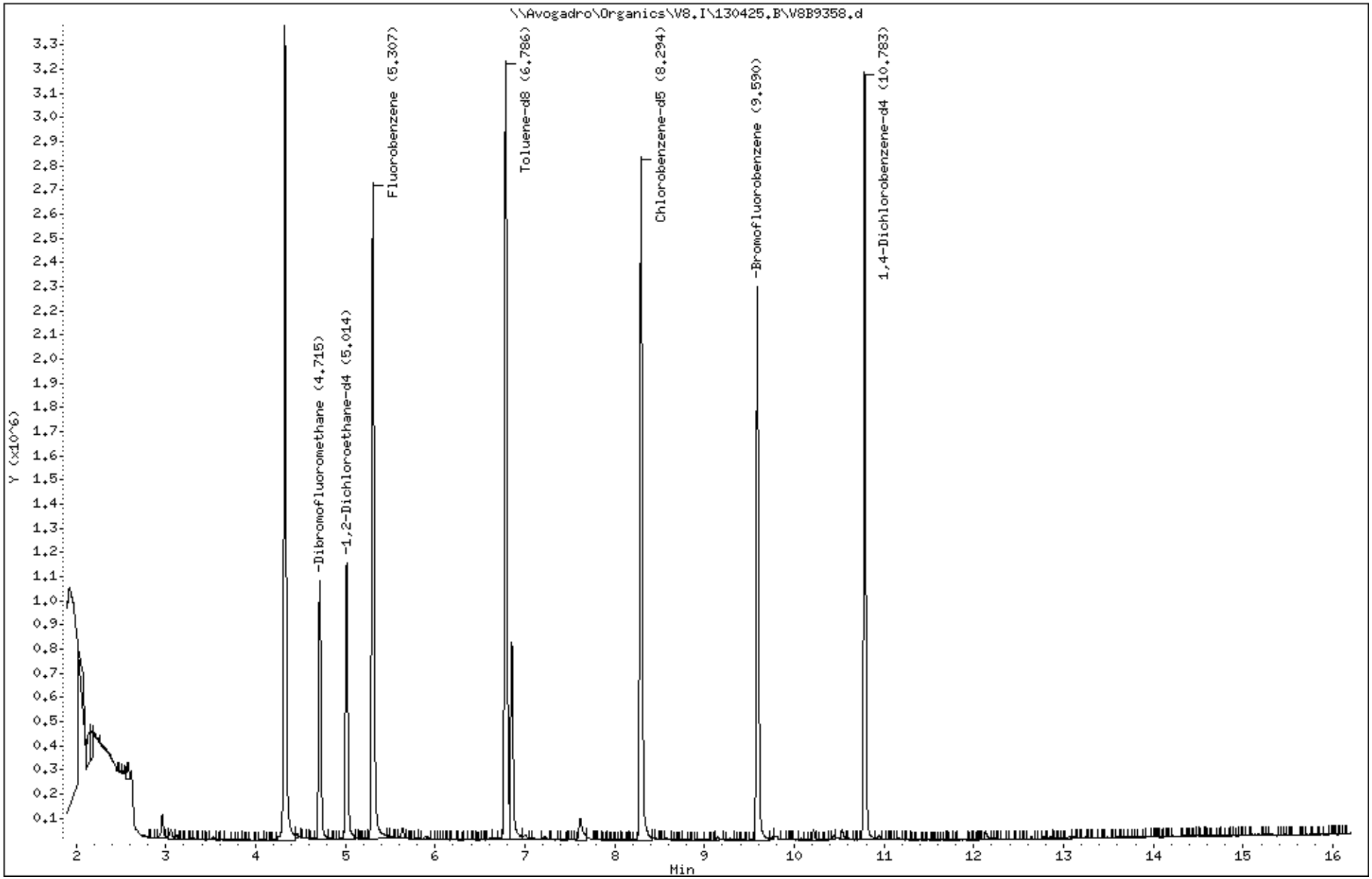
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	4 Vinyl Chloride	62	1.924	1.930	(0.363)	11427	0.86093	0.86(Q)
	12 Acetone	58	2.962	2.966	(0.558)	31667	17.2648	17
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	1297482	87.1173	87
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	612659	51.6622	52
$	42 1,2-Dichloroethane-d4	102	5.011	5.014	(0.944)	135553	49.4212	49
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2341459	50.0000	
	47 Trichloroethene	130	5.638	5.634	(1.062)	15043	1.10691	1.1
$	58 Toluene-d8	98	6.785	6.789	(0.818)	2258355	50.0339	50
	59 Toluene	91	6.853	6.856	(1.291)	617004	8.93363	8.9
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1699287	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	834517	49.8175	50
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	787880	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9358.d
Date : 25-APR-2013 13:54
Client ID: MW-1-042313
Instrument: V8.i
Sample Info: 5ML,M0582-01A,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9358.d

Date : 25-APR-2013 13:54

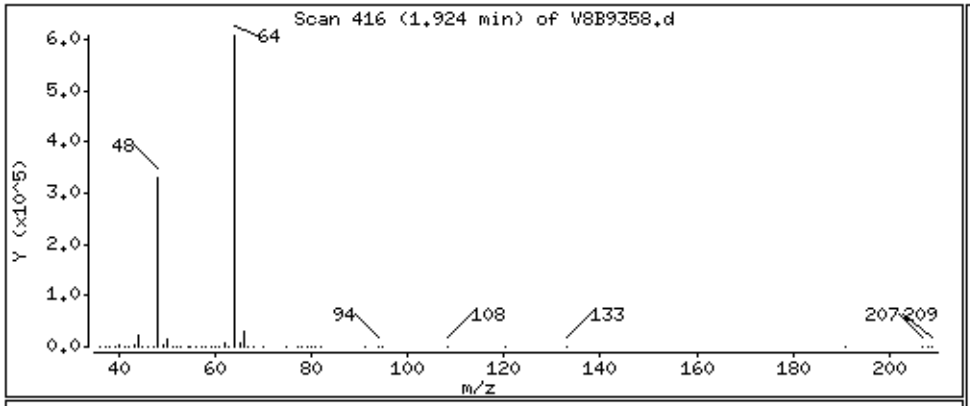
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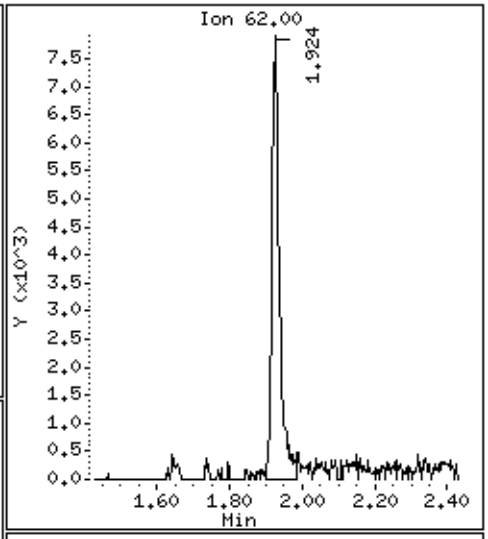
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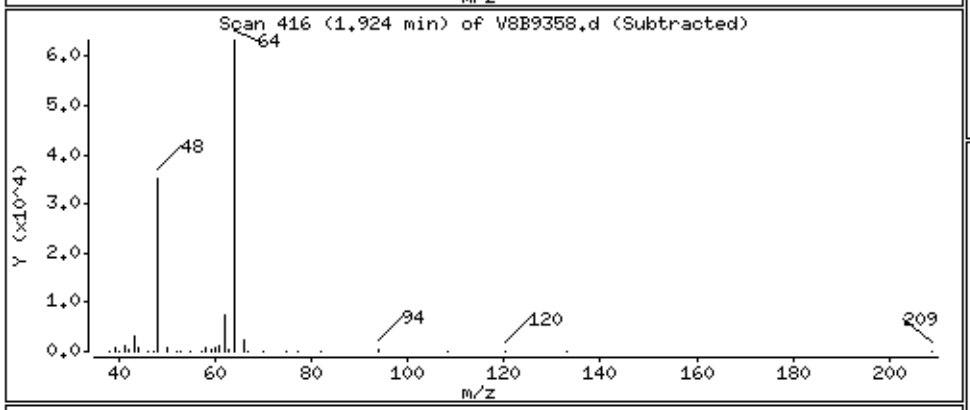
Purge Volume: 5.0 Operator: V10 SRC: LIMS

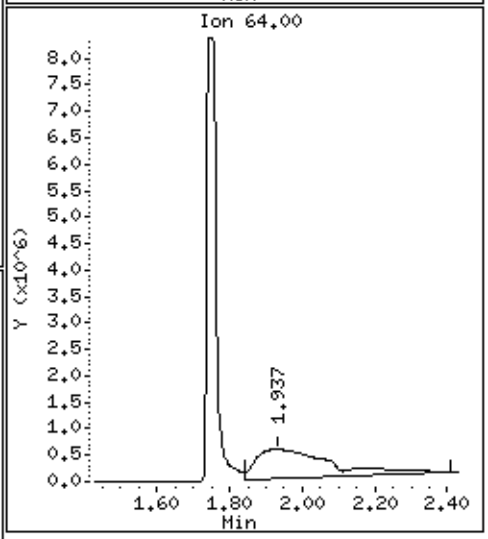
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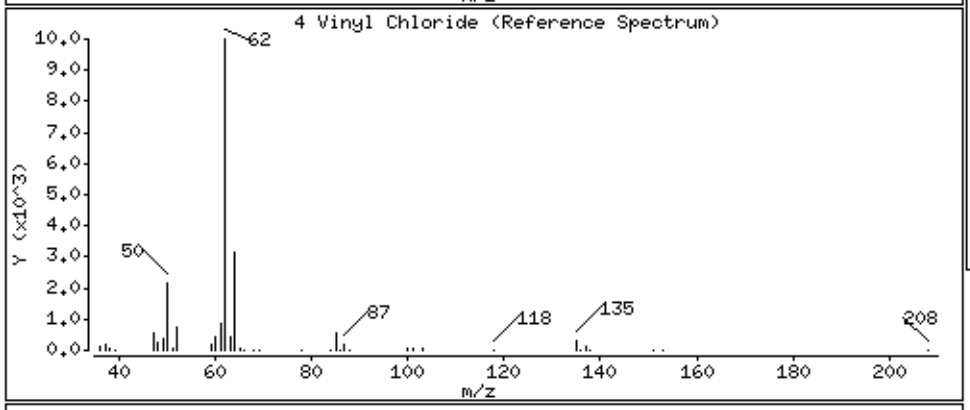
4 Vinyl Chloride Concentration: 0.86 ug/L

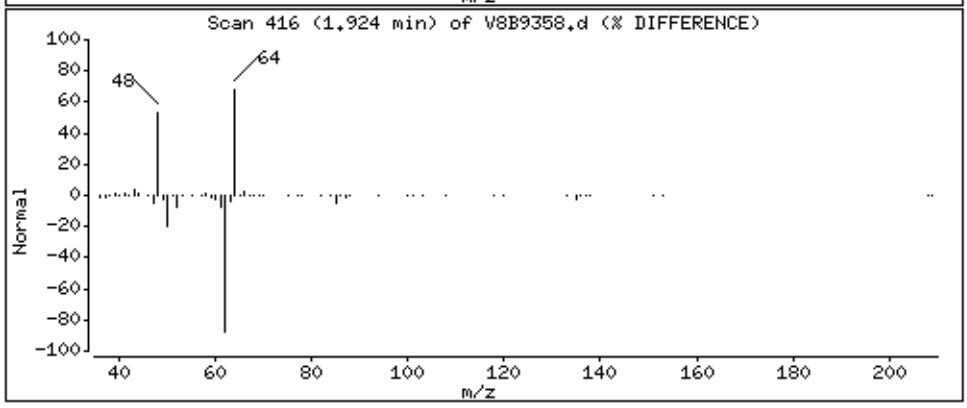












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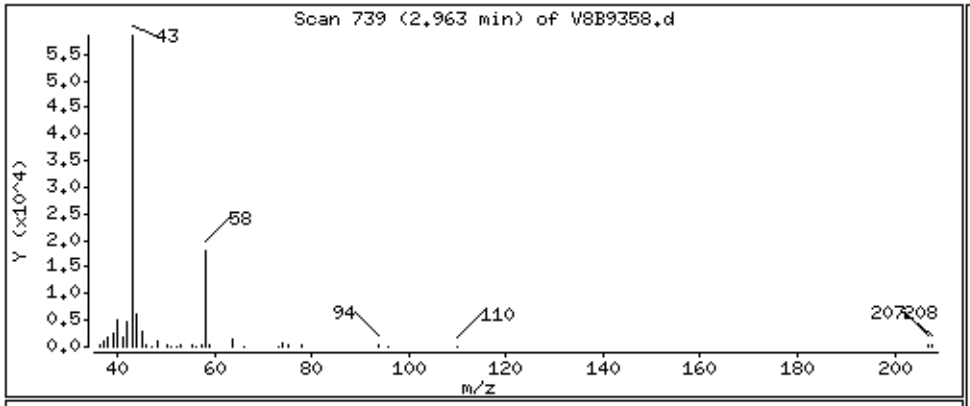
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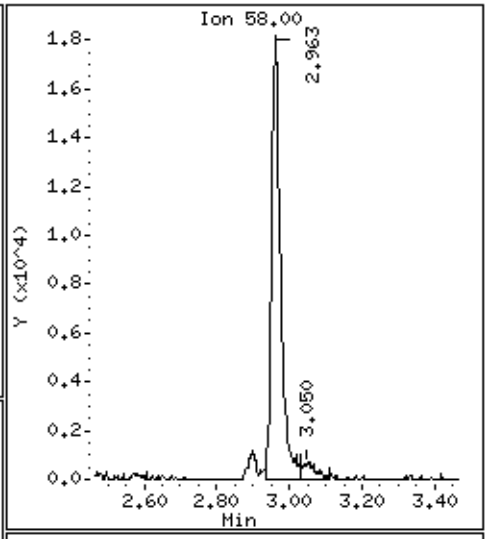
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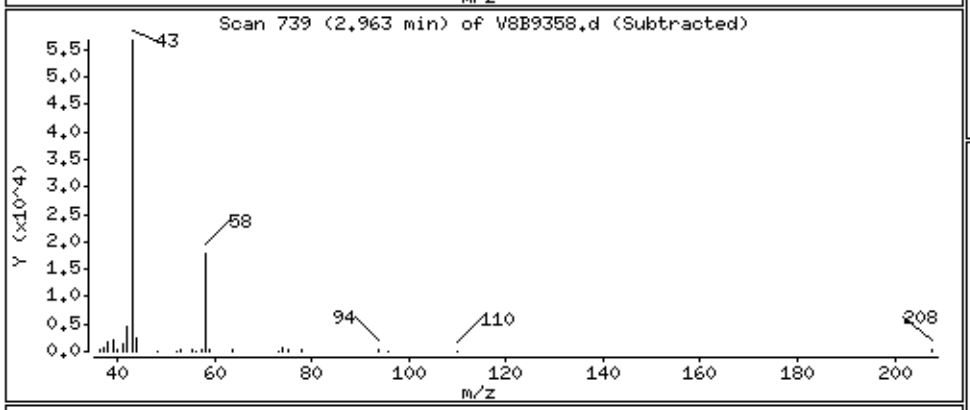
Purge Volume: 5.0 Operator: V10 SRC: LIMS

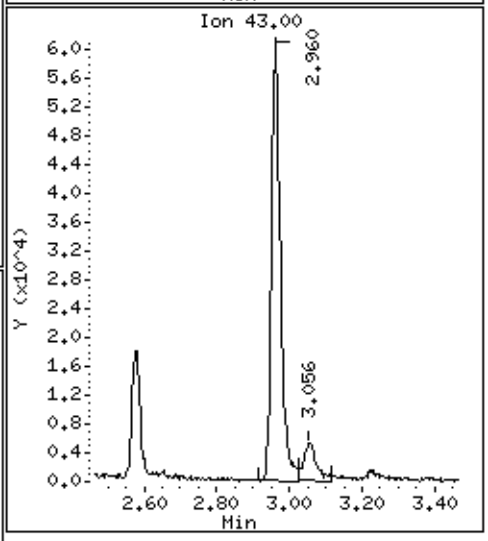
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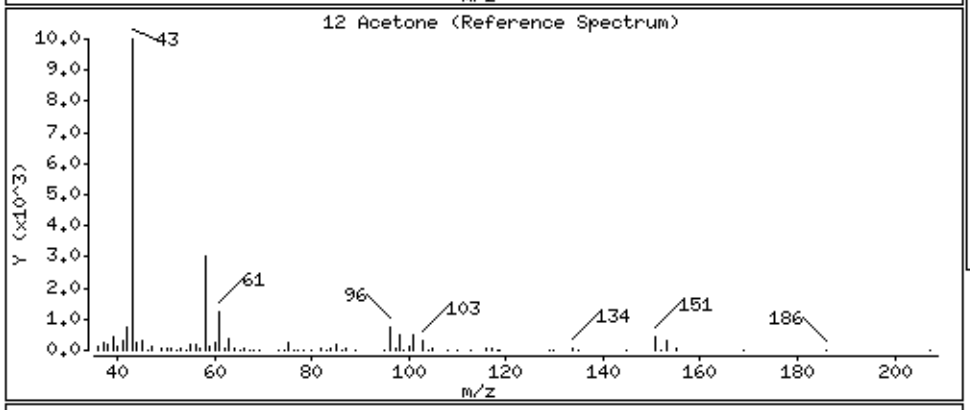
12 Acetone Concentration: 17 ug/L

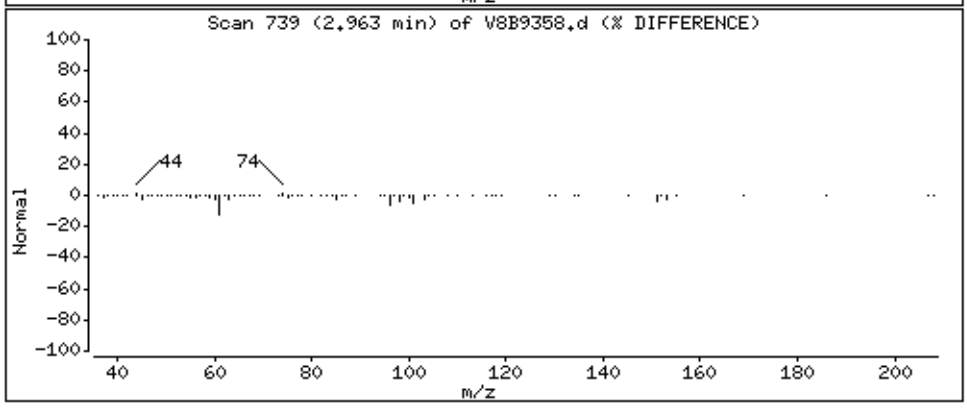












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Date : 25-APR-2013 13:54

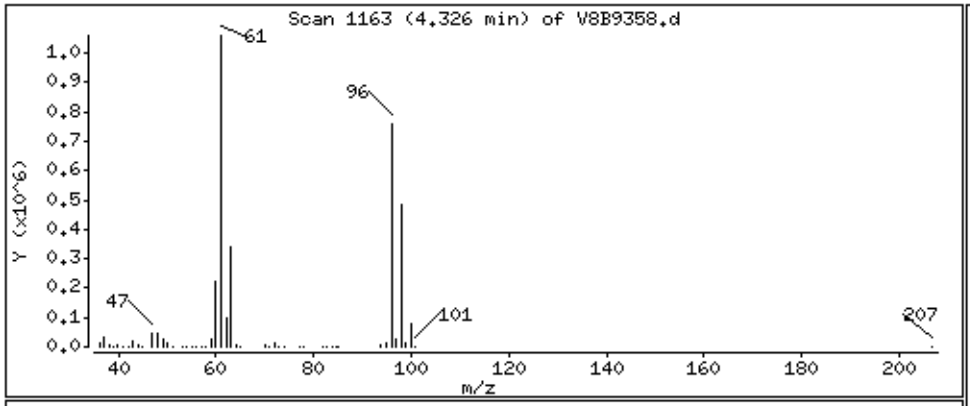
Client ID: MW-1-042313 Instrument: V8.i

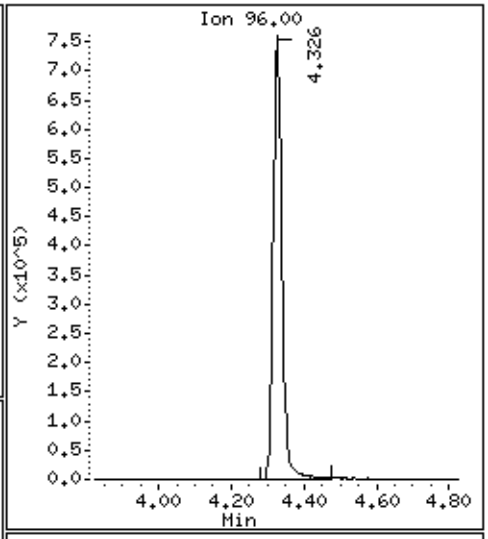
Sample Info: 5ML,M0582-01A,,71366

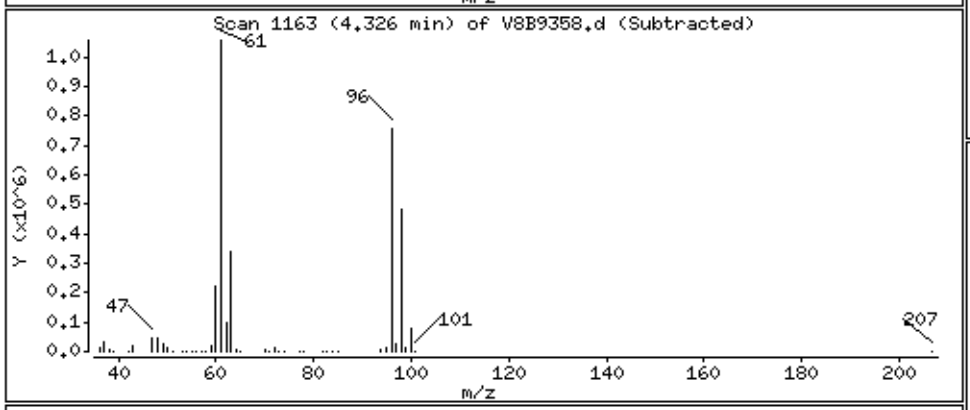
Purge Volume: 5.0 Operator: V10 SRC: LIMS

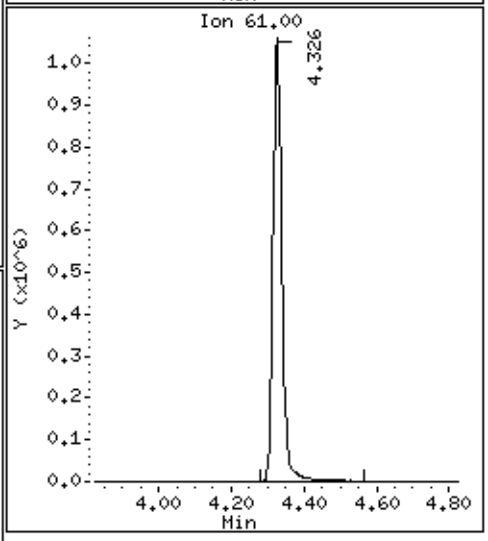
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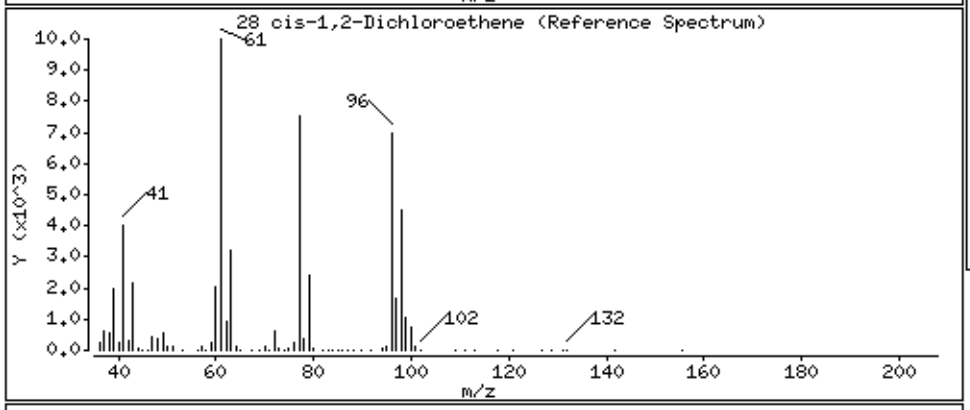
28 cis-1,2-Dichloroethene Concentration: 87 ug/L

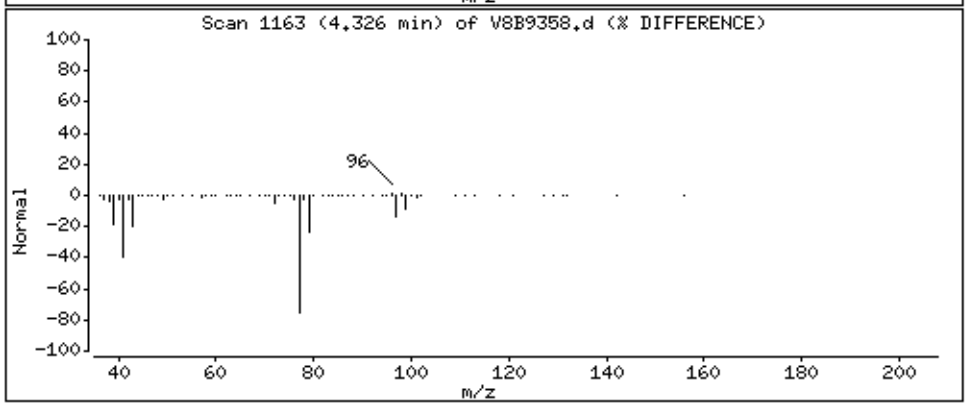












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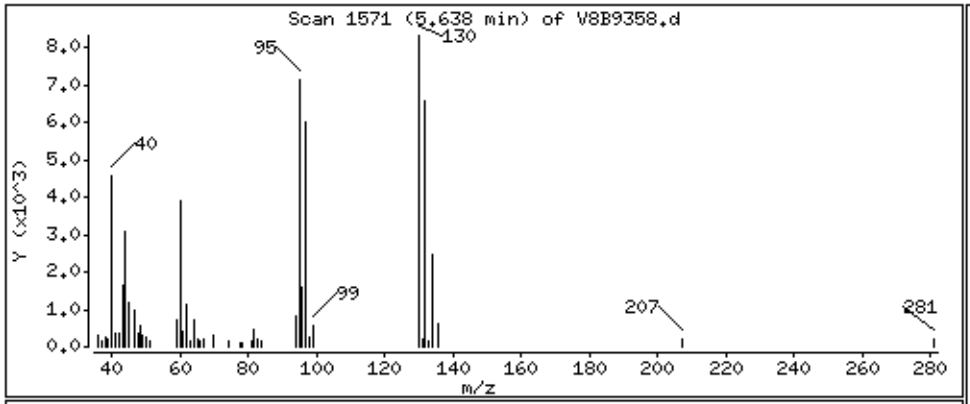
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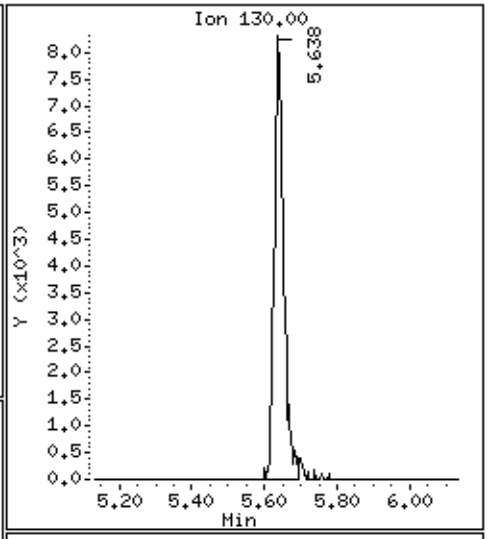
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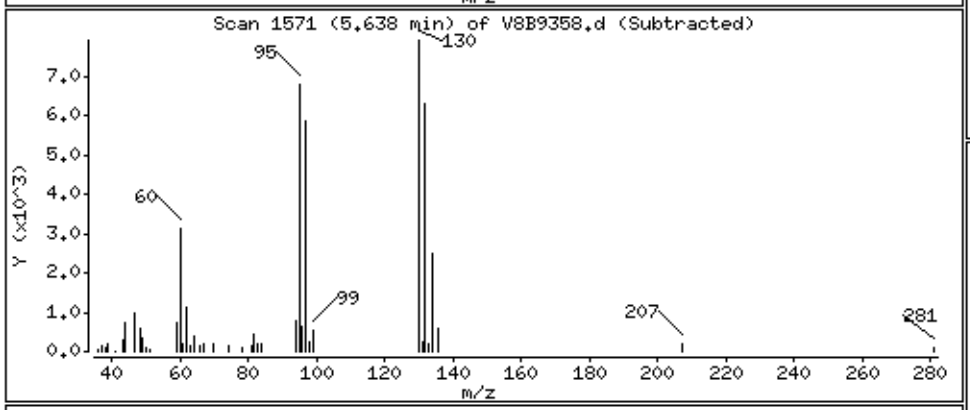
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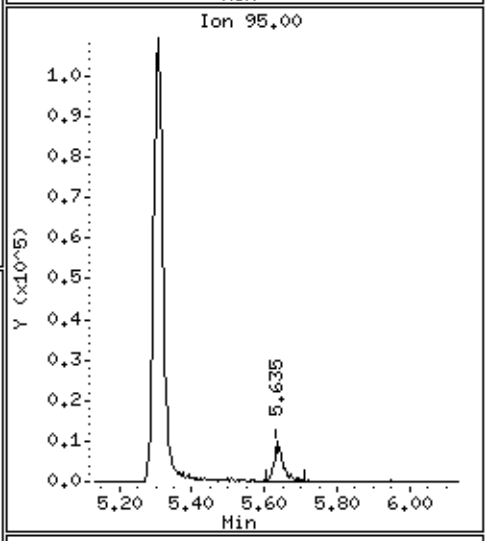
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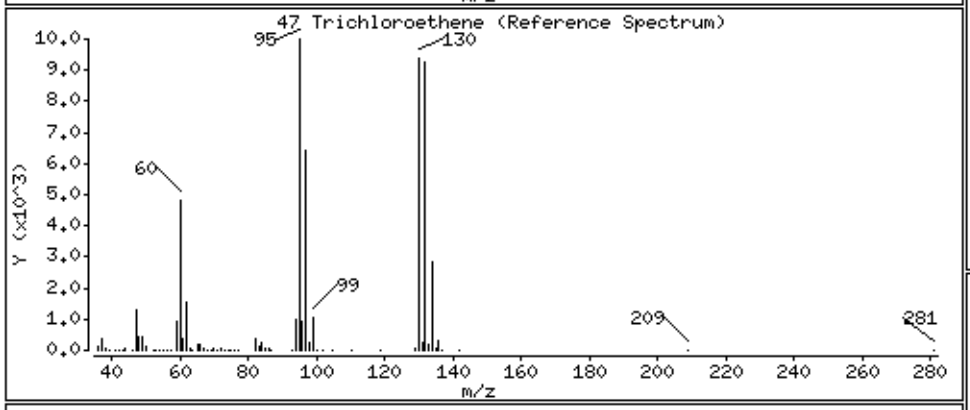
47 Trichloroethene Concentration: 1.1 ug/L

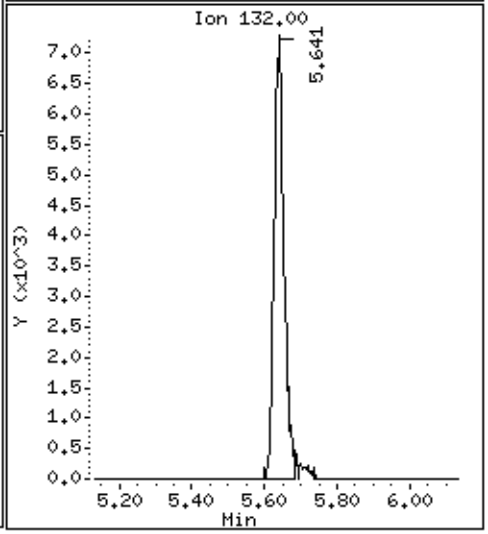


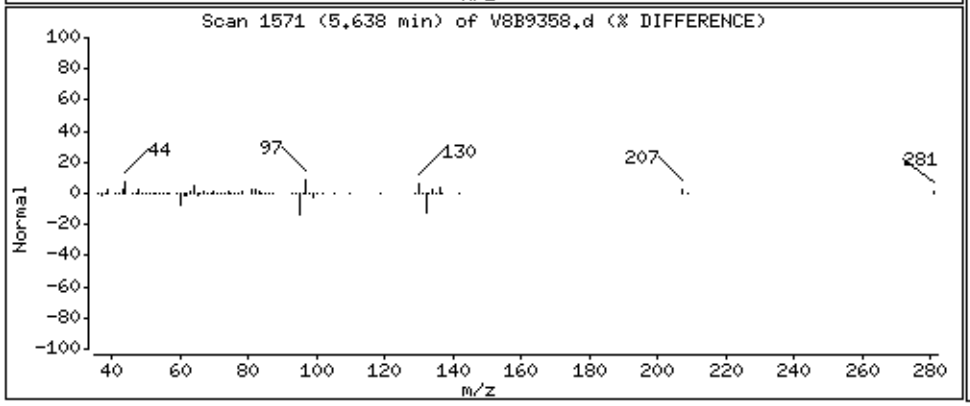












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Date : 25-APR-2013 13:54

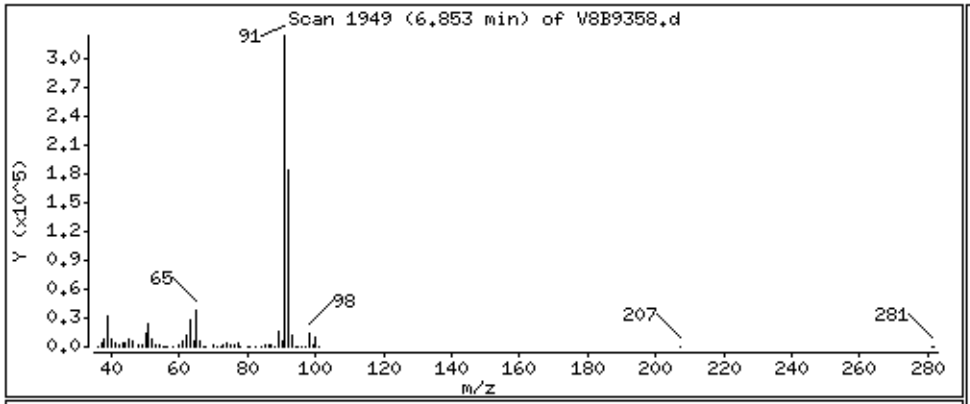
Client ID: MW-1-042313 Instrument: V8.i

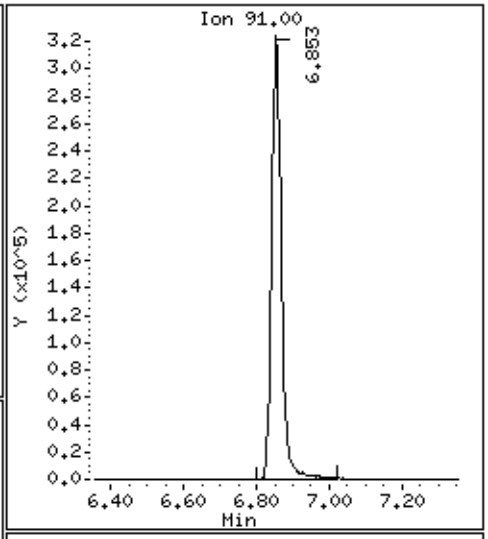
Sample Info: 5ML,M0582-01A,,71366

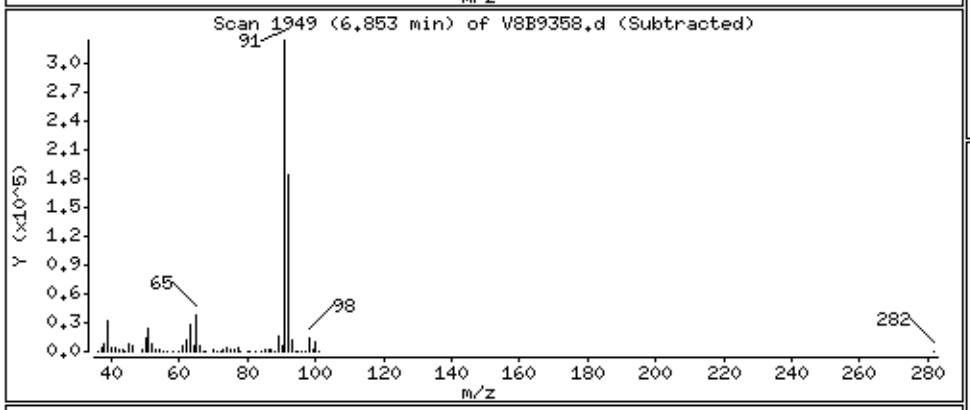
Purge Volume: 5.0 Operator: V10 SRC: LIMS

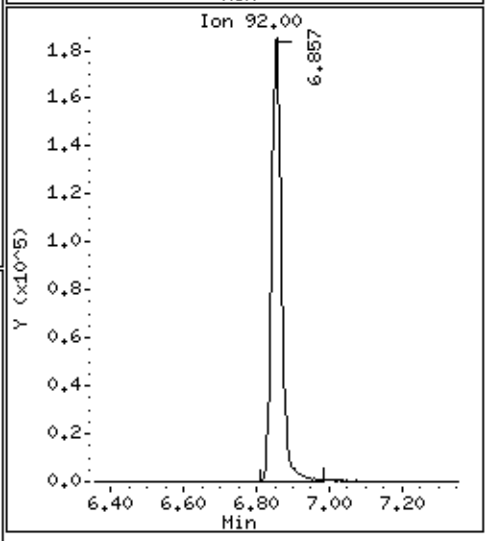
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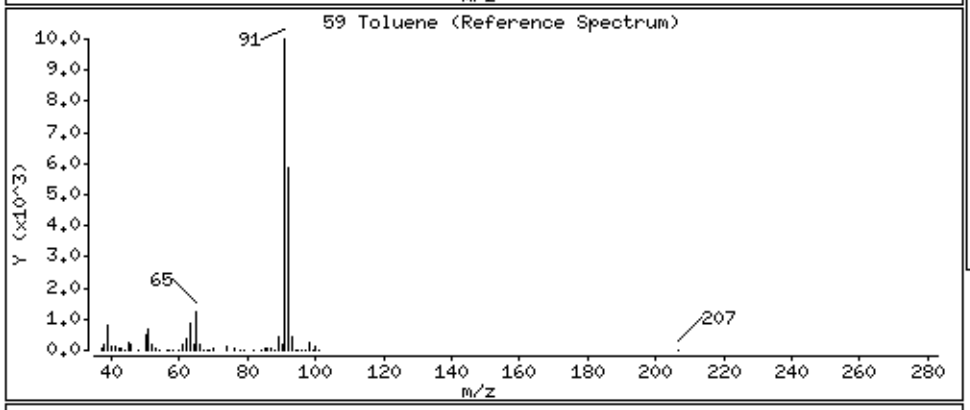
59 Toluene Concentration: 8.9 ug/L

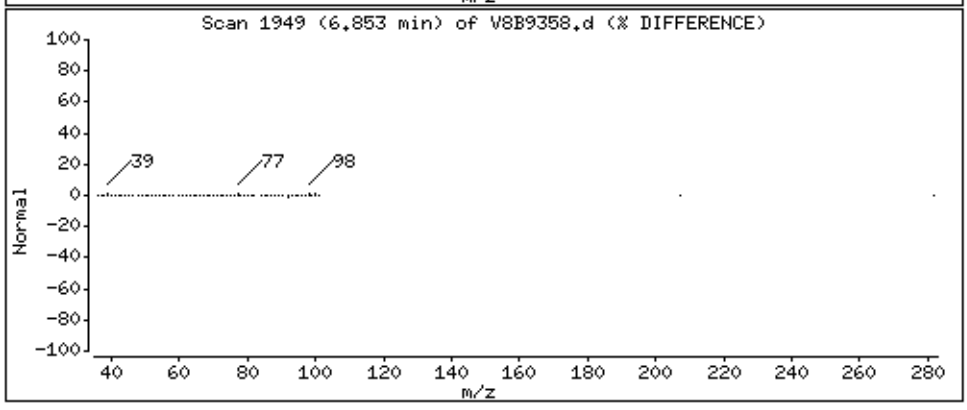












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9359.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	0.81	J
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	0.78	J
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.67	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	J
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	35	
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

EPA SAMPLE NO.

MW-2-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9359.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9359.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

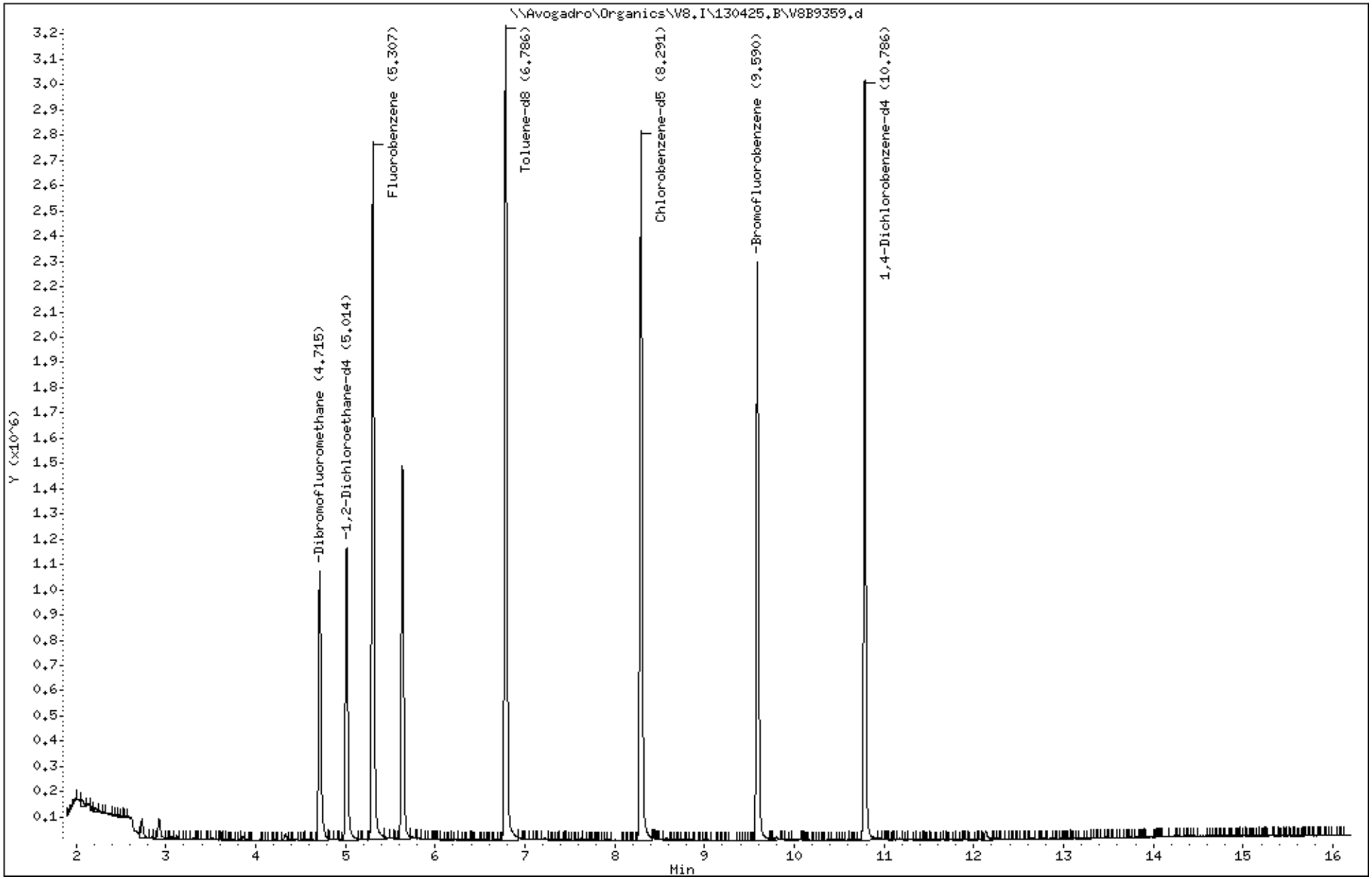
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Inj Date : 25-APR-2013 14:22
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-02A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	2.213	2.223	(0.417)	7234	0.80557	0.80
	13 Iodomethane	142	3.062	3.065	(0.577)	9883	0.78129	0.78
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	9889	0.67247	0.67
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	602793	51.4800	51
	37 1,1,1-Trichloroethane	97	4.753	4.756	(0.896)	20973	0.99976	1.00
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	135245	49.9393	50
*	46 Fluorobenzene	96	5.307	5.306	(1.000)	2311904	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	468700	34.9293	35
$	58 Toluene-d8	98	6.786	6.789	(0.818)	2227096	50.1118	50
*	68 Chlorobenzene-d5	117	8.294	8.293	(1.000)	1673161	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	814669	49.3921	49
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	760239	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9359.d
Date : 25-APR-2013 14:22
Client ID: MW-2-042313
Instrument: V8.i
Sample Info: 5ML,M0582-02A,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9359.d

Date : 25-APR-2013 14:22

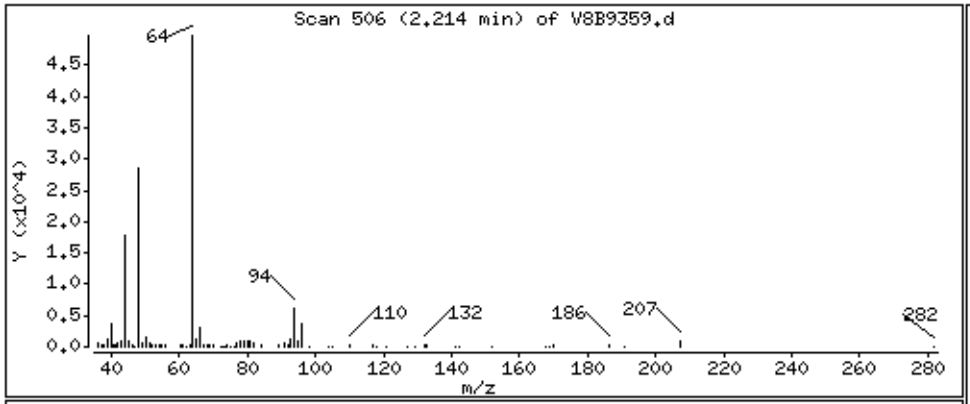
Client ID: MW-2-042313 Instrument: V8.i

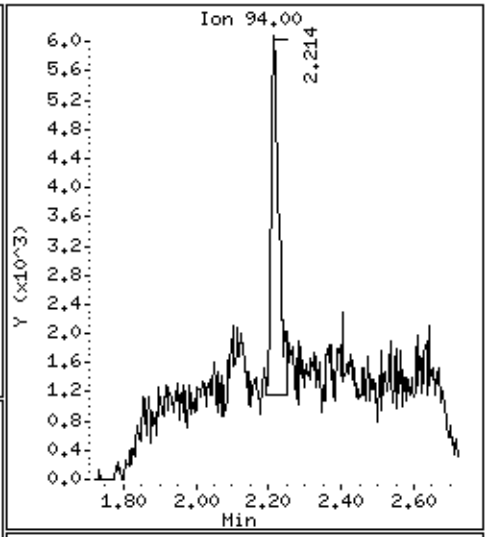
Sample Info: 5ML,M0582-02A,,71366

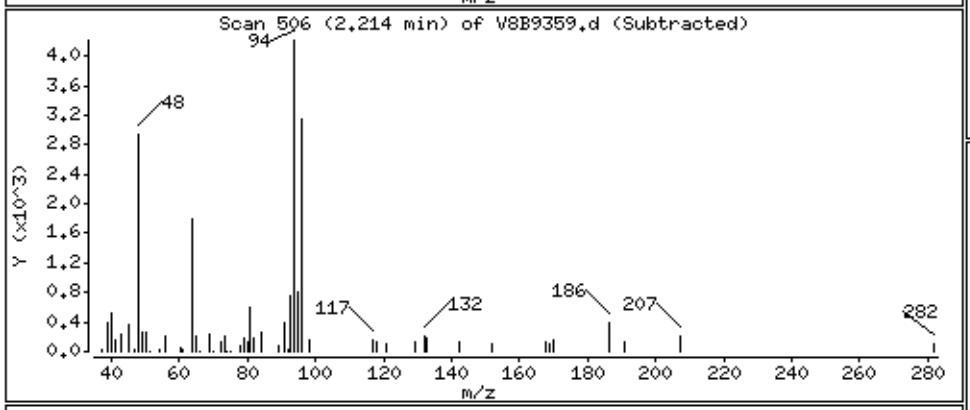
Purge Volume: 5.0 Operator: V10 SRC: LIMS

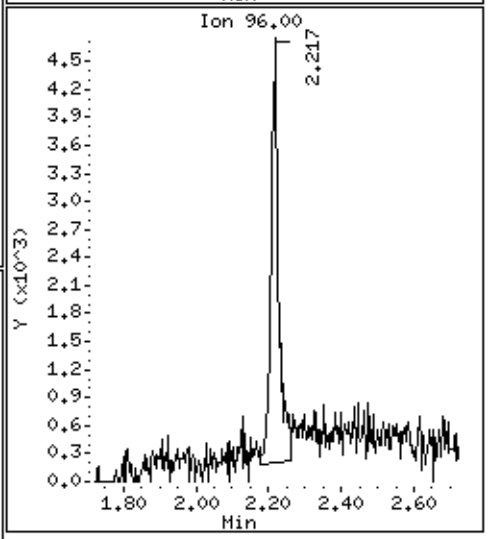
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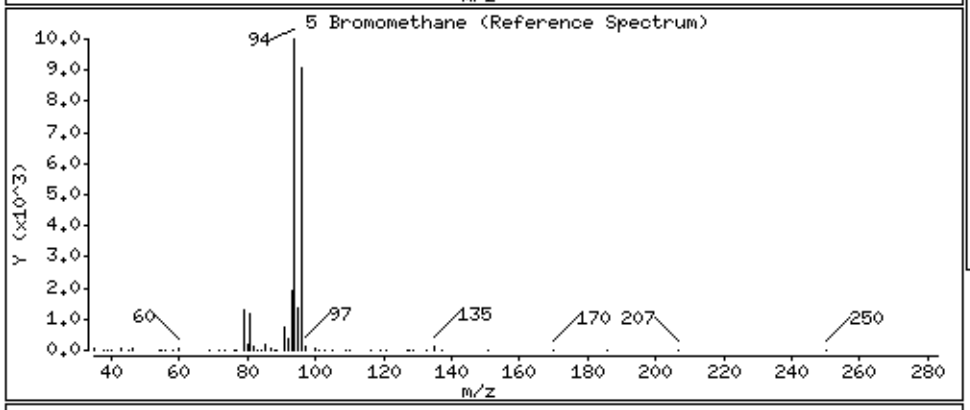
5 Bromomethane Concentration: 0.80 ug/L

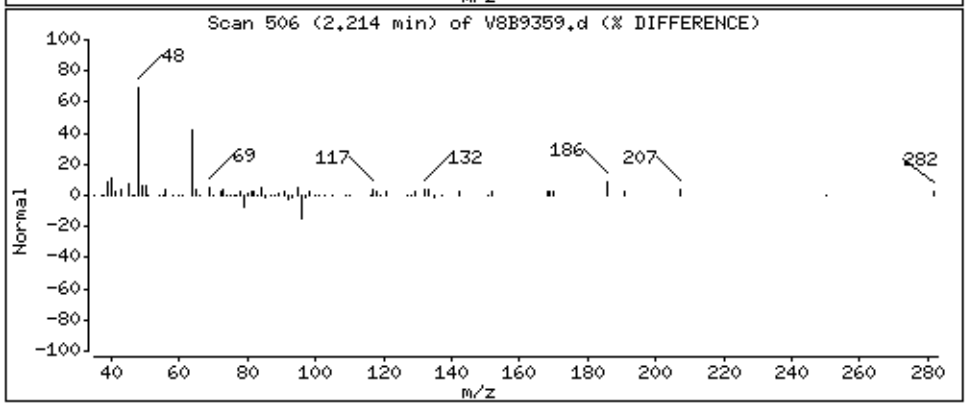












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Date : 25-APR-2013 14:22

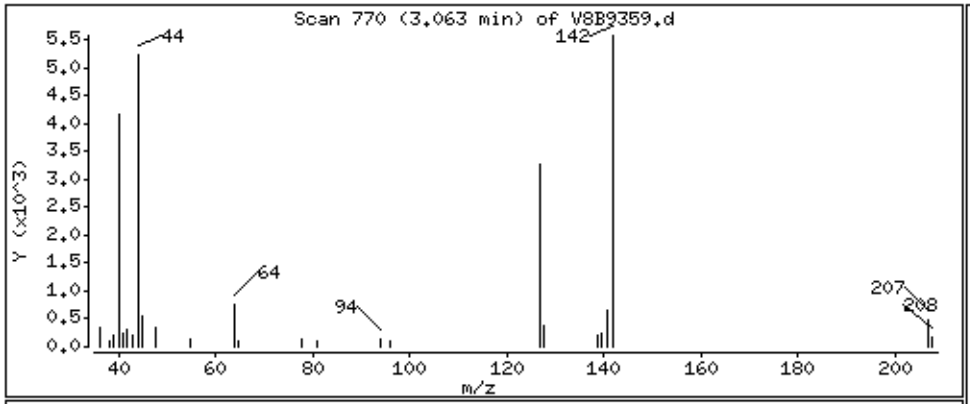
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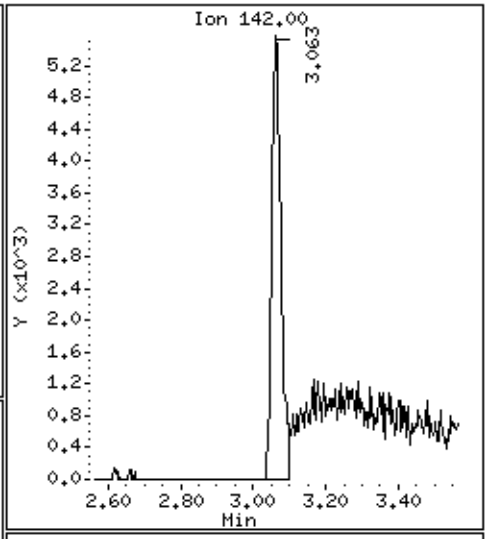
Sample Info: 5ML,M0582-02A,,71366

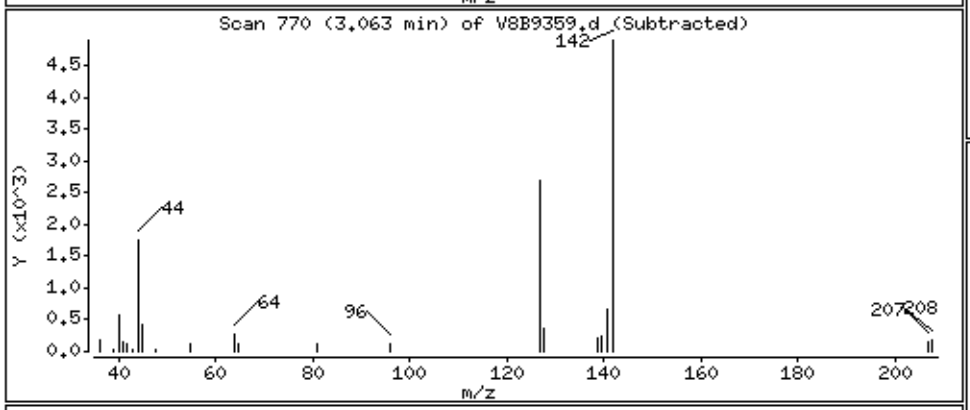
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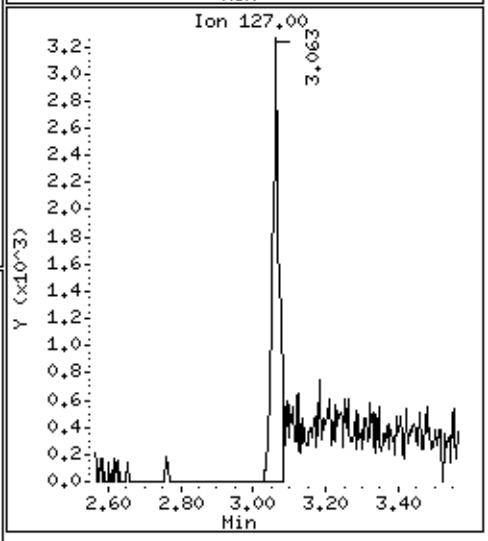
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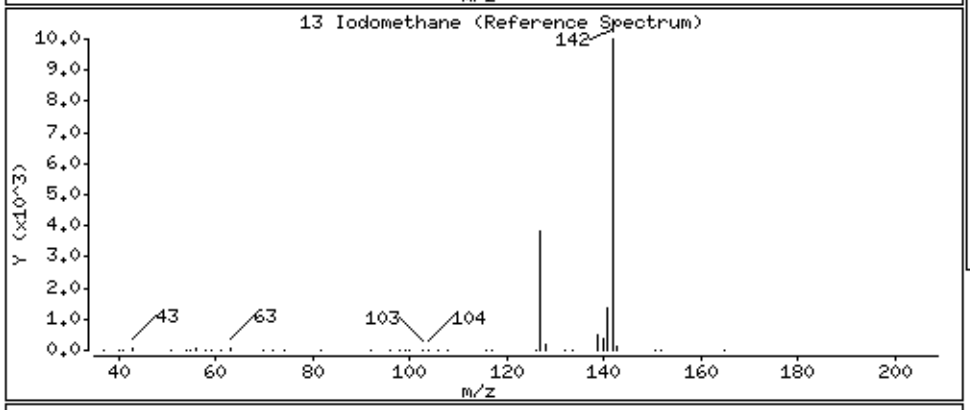
13 Iodomethane Concentration: 0.78 ug/L

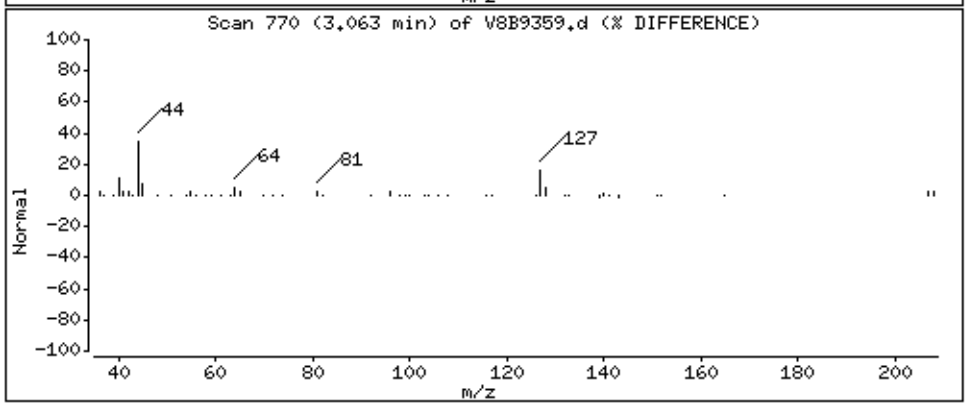












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9359.d

Date : 25-APR-2013 14:22

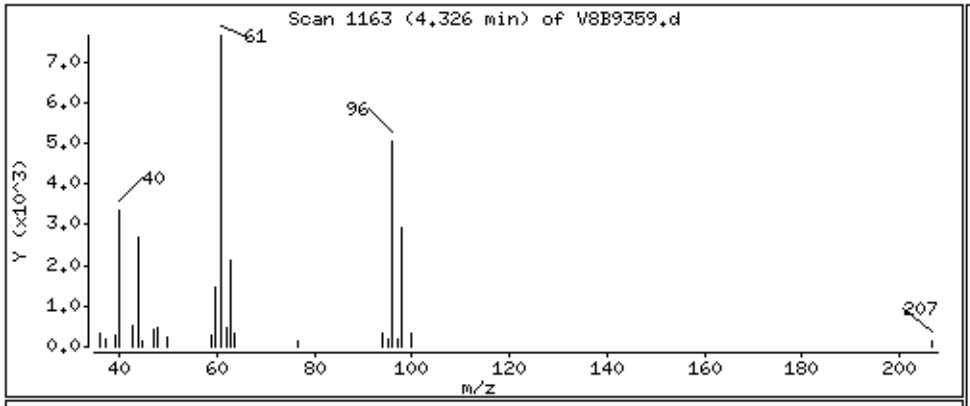
Client ID: MW-2-042313 Instrument: V8.i

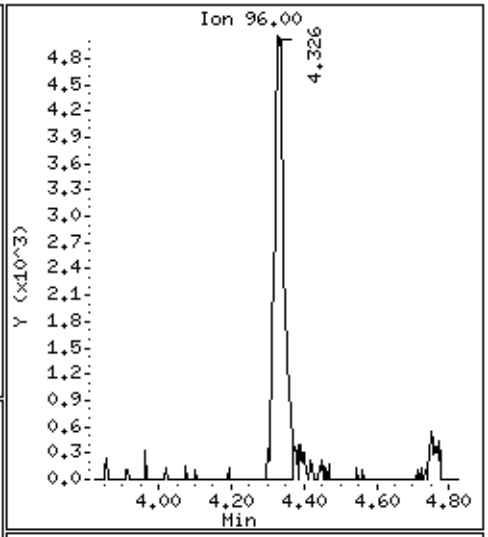
Sample Info: 5ML,M0582-02A,,71366

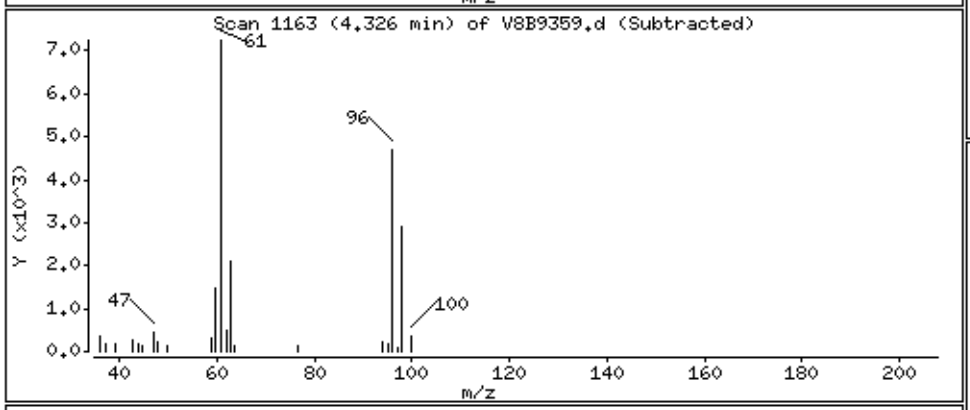
Purge Volume: 5.0 Operator: V10 SRC: LIMS

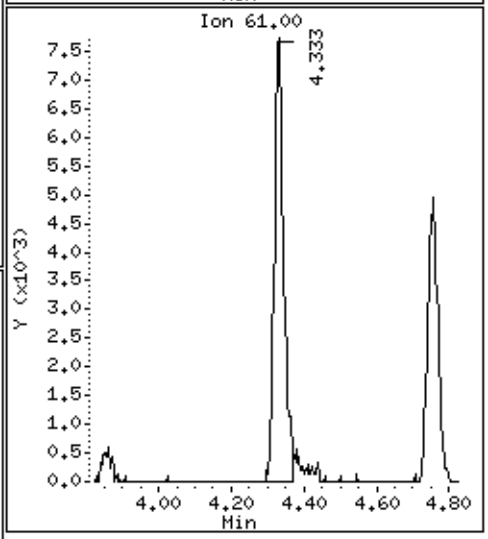
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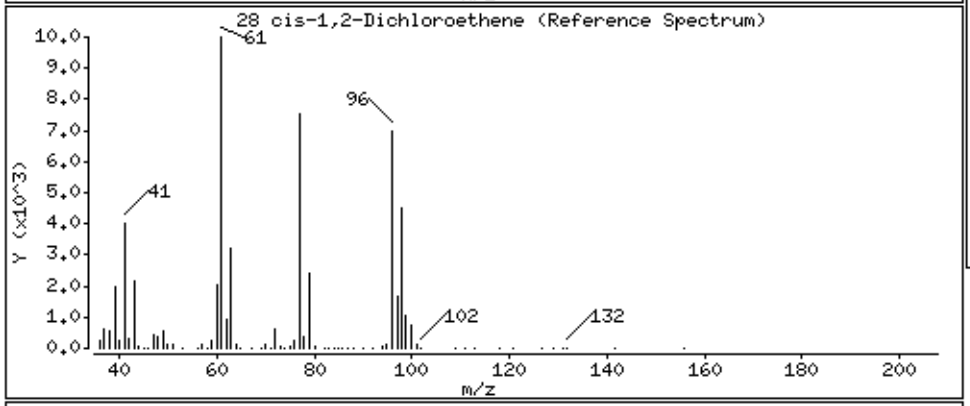
28 cis-1,2-Dichloroethene Concentration: 0.67 ug/L

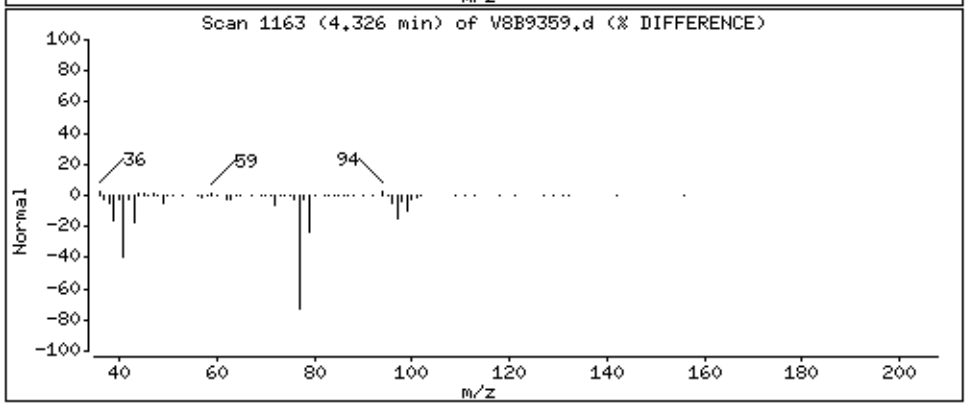












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9359.d

Date : 25-APR-2013 14:22

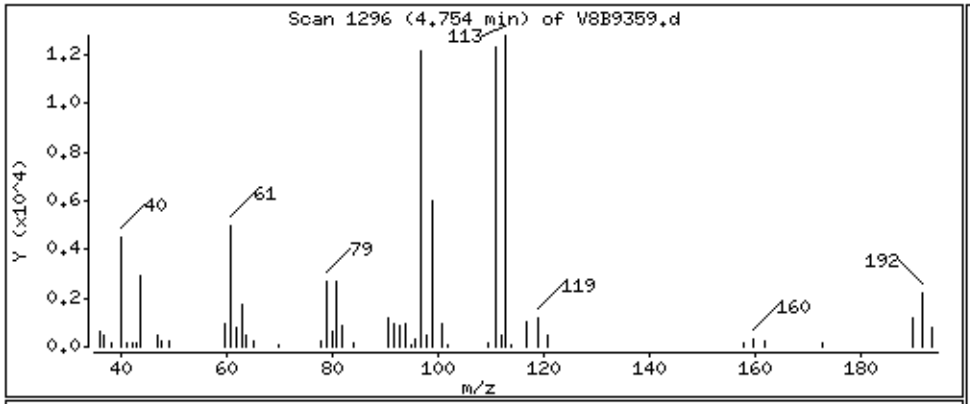
Client ID: MW-2-042313 Instrument: V8.i

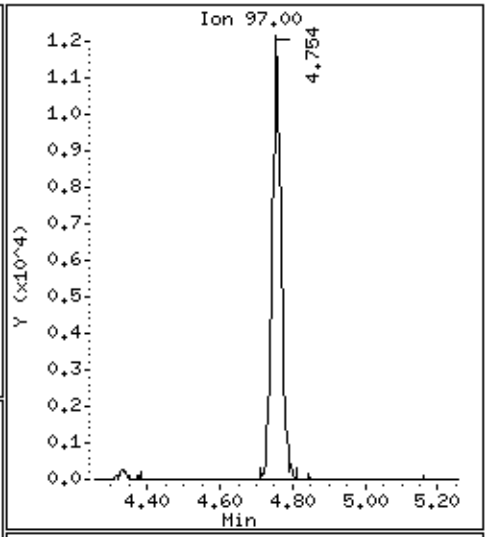
Sample Info: 5ML,M0582-02A,,71366

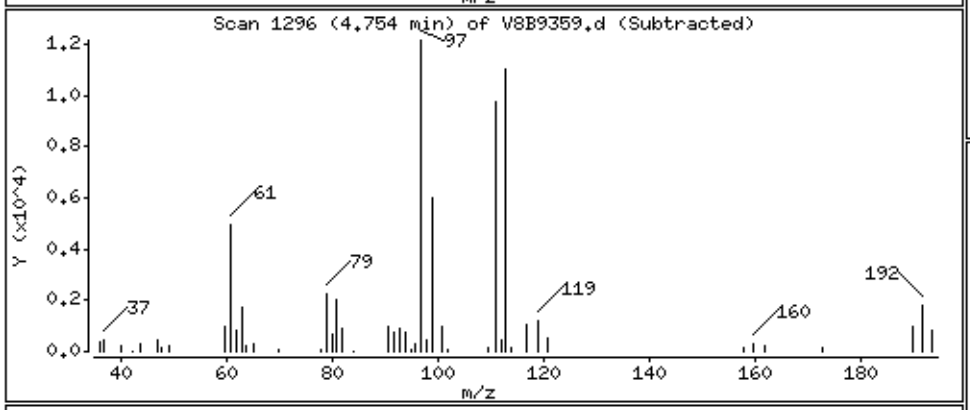
Purge Volume: 5.0 Operator: V10 SRC: LIMS

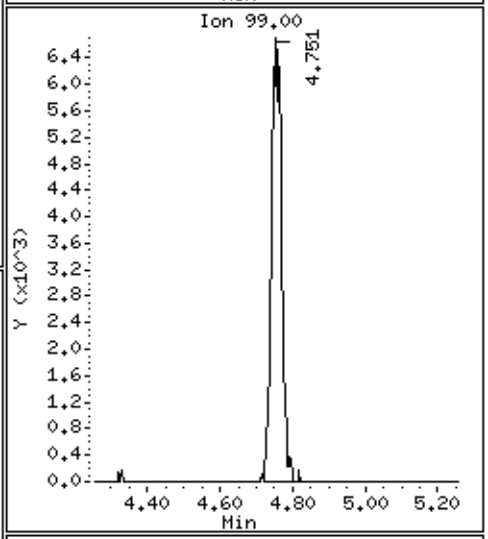
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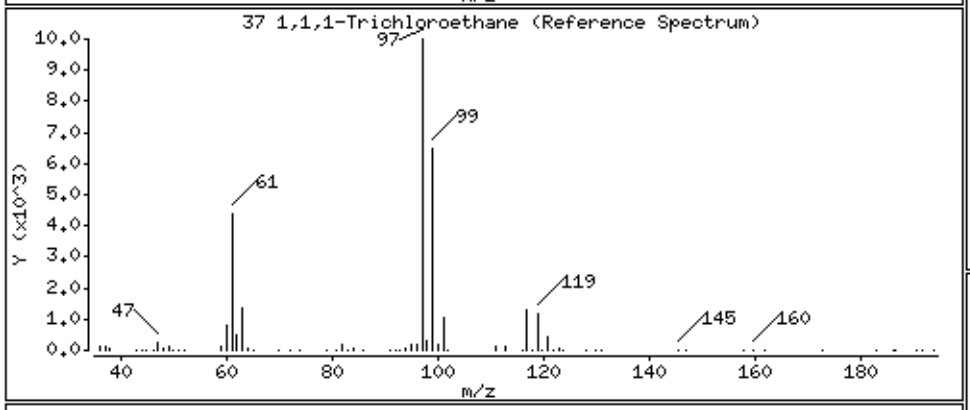
37 1,1,1-Trichloroethane Concentration: 1.00 ug/L

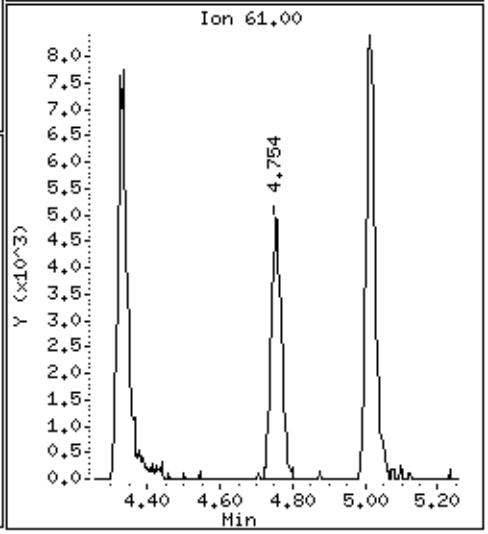


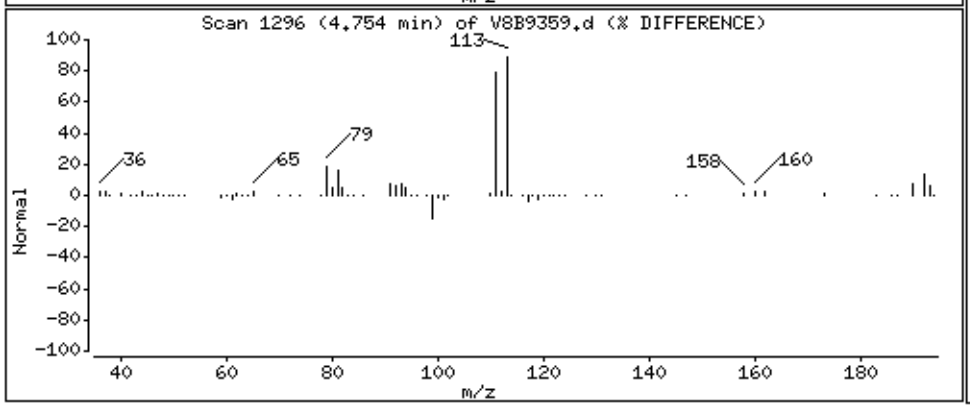












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9359.d

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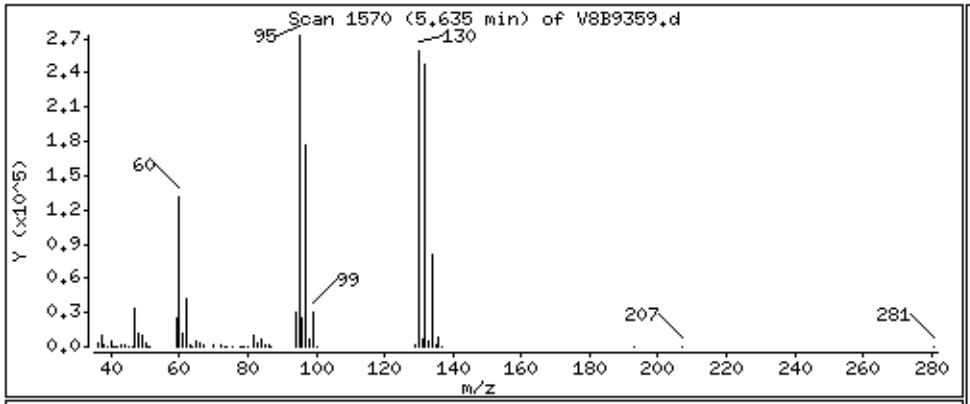
Client ID: MW-2-042313 Instrument: V8.i

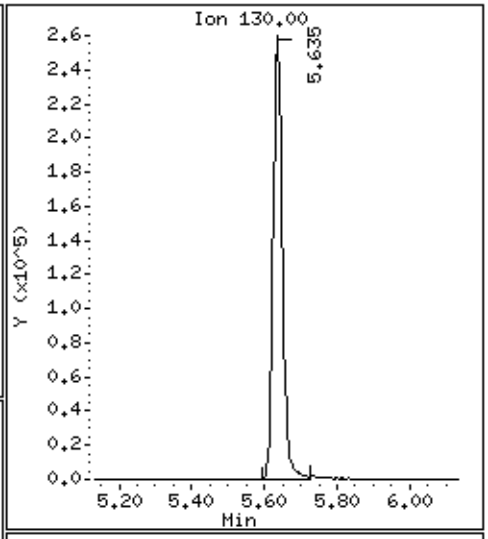
Sample Info: 5ML,M0582-02A,,71366

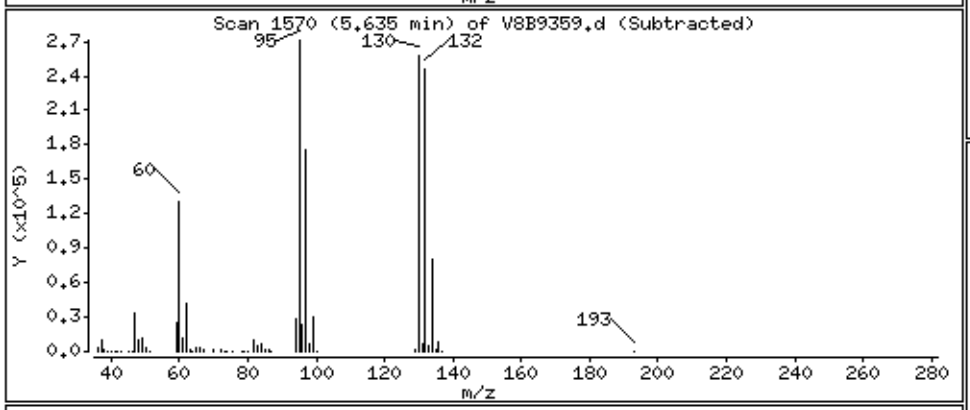
Purge Volume: 5.0 Operator: V10 SRC: LIMS

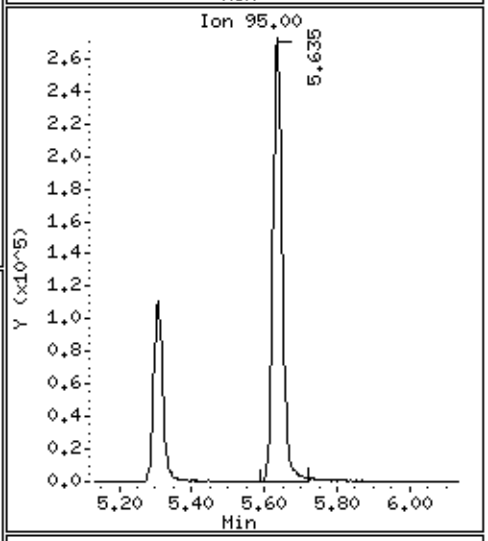
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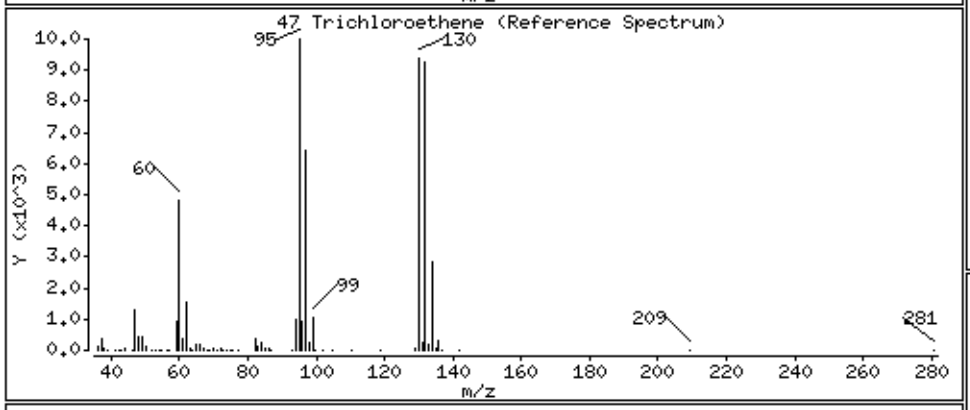
47 Trichloroethene Concentration: 35 ug/L

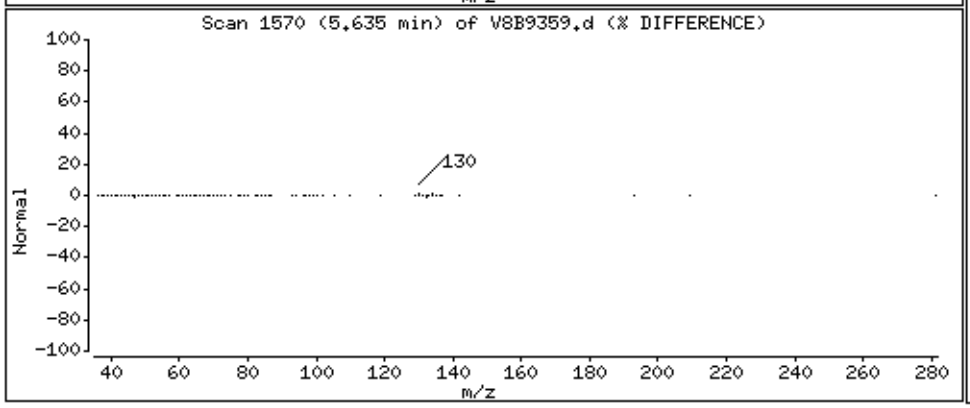


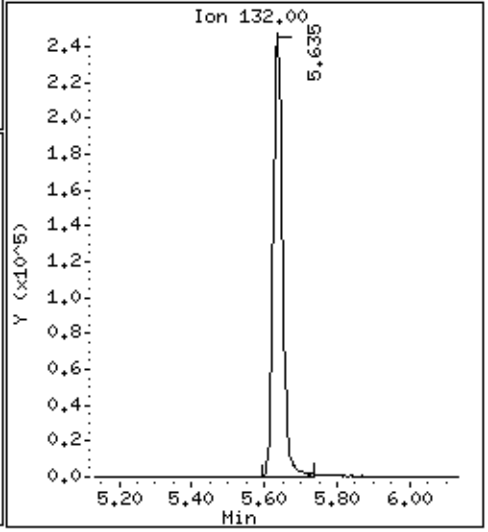












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9360.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	0.93	J
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	1.8	J
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

EPA SAMPLE NO.

MW-9-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9360.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9360.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

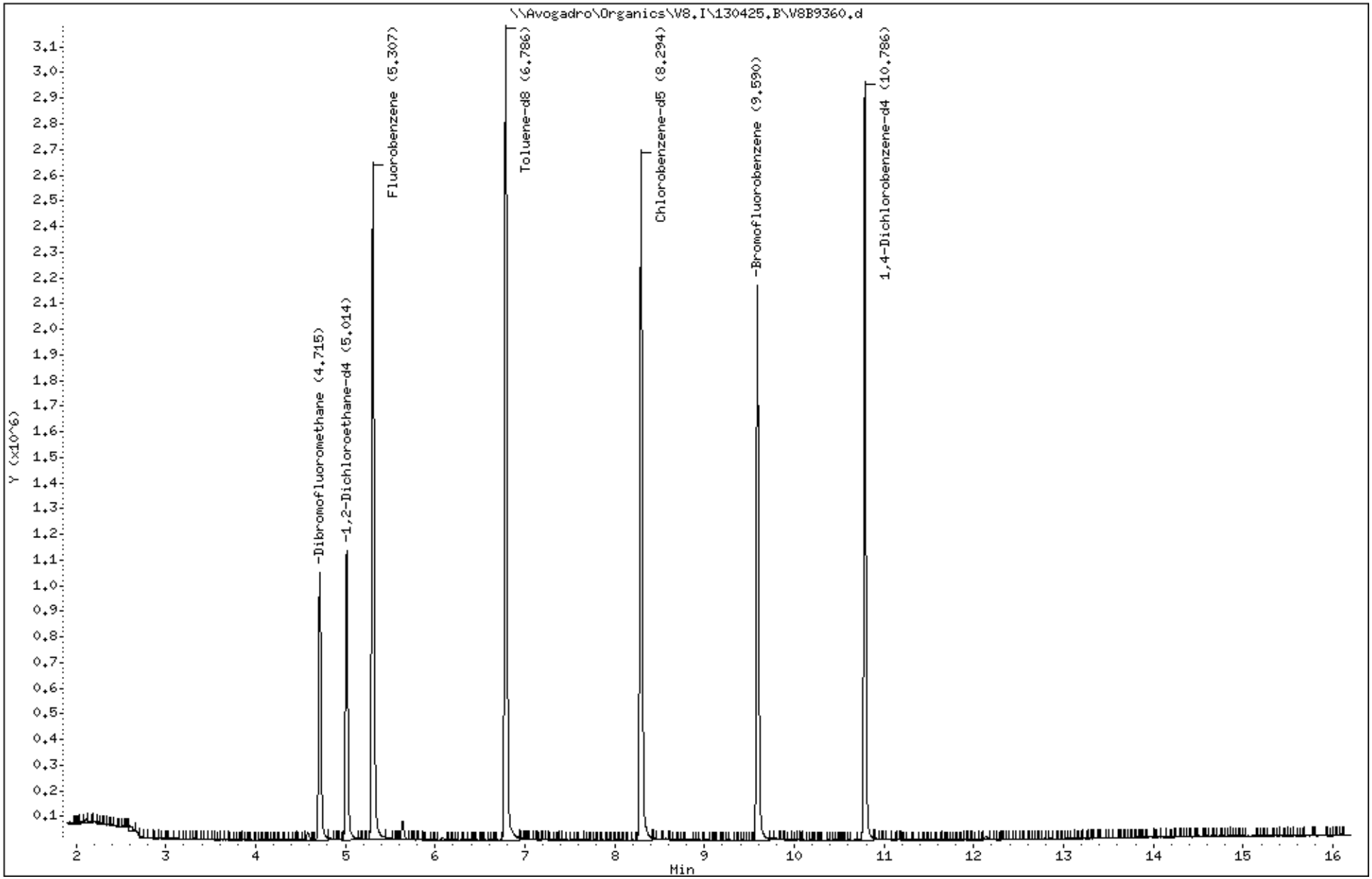
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Lab Smp Id: M0582-03A Client Smp ID: MW-9-042313
Inj Date : 25-APR-2013 14:49
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-03A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	35 Chloroform	83	4.577	4.580	(0.862)	22078	0.92571	0.92
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	591930	52.5676	52
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	133315	51.1891	51
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2223272	50.0000	
	47 Trichloroethene	130	5.644	5.634	(1.064)	23502	1.82128	1.8
$	58 Toluene-d8	98	6.785	6.789	(0.818)	2155822	50.5677	50
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1605012	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	782156	49.4343	49
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	737356	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9360.d
Date : 25-APR-2013 14:49
Client ID: MW-9-042313
Instrument: V8.i
Sample Info: 5ML,M0582-03A,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9360.d

Date : 25-APR-2013 14:49

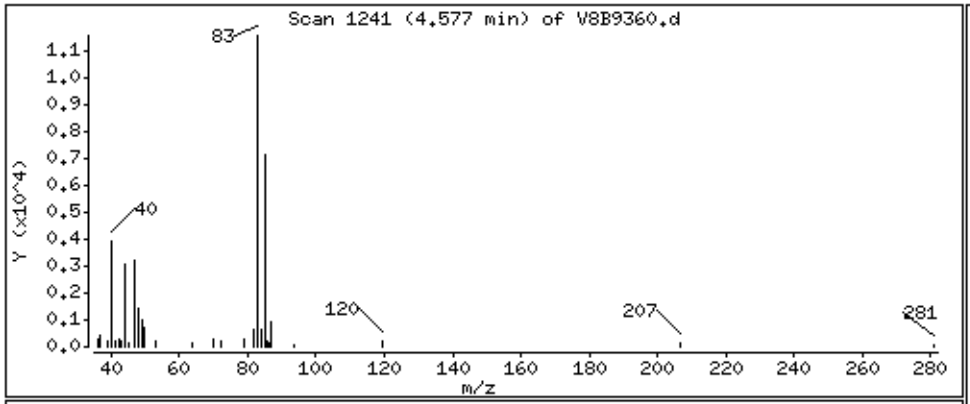
Client ID: MW-9-042313 Instrument: V8.i

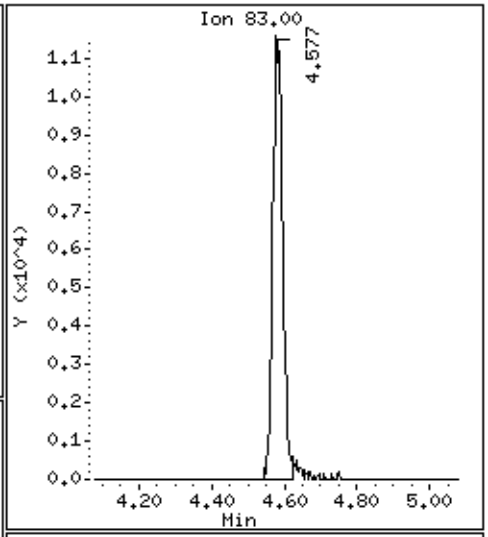
Sample Info: 5ML,M0582-03A,,71366

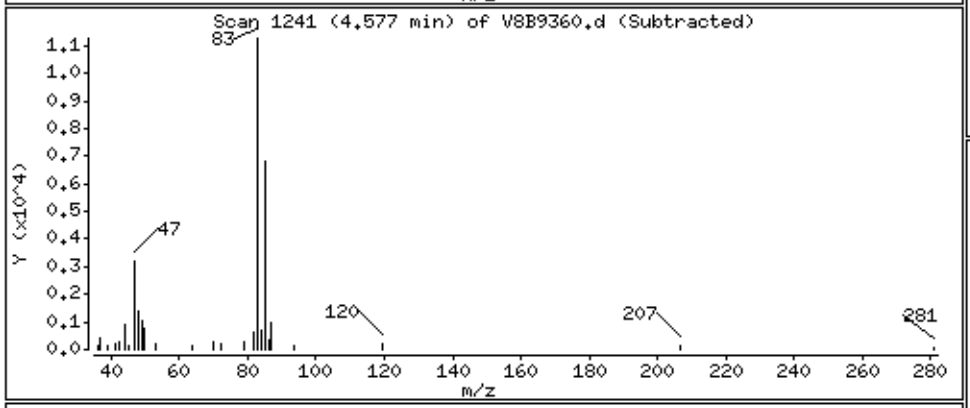
Purge Volume: 5.0 Operator: V10 SRC: LIMS

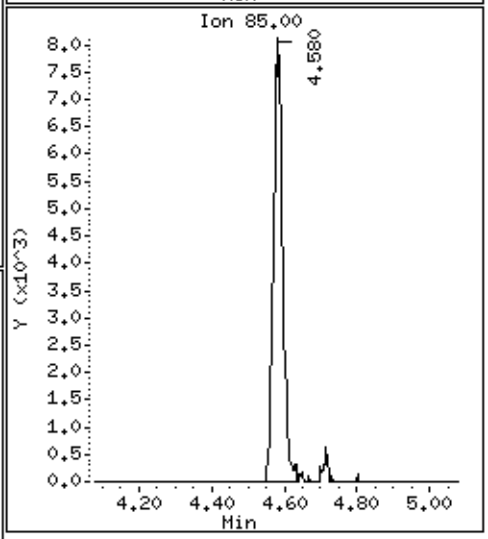
Column phase: DB-624 Column diameter: 0.25

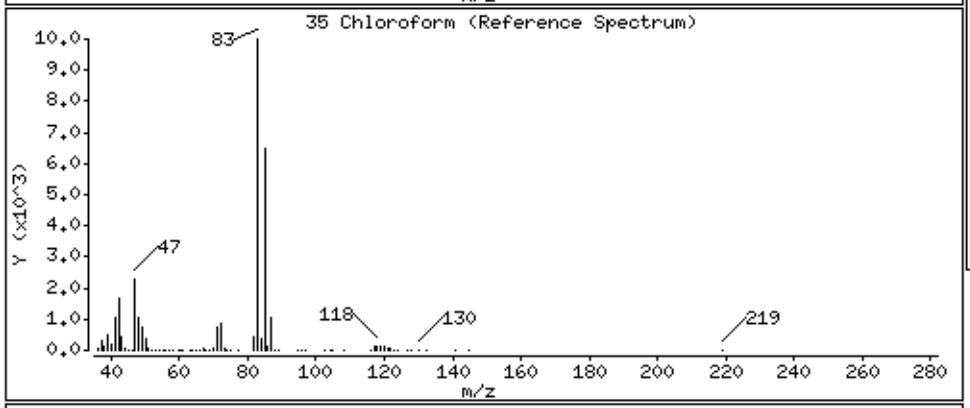
35 Chloroform Concentration: 0.92 ug/L

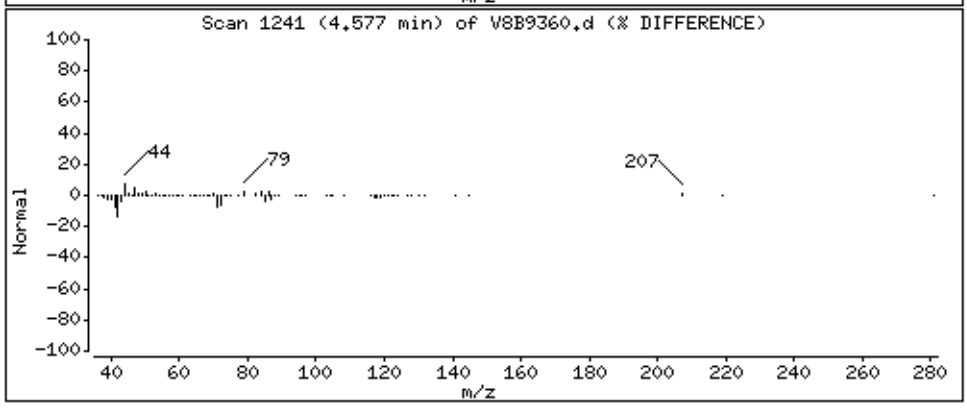












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9360.d

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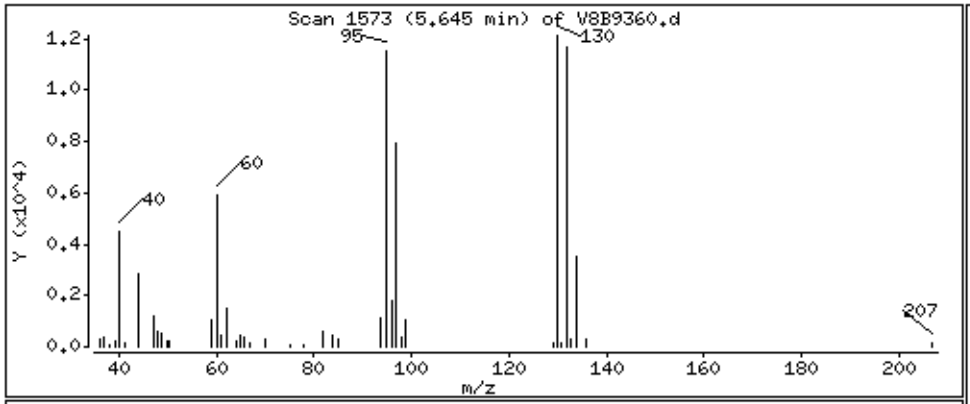
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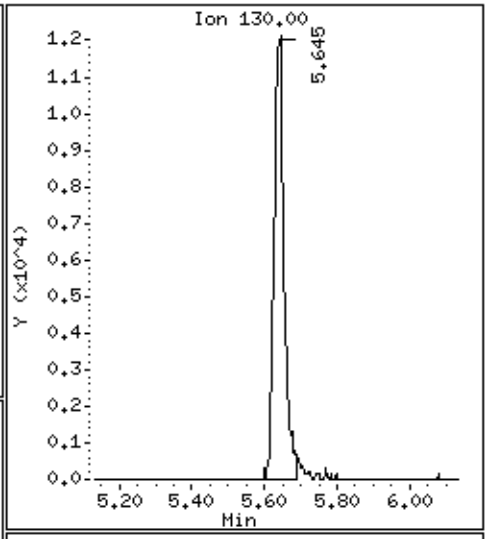
Sample Info: 5ML,M0582-03A,,71366

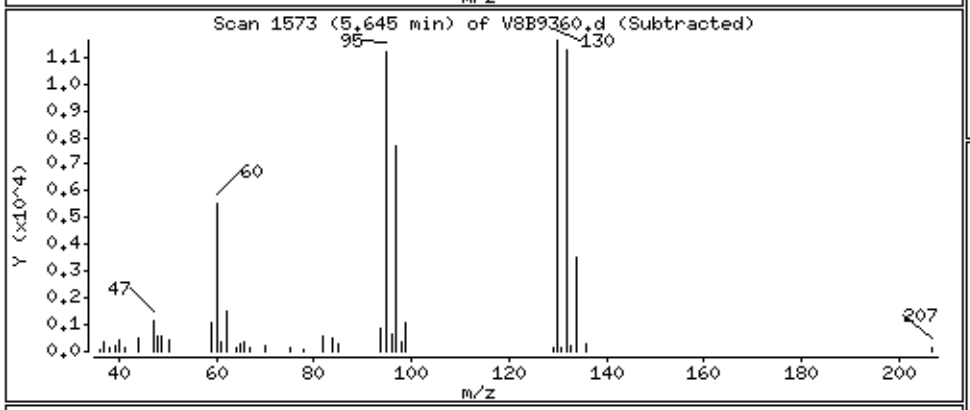
Purge Volume: 5.0 Operator: V10 SRC: LIMS

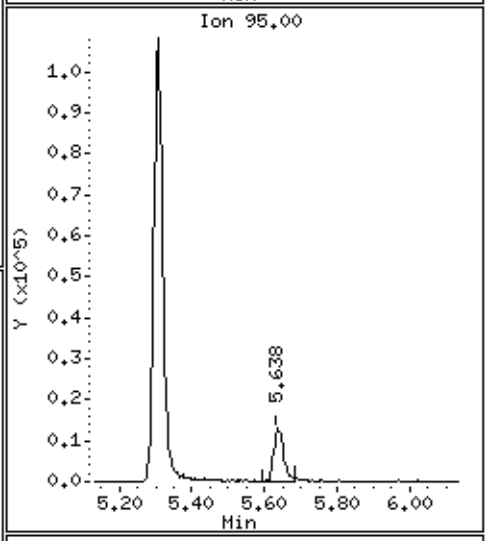
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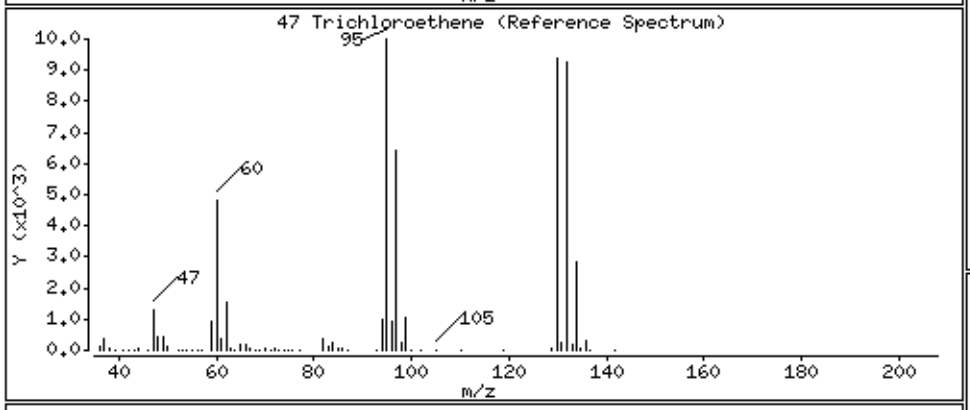
47 Trichloroethene Concentration: 1.8 ug/L

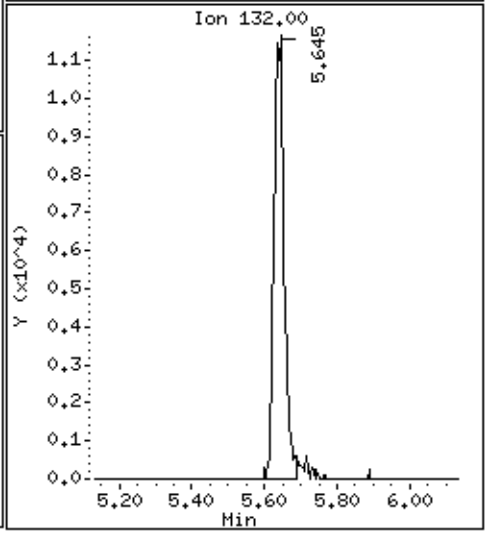


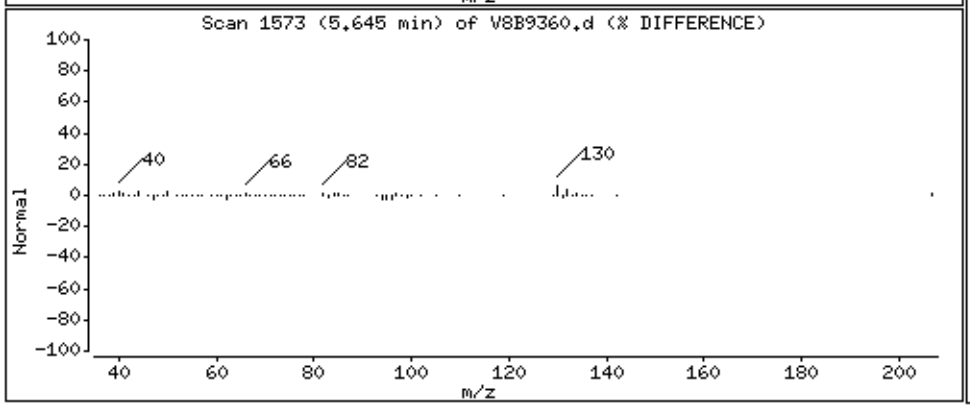












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9361.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9361.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9361.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

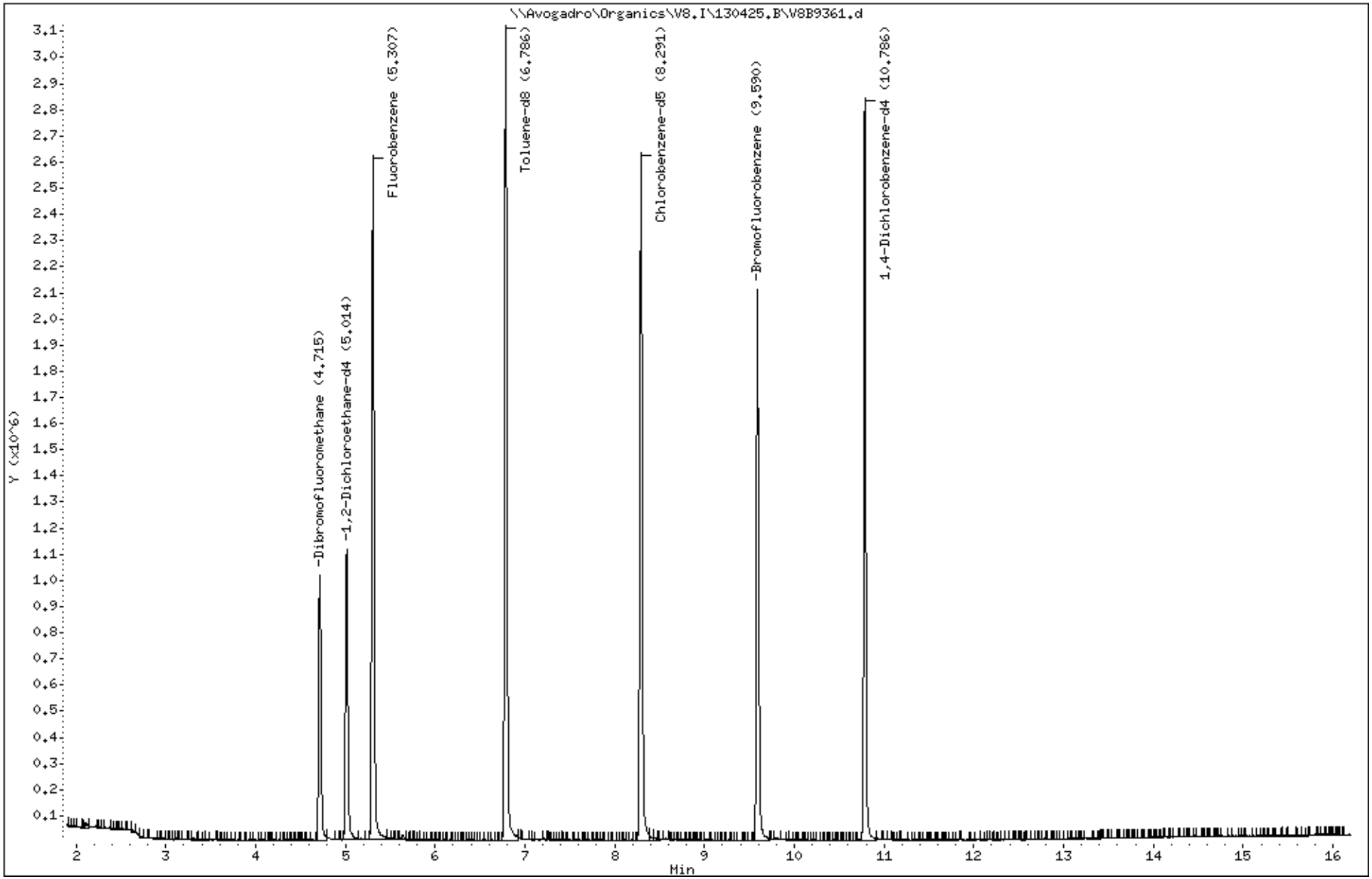
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Inj Date : 25-APR-2013 15:16
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-04A,,71366
Misc Info :
Comment   :
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Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 36 Dibromofluoromethane	113	4.715	4.715	(0.889)	577320	52.2162	52
$ 42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	129422	50.6113	51
* 46 Fluorobenzene	96	5.306	5.306	(1.000)	2182989	50.0000	
$ 58 Toluene-d8	98	6.785	6.789	(0.818)	2108233	50.1173	50
* 68 Chlorobenzene-d5	117	8.290	8.293	(1.000)	1583688	50.0000	
$ 79 Bromofluorobenzene	95	9.589	9.589	(1.157)	767717	49.1751	49
* 92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	706425	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9361.d
Date : 25-APR-2013 15:16
Client ID: MW-6-042313
Instrument: V8.i
Sample Info: 5ML,M0582-04A,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9362.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	0.95	J
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	1.8	J
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

EPA SAMPLE NO.

DUP-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9362.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9362.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

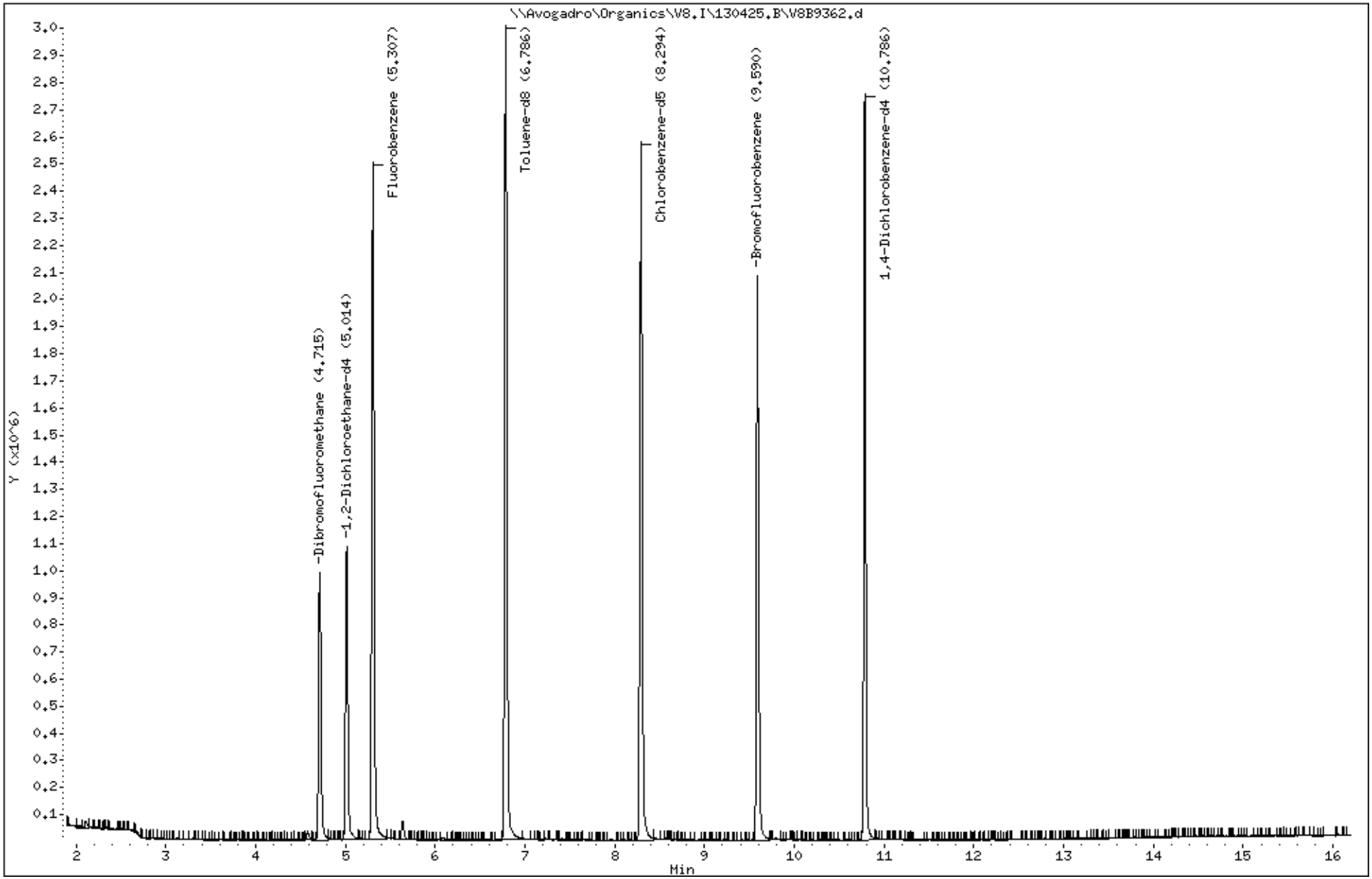
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Inj Date : 25-APR-2013 15:43
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-05A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	35 Chloroform	83	4.583	4.580	(0.864)	21483	0.94733	0.95
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	555829	51.9140	52
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	126354	51.0250	51
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2113961	50.0000	
	47 Trichloroethene	130	5.638	5.634	(1.062)	22471	1.83143	1.8
$	58 Toluene-d8	98	6.785	6.789	(0.818)	2028884	50.2450	50
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1520207	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	741123	49.4540	49
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	688097	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9362.d
Date : 25-APR-2013 15:43
Client ID: DUP-1-042313
Instrument: V8.i
Sample Info: 5ML,M0582-05A,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9362.d

Date : 25-APR-2013 15:43

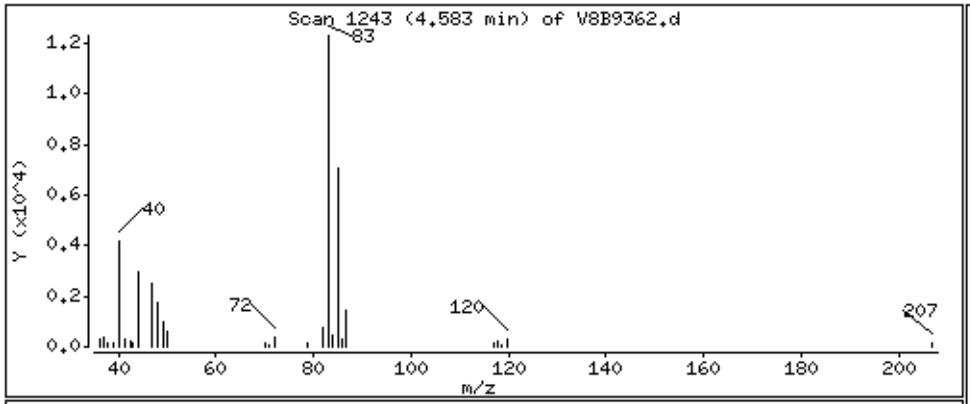
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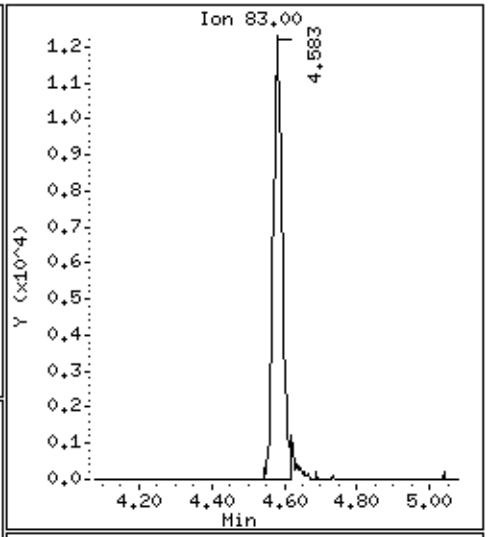
Sample Info: 5ML,M0582-05A,,71366

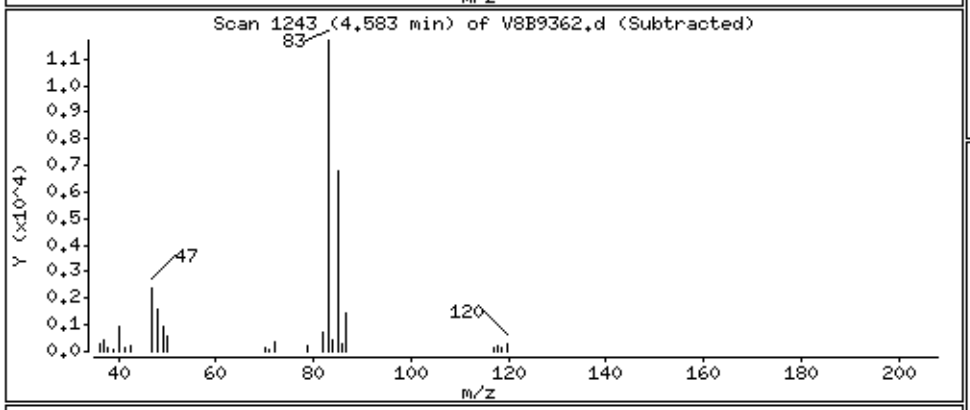
Purge Volume: 5.0 Operator: V10 SRC: LIMS

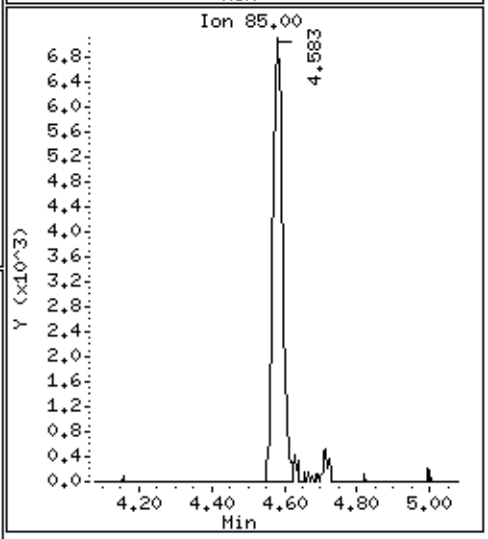
Column phase: DB-624 Column diameter: 0.25

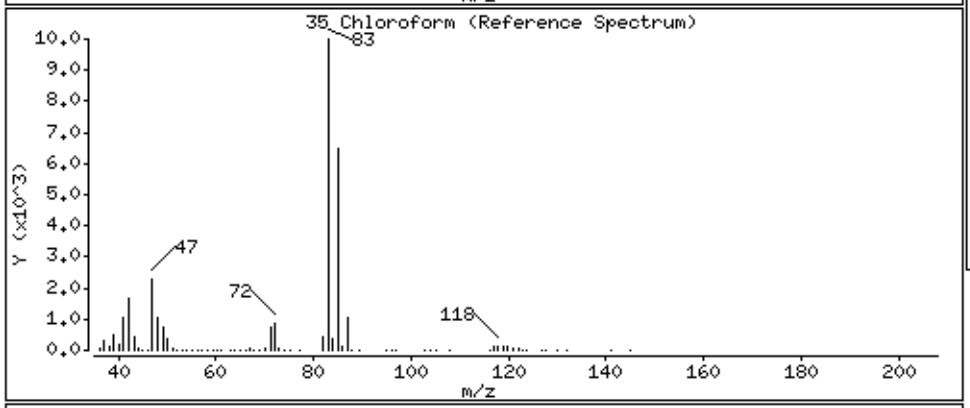
35 Chloroform Concentration: 0.95 ug/L

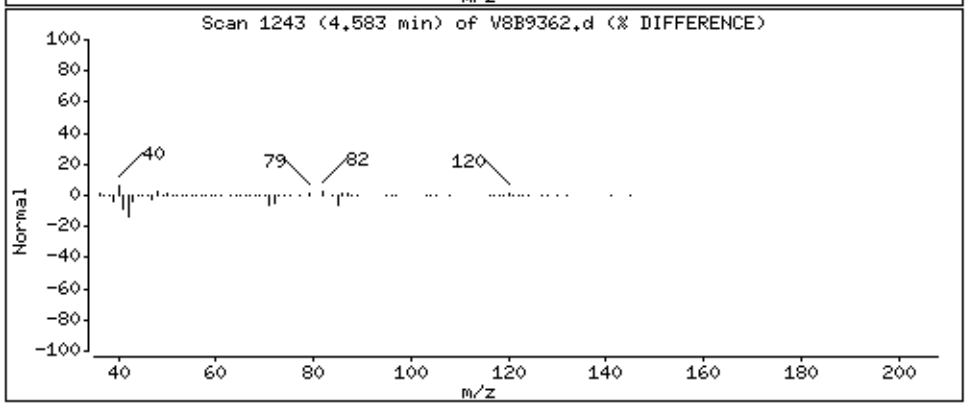












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9362.d

Date : 25-APR-2013 15:43

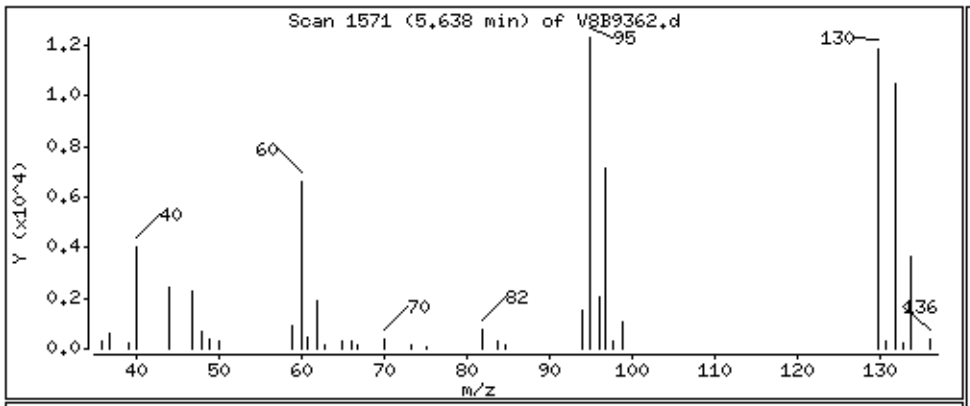
Client ID: DUP-1-042313 Instrument: V8.i

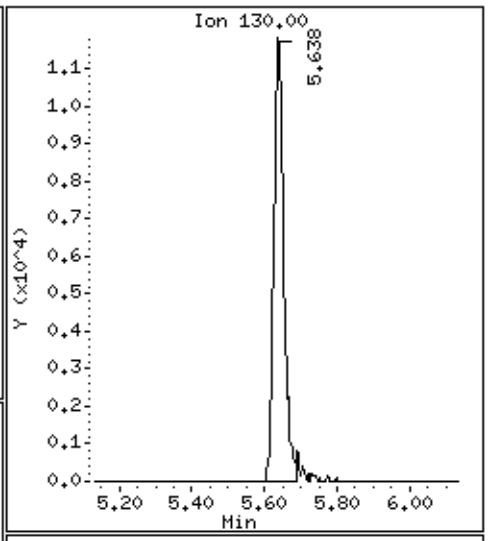
Sample Info: 5ML,M0582-05A,,71366

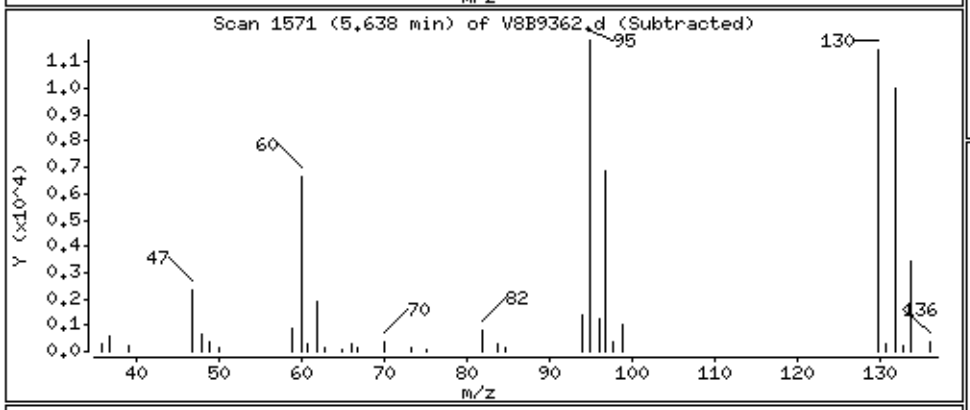
Purge Volume: 5.0 Operator: V10 SRC: LIMS

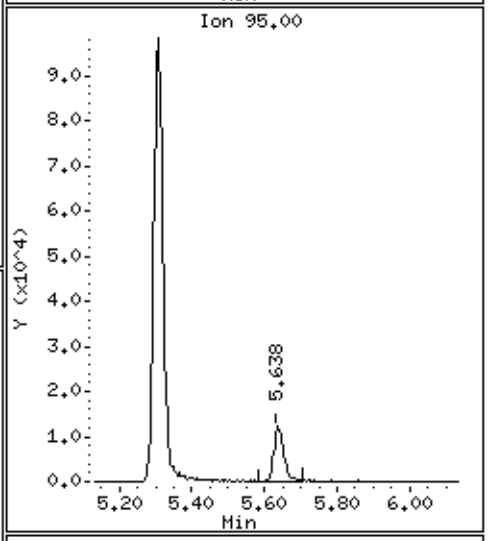
Column phase: DB-624 Column diameter: 0.25

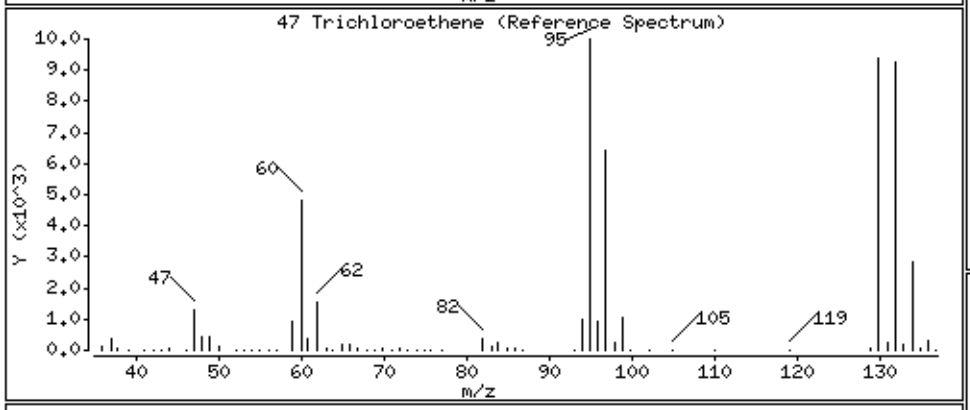
47 Trichloroethene Concentration: 1.8 ug/L

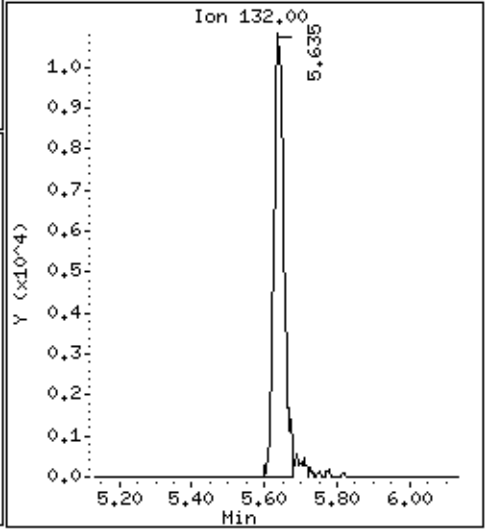


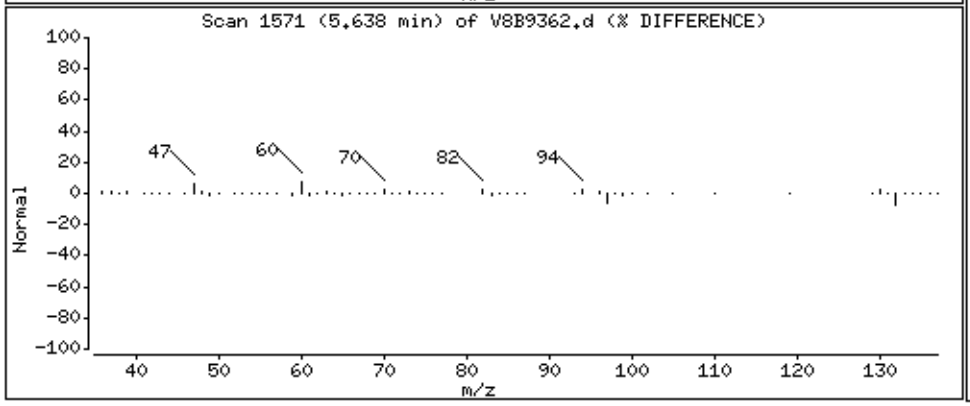












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9363.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	9.7	
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

EPA SAMPLE NO.

MW-4-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9363.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9363.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

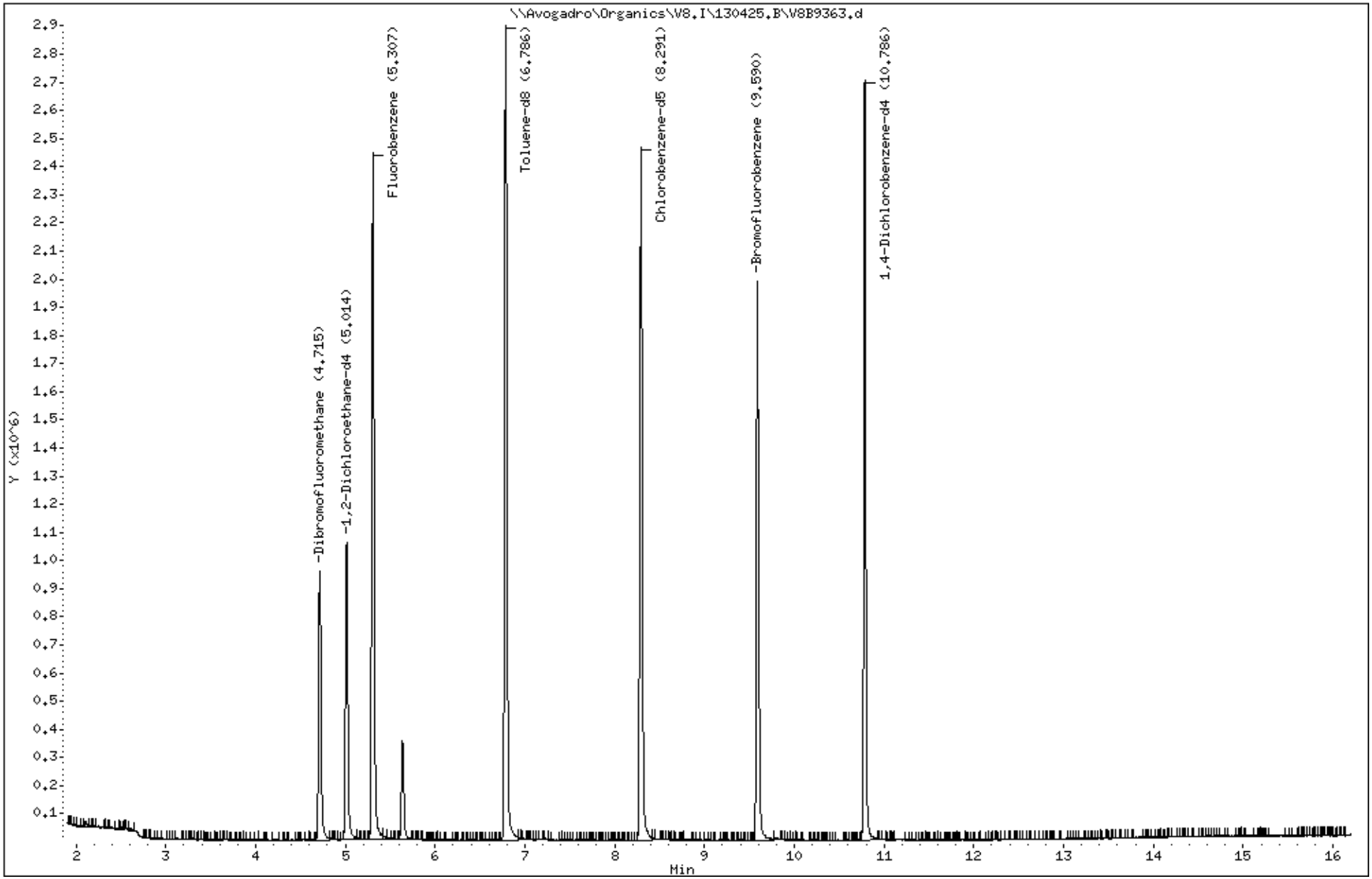
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Lab Smp Id: M0582-06A Client Smp ID: MW-4-042313
Inj Date : 25-APR-2013 16:11
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-06A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	546855	53.3261	53
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	121202	51.1009	51
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2024755	50.0000	
	47 Trichloroethene	130	5.638	5.634	(1.062)	114243	9.72125	9.7
$	58 Toluene-d8	98	6.786	6.789	(0.819)	1984239	50.0247	50
*	68 Chlorobenzene-d5	117	8.290	8.293	(1.000)	1493305	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	721359	49.0023	49
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	666944	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9363.d
Date : 25-APR-2013 16:11
Client ID: MW-4-042313
Instrument: V8.i
Sample Info: 5ML,M0582-06A,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9363.d

Date : 25-APR-2013 16:11

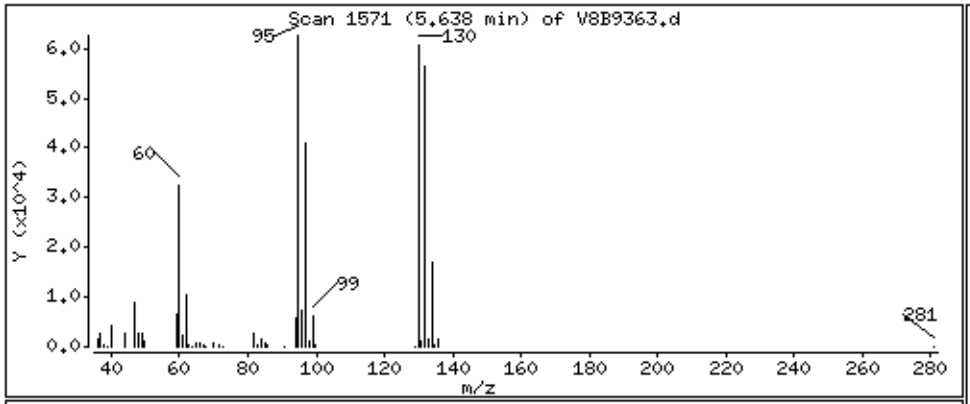
Client ID: MW-4-042313 Instrument: V8.i

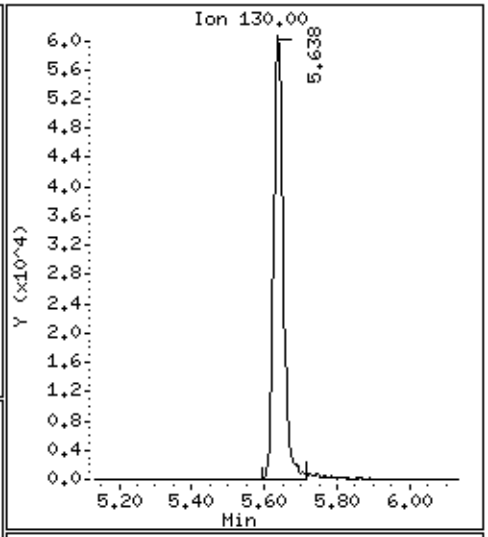
Sample Info: 5ML,M0582-06A,,71366

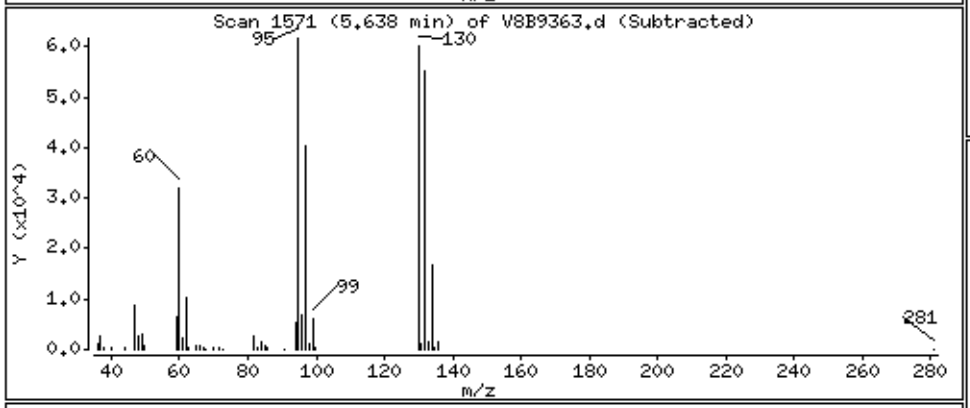
Purge Volume: 5.0 Operator: V10 SRC: LIMS

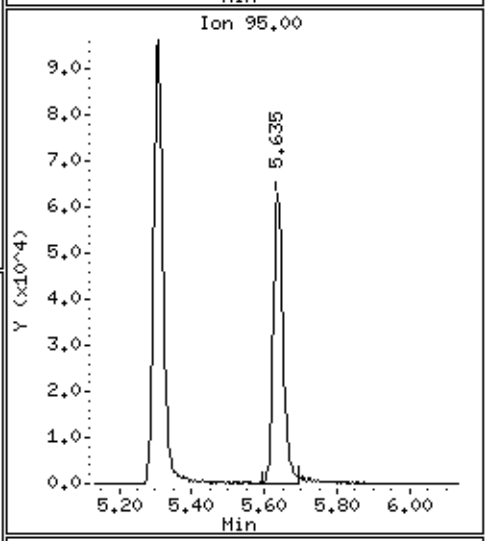
Column phase: DB-624 Column diameter: 0.25

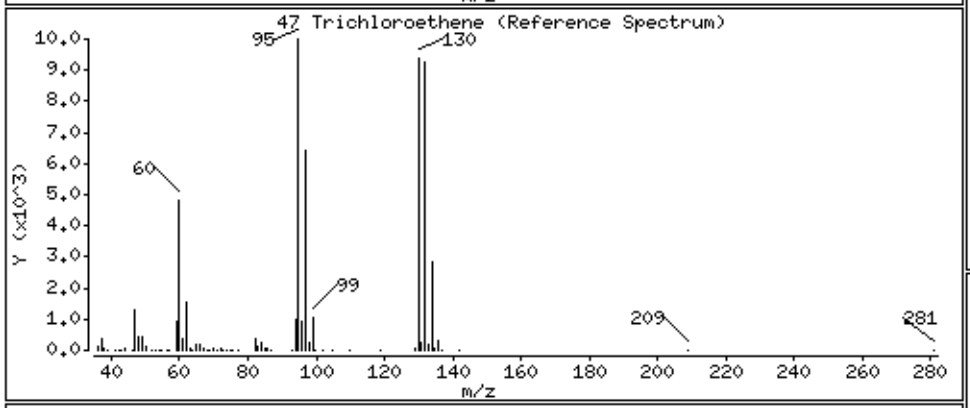
47 Trichloroethene Concentration: 9.7 ug/L

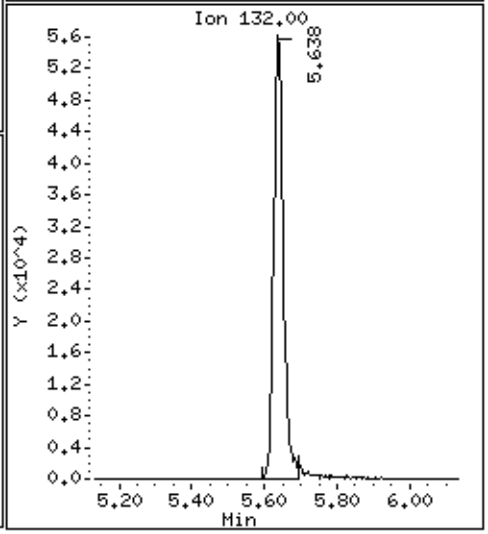


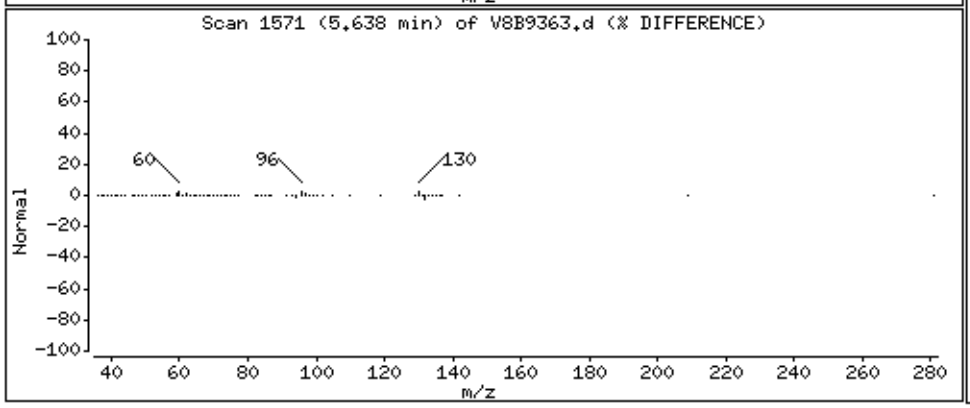












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9364.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	0.96	J
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	0.78	J
1634-04-4	Methyl tert-butyl ether	4.1	J
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	130	
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	20	
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

EPA SAMPLE NO.

MW-5-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9364.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9364.d
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Inj Date : 25-APR-2013 16:38
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-07A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14
Processing Host: TARGET115

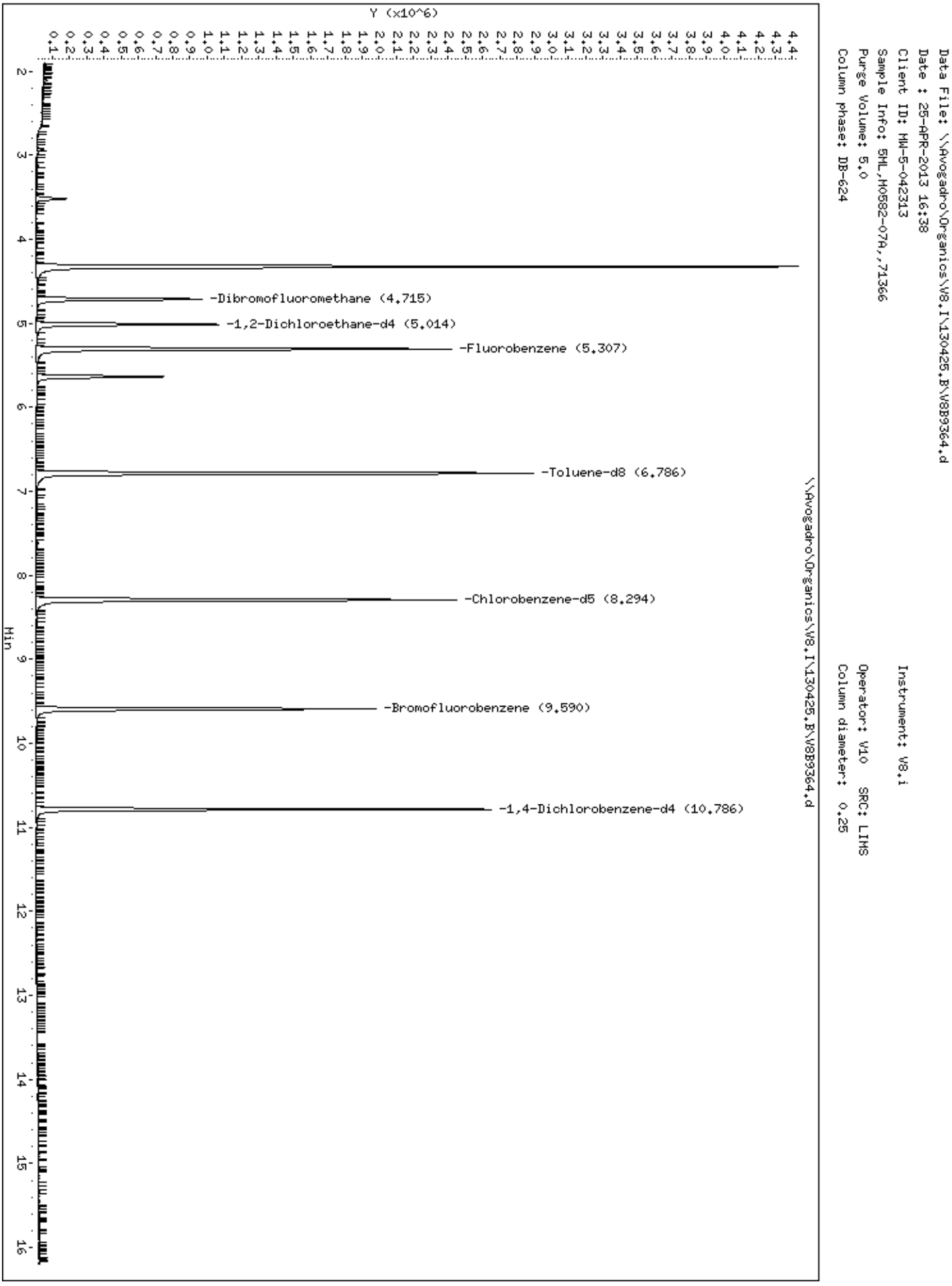
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	10 1,1-Dichloroethene	96	2.930	2.933	(0.552)	10294	0.96239	0.96
	12 Acetone	58	2.962	2.966	(0.558)	3318	2.10435	2.1(Q)
	21 trans-1,2-Dichloroethene	96	3.532	3.525	(0.666)	9013	0.77946	0.78
	22 Methyl tert-butyl ether	73	3.516	3.522	(0.663)	138135	4.10449	4.1
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	1675259	130.849	130
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	538205	52.7944	53
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	119448	50.6605	51
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2012797	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	234234	20.0500	20
$	58 Toluene-d8	98	6.785	6.789	(0.819)	1953500	50.3778	50
*	68 Chlorobenzene-d5	117	8.290	8.293	(1.000)	1459865	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	705166	48.9996	49
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	650410	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d
Date : 25-APR-2013 16:38
Client ID: MW-5-042313
Sample Info: 5ML,M0582-07A,,71366
Purge Volume: 5.0
Column phase: DB-624
Instrument: V8.i
Operator: V10 SRC: LIMS
Column diameter: 0.25
Y (x10^6)
Min
-Dibromofluoromethane (4.715)
-1,2-Dichloroethane-d4 (5.014)
-Fluorobenzene (5.307)
-Toluene-d8 (6.786)
-Chlorobenzene-d5 (8.294)
-Bromofluorobenzene (9.590)
-1,4-Dichlorobenzene-d4 (10.786)
\\Avogadro\Organics\V8.I\130425.B\V8B9364.d

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d

Date : 25-APR-2013 16:38

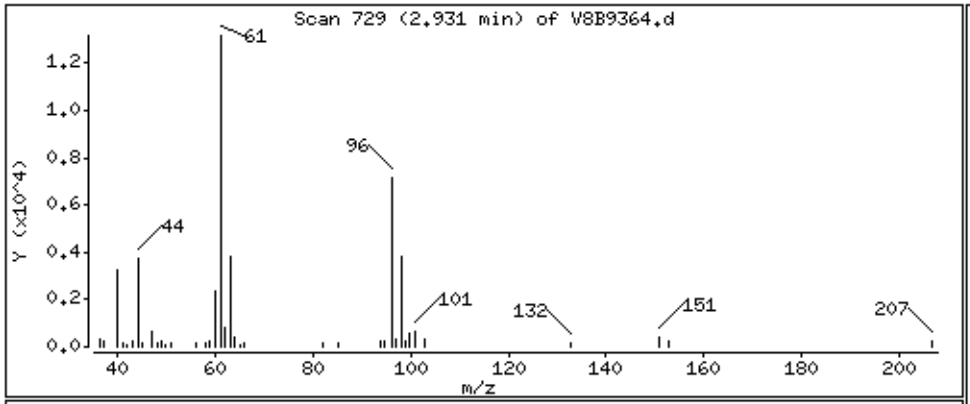
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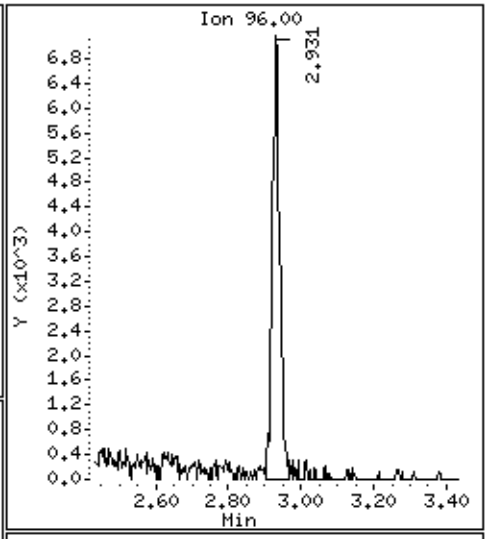
Sample Info: 5ML,M0582-07A,,71366

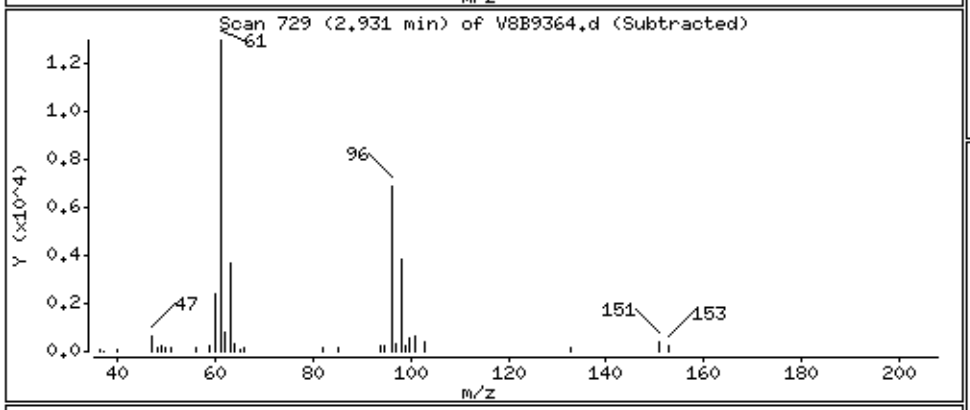
Purge Volume: 5.0 Operator: V10 SRC: LIMS

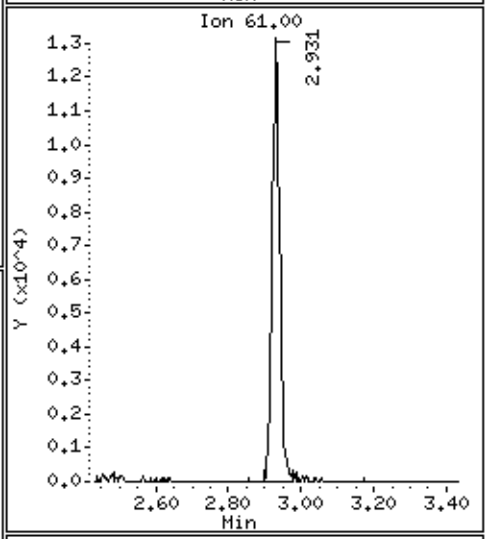
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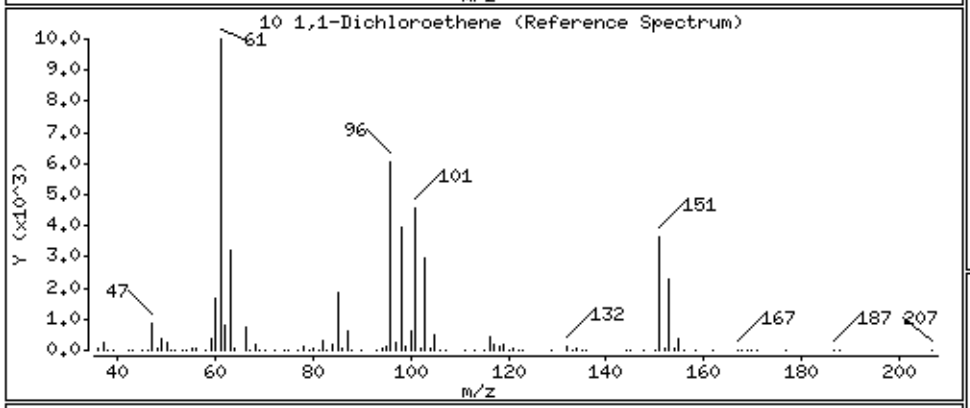
10 1,1-Dichloroethene Concentration: 0.96 ug/L

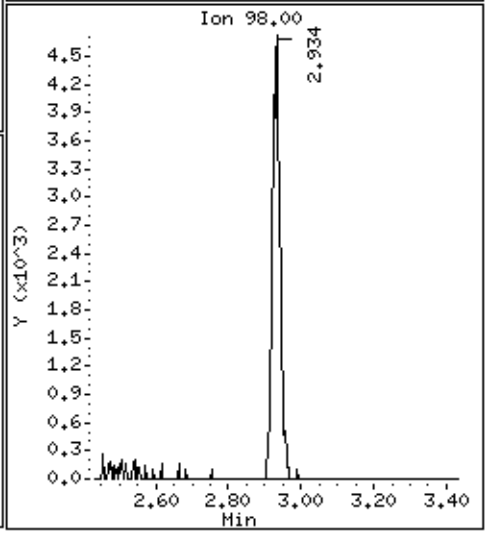


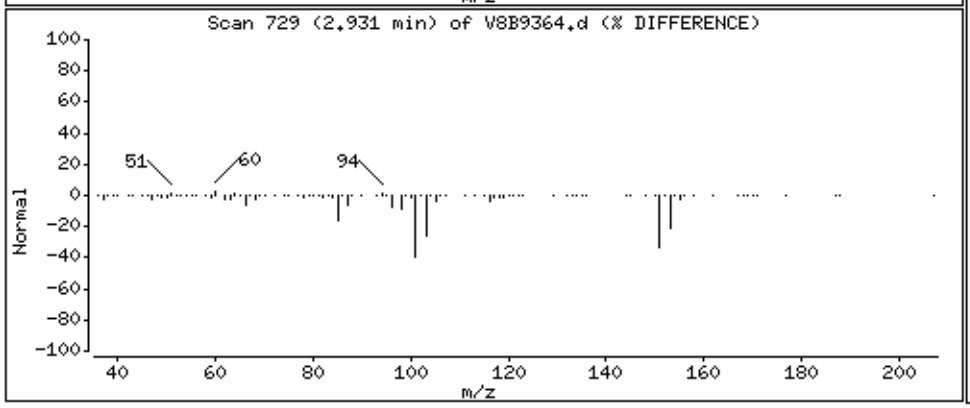












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d

Date : 25-APR-2013 16:38

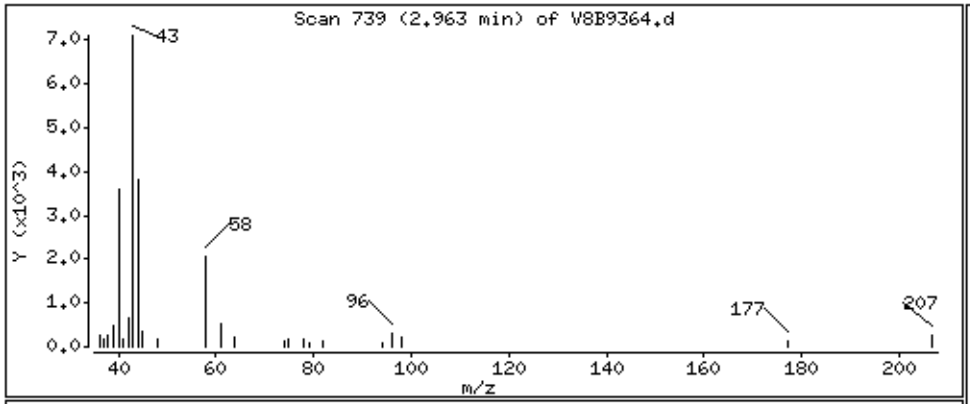
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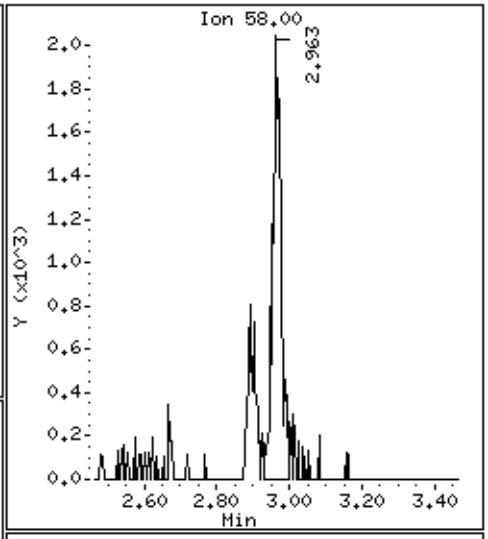
Sample Info: 5ML,M0582-07A,,71366

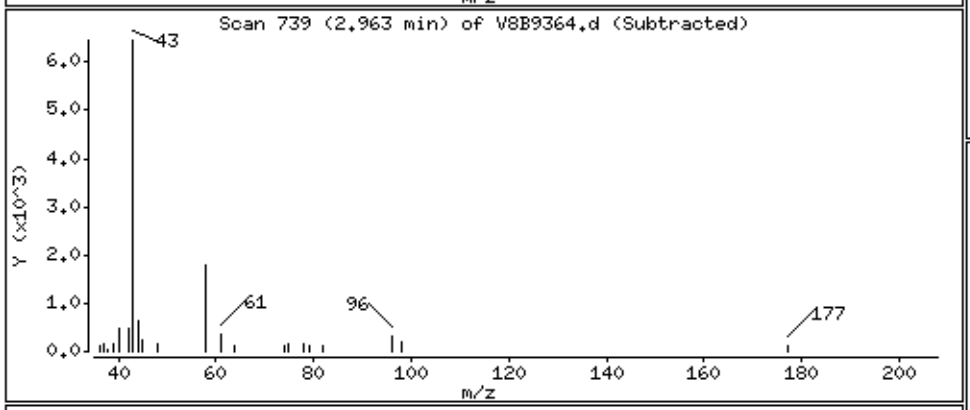
Purge Volume: 5.0 Operator: V10 SRC: LIMS

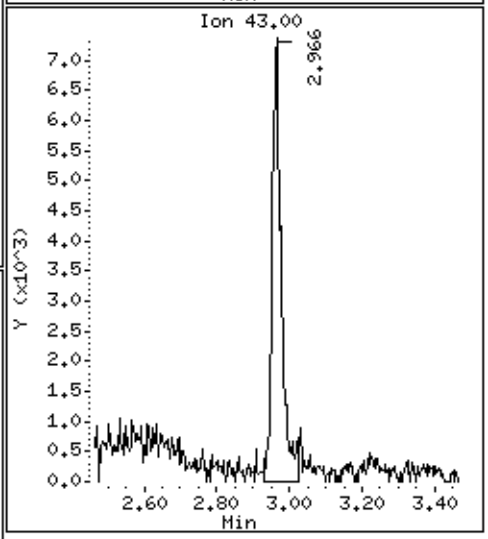
Column phase: DB-624 Column diameter: 0.25

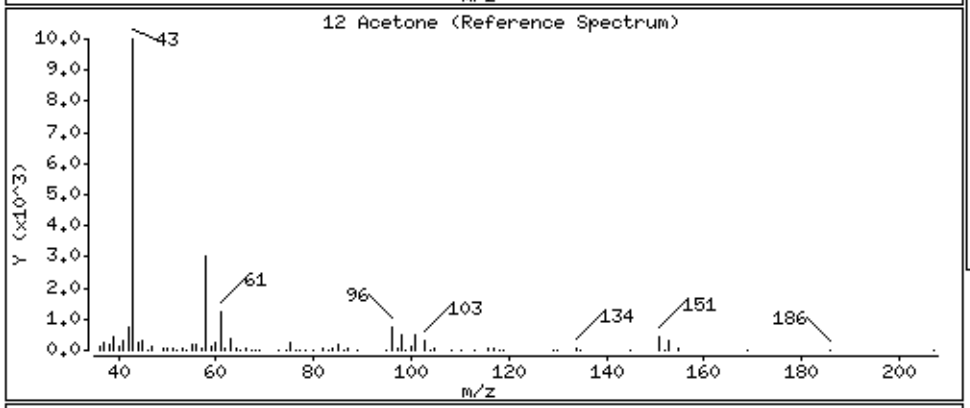
12 Acetone Concentration: 2.1 ug/L

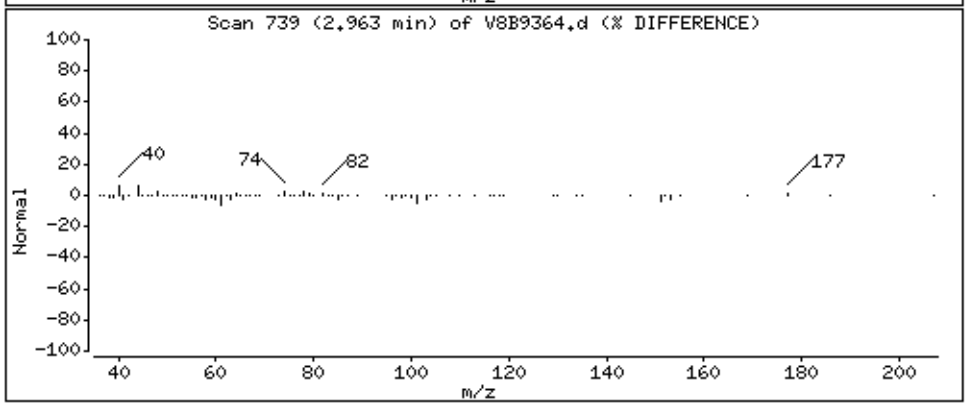












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d

Date : 25-APR-2013 16:38

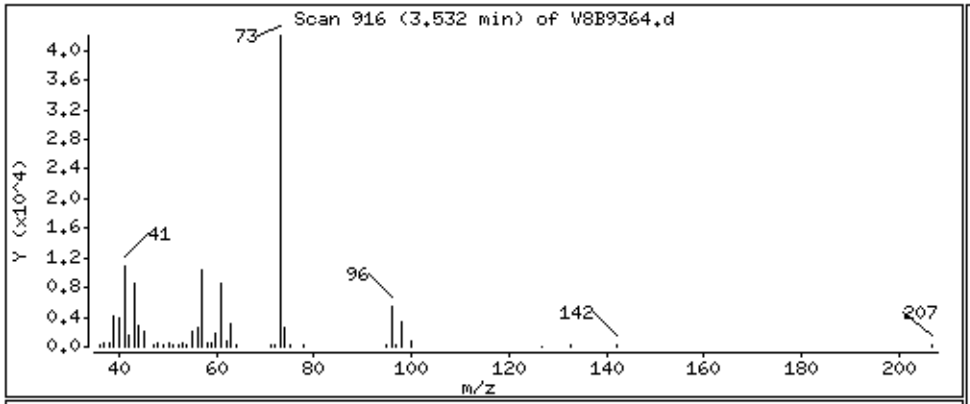
Client ID: MW-5-042313 Instrument: V8.i

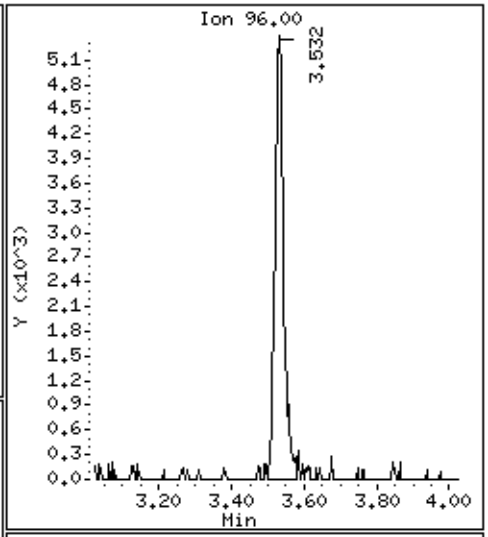
Sample Info: 5ML,M0582-07A,,71366

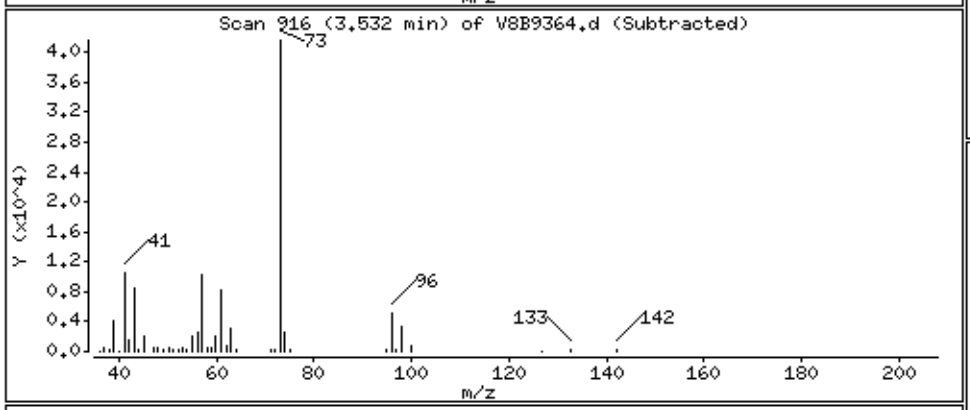
Purge Volume: 5.0 Operator: V10 SRC: LIMS

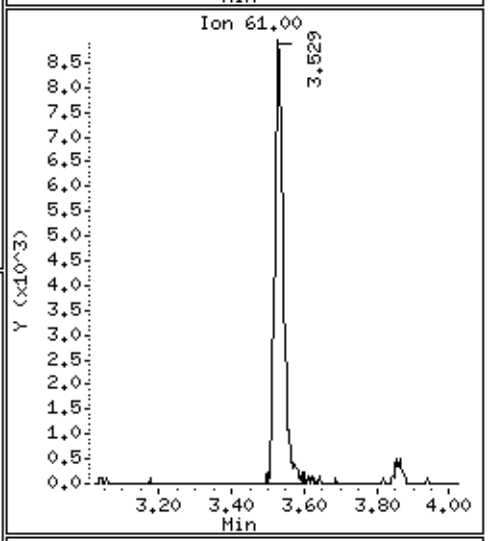
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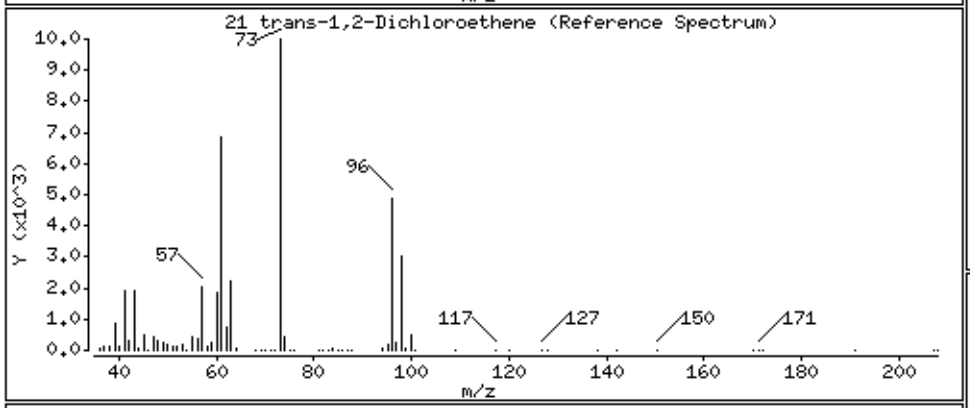
21 trans-1,2-Dichloroethene Concentration: 0.78 ug/L

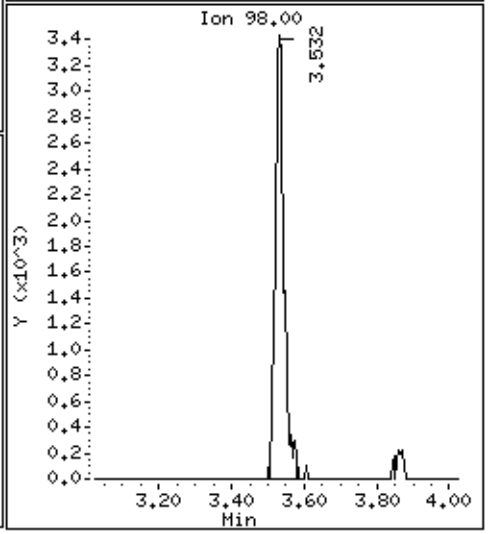


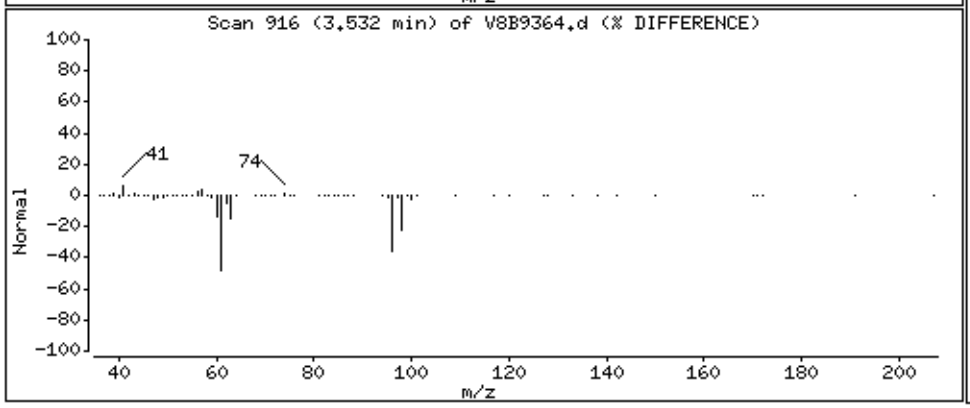












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d

Date : 25-APR-2013 16:38

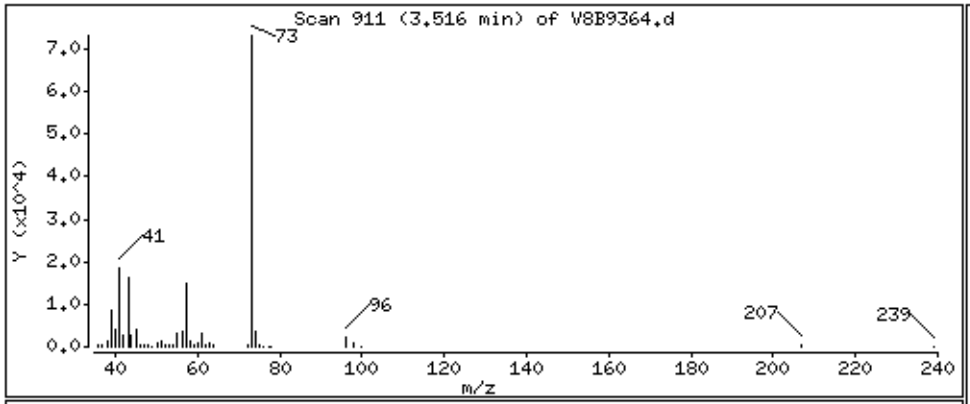
Client ID: MW-5-042313 Instrument: V8.i

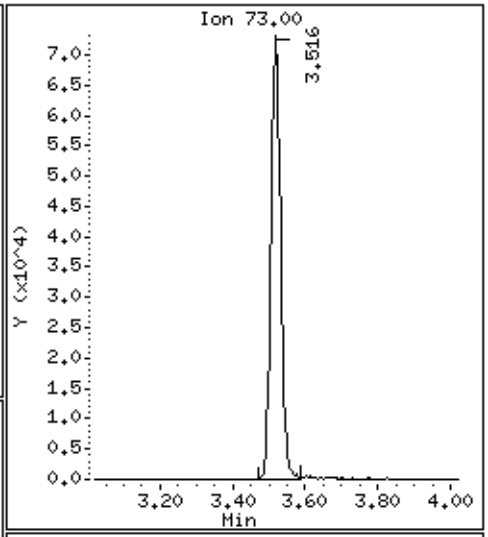
Sample Info: 5ML,M0582-07A,,71366

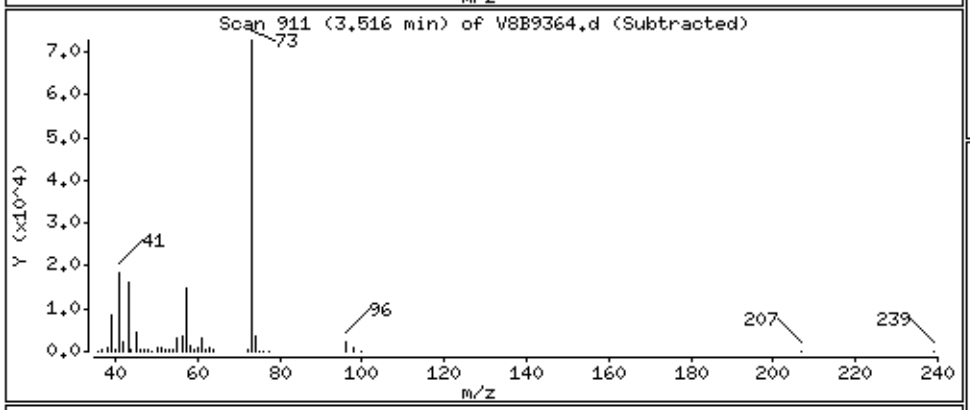
Purge Volume: 5.0 Operator: V10 SRC: LIMS

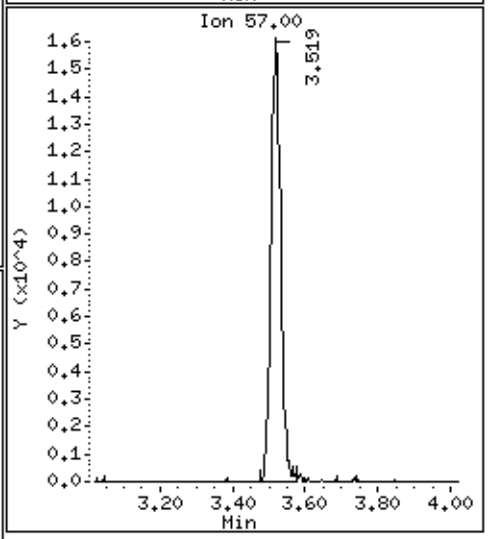
Column phase: DB-624 Column diameter: 0.25

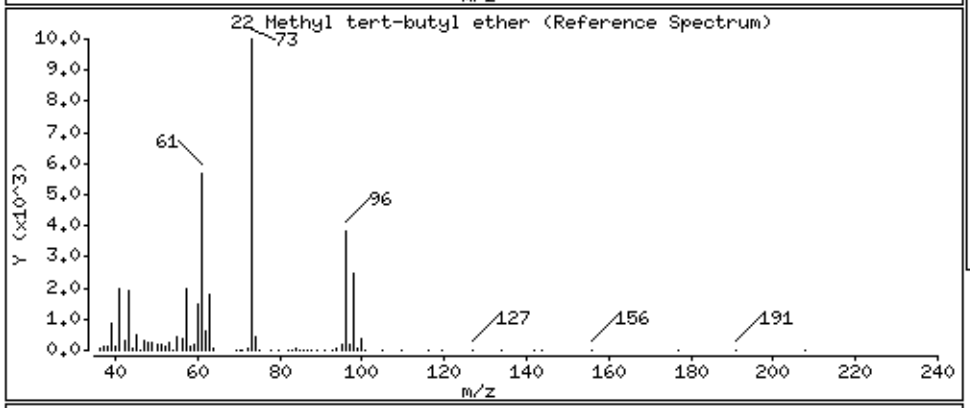
22 Methyl tert-butyl ether Concentration: 4.1 ug/L

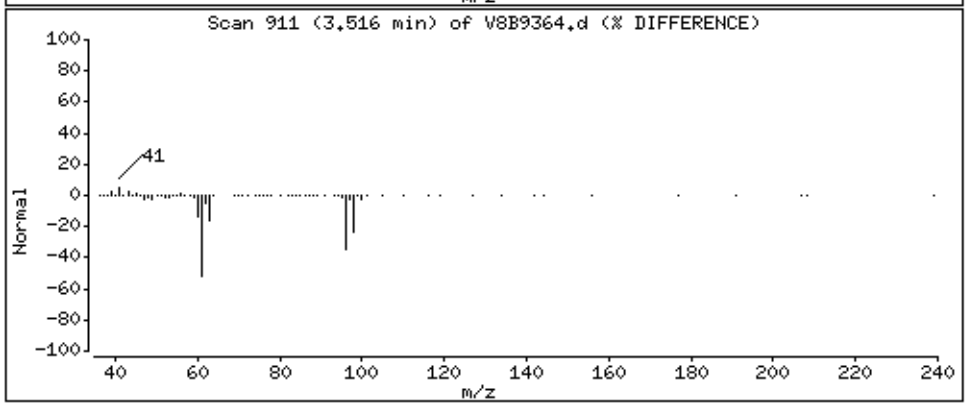












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d

Date : 25-APR-2013 16:38

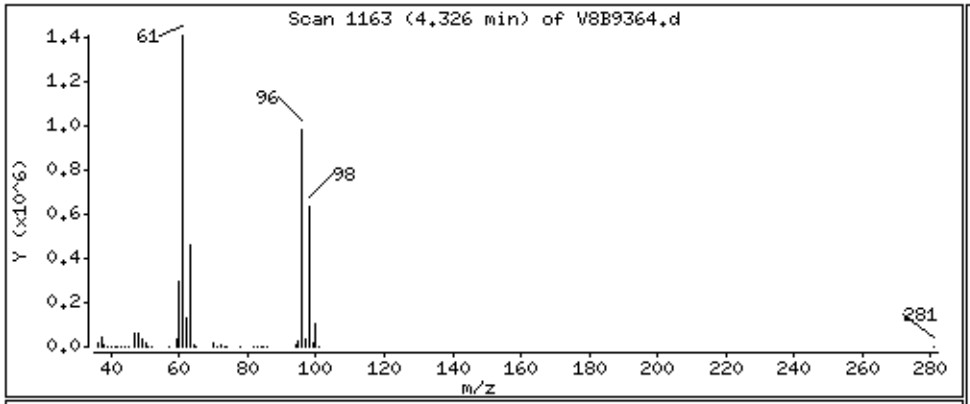
Client ID: MW-5-042313 Instrument: V8.i

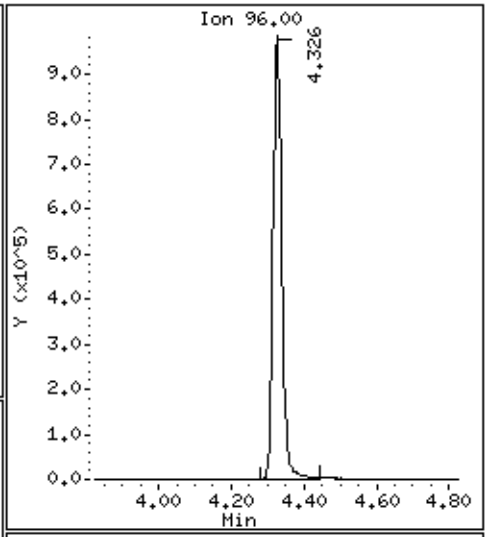
Sample Info: 5ML,M0582-07A,,71366

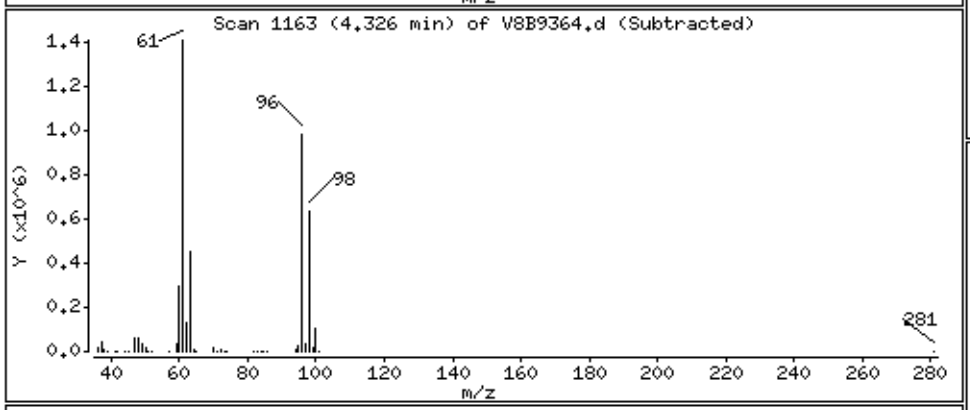
Purge Volume: 5.0 Operator: V10 SRC: LIMS

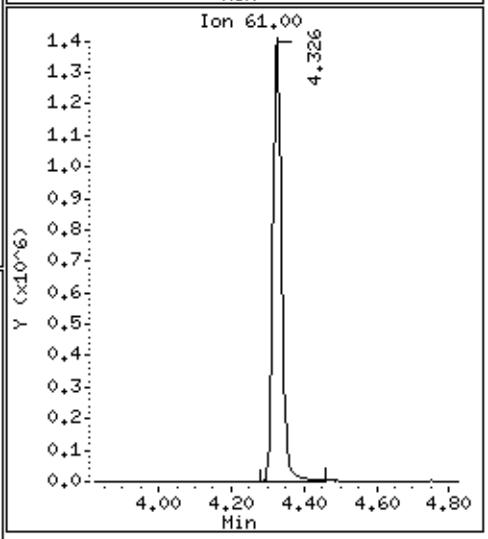
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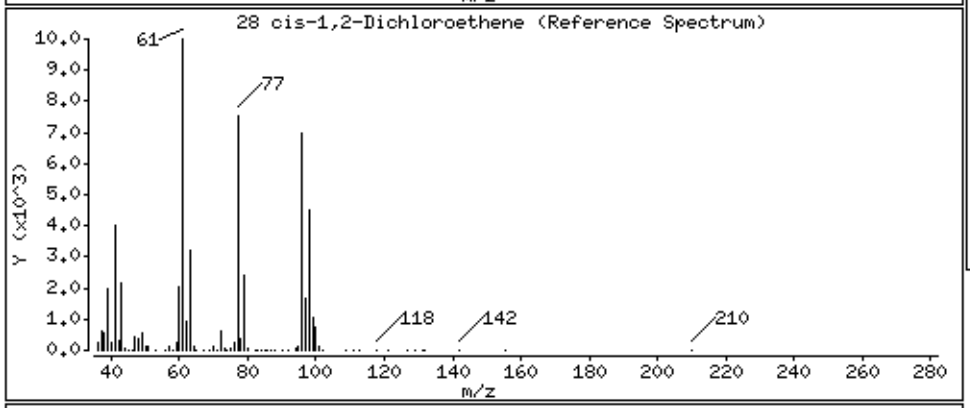
28 cis-1,2-Dichloroethene Concentration: 130 ug/L

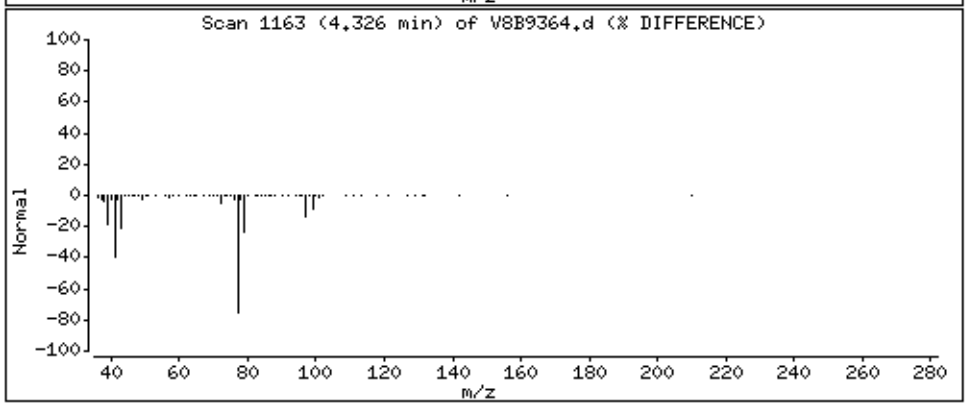












Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9364.d

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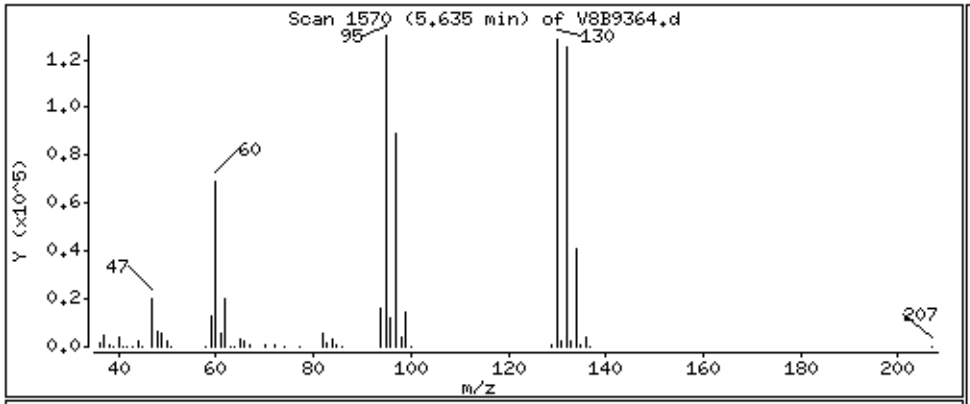
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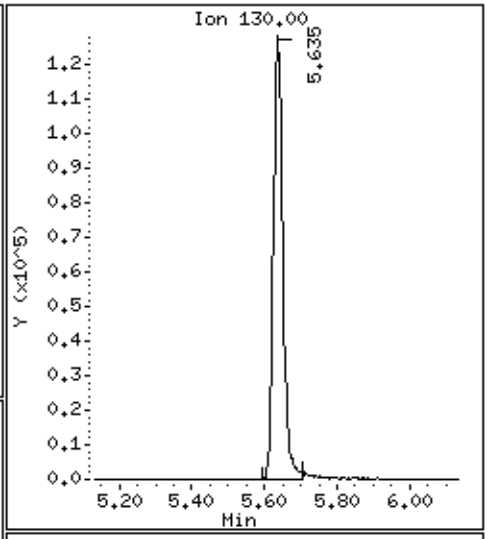
Sample Info: 5ML,M0582-07A,,71366

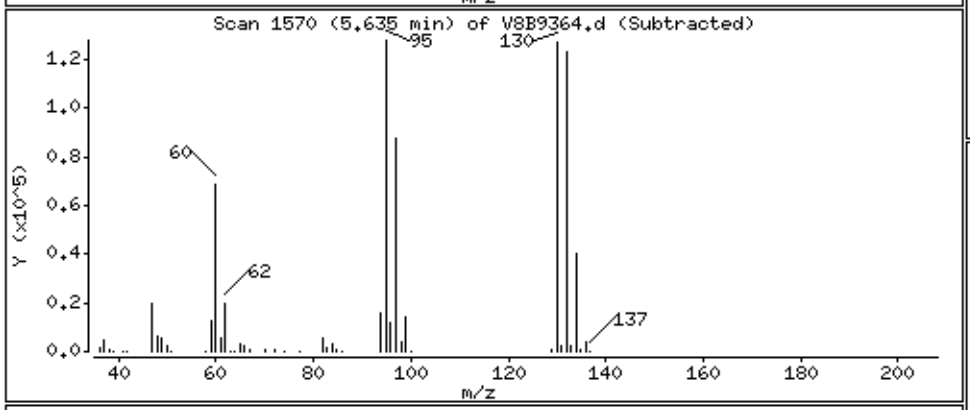
Purge Volume: 5.0 Operator: V10 SRC: LIMS

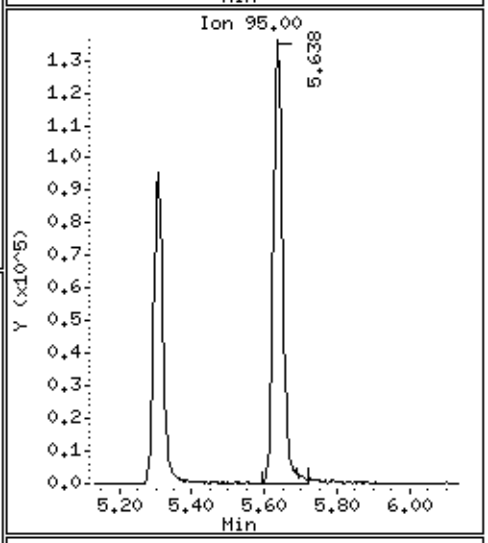
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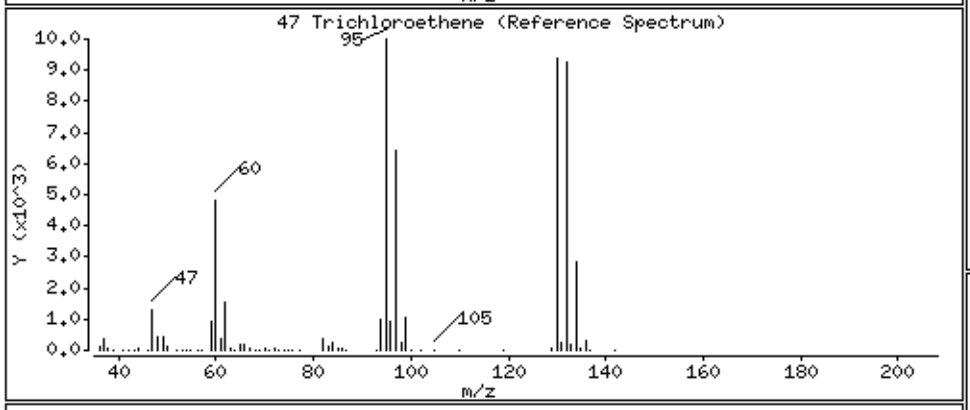
47 Trichloroethene Concentration: 20 ug/L

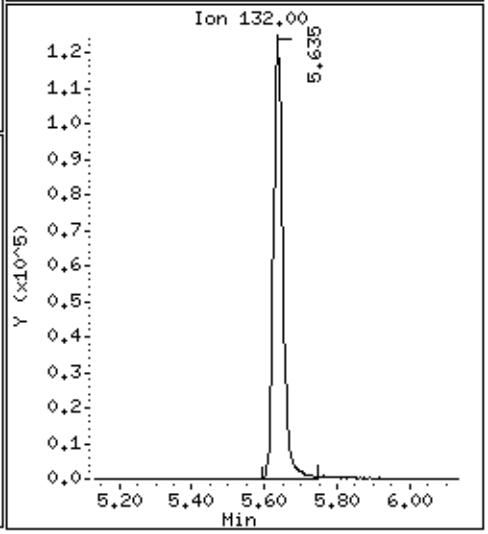


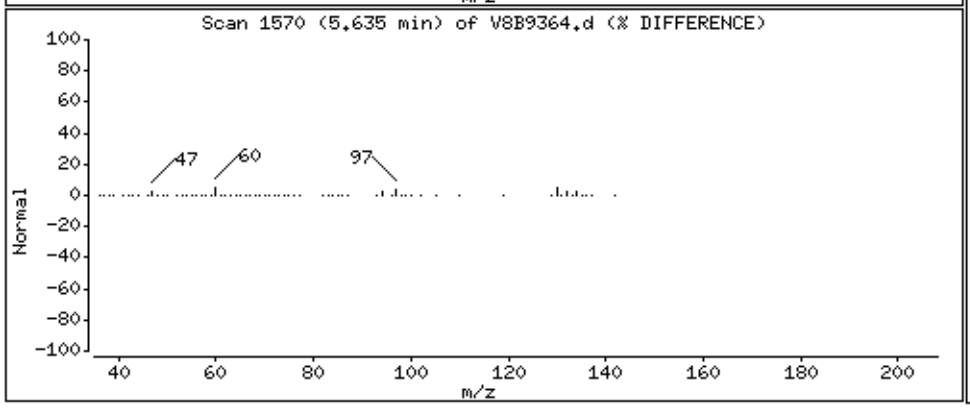












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9357.d
Report Date: 30-Apr-2013 09:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

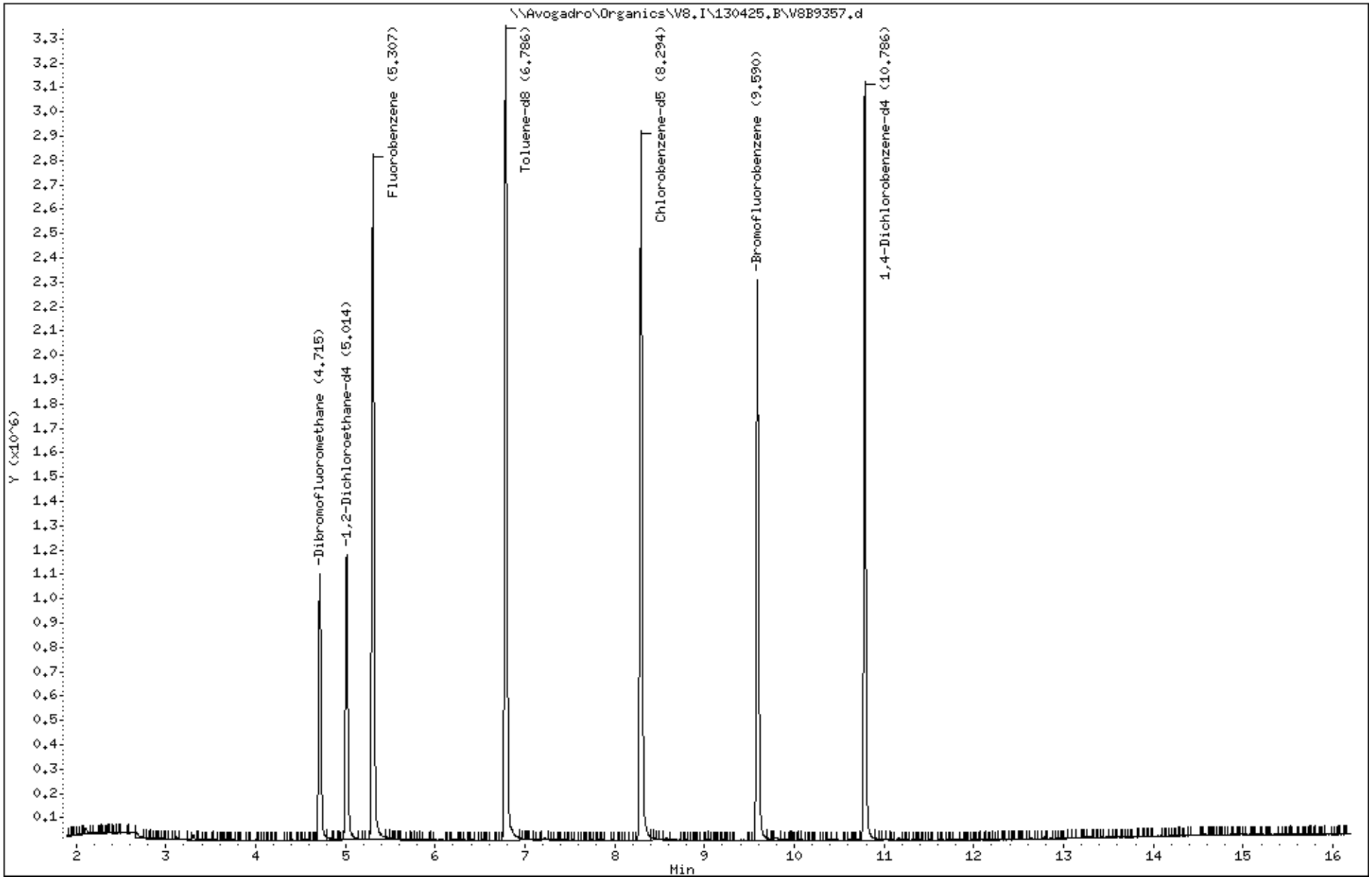
Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9357.d
Lab Smp Id: M0582-08A Client Smp ID: TRIP BLANK
Inj Date : 25-APR-2013 13:27
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-08A,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 36 Dibromofluoromethane	113	4.715	4.715	(0.889)	620594	50.8850	51
$ 42 1,2-Dichloroethane-d4	102	5.011	5.014	(0.944)	143640	50.9223	51
* 46 Fluorobenzene	96	5.306	5.306	(1.000)	2408010	50.0000	
$ 58 Toluene-d8	98	6.785	6.789	(0.818)	2331893	50.9238	51
* 68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1723958	50.0000	
$ 79 Bromofluorobenzene	95	9.589	9.589	(1.156)	844154	49.6717	50
* 92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	771825	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9357.d
Date : 25-APR-2013 13:27
Client ID: TRIP BLANK
Instrument: V8.i
Sample Info: 5ML,M0582-08A,,71366
Purge Volume: 5.0
Operator: V10 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.: M0582 SAS No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.213	0.213	0.213	0.212	0.213	0.181					0.208	6.3
Chloromethane	0.281	0.297	0.278	0.288	0.272	0.307					0.287	4.6
Vinyl chloride	0.287	0.303	0.288	0.285	0.275	0.262					0.283	4.8
Bromomethane	0.208	0.205	0.185	0.177	0.181	0.209					0.194	7.6
Chloroethane	0.164	0.169	0.160	0.148	0.147	0.139					0.155	7.4
Trichlorofluoromethane	0.355	0.366	0.363	0.348	0.350	0.316					0.350	5.1
1,1-Dichloroethene	0.260	0.274	0.269	0.271	0.270	0.251					0.266	3.2
Acetone	0.041	0.043	0.041	0.033	0.038						0.039	9.4
Iodomethane	0.224	0.291	0.287	0.321	0.337	0.181					0.274	21.7
Carbon disulfide	0.866	0.890	0.898	0.889	0.871	0.926					0.890	2.4
Methylene chloride	0.329	0.329	0.301	0.311	0.311	0.426					0.335	13.8
trans-1,2-Dichloroethene	0.287	0.298	0.288	0.290	0.290	0.270					0.287	3.2
Methyl tert-butyl ether	0.815	0.911	0.804	0.853	0.858	0.775					0.836	5.8
1,1-Dichloroethane	0.537	0.582	0.545	0.553	0.560	0.505					0.547	4.7
Vinyl acetate	0.792	0.942	0.855	0.896	0.892	0.716					0.849	9.7
2-Butanone	0.033	0.043	0.038	0.037	0.039						0.038	9.3
cis-1,2-Dichloroethene	0.311	0.336	0.313	0.321	0.321	0.305					0.318	3.4
2,2-Dichloropropane	0.417	0.462	0.456	0.449	0.460	0.372					0.436	8.2
Bromochloromethane	0.145	0.162	0.147	0.147	0.146	0.141					0.148	4.9
Chloroform	0.531	0.565	0.529	0.539	0.546	0.508					0.536	3.5
1,1,1-Trichloroethane	0.447	0.477	0.453	0.462	0.464	0.418					0.454	4.4
1,1-Dichloropropene	0.131	0.147	0.144	0.146	0.146	0.125					0.140	6.8
Carbon tetrachloride	0.363	0.395	0.385	0.394	0.399	0.336					0.378	6.5
1,2-Dichloroethane	0.427	0.464	0.425	0.441	0.444	0.430					0.439	3.3
Benzene	1.229	1.274	1.173	1.207	1.207	1.408					1.250	6.8
Trichloroethene	0.284	0.295	0.292	0.296	0.299	0.275					0.290	3.1
1,2-Dichloropropane	0.302	0.329	0.305	0.316	0.313	0.293					0.310	3.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0582 SAS No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.185	0.205	0.184	0.195	0.197	0.177					0.190	5.4
Bromodichloromethane	0.378	0.436	0.406	0.425	0.434	0.359					0.406	7.8
cis-1,3-Dichloropropene	0.460	0.523	0.494	0.521	0.529	0.397					0.487	10.5
4-Methyl-2-pentanone	0.242	0.286	0.251	0.279	0.289						0.269	8.0
Toluene	1.438	1.352	1.239	1.255	1.263	2.301					1.475	27.9
trans-1,3-Dichloropropene	0.405	0.490	0.451	0.479	0.492	0.355					0.445	12.3
1,1,2-Trichloroethane	0.257	0.282	0.251	0.268	0.273	0.268					0.267	4.2
1,3-Dichloropropane	0.614	0.678	0.609	0.646	0.641	0.564					0.625	6.3
Tetrachloroethene	0.322	0.339	0.325	0.328	0.327	0.313					0.326	2.5
2-Hexanone	0.221	0.288	0.262	0.274	0.284						0.266	10.2
Dibromochloromethane	0.367	0.438	0.408	0.431	0.439	0.347					0.405	9.7
1,2-Dibromoethane	0.364	0.413	0.376	0.396	0.397	0.353					0.383	6.0
Chlorobenzene	1.050	1.142	1.066	1.082	1.082	1.021					1.074	3.8
1,1,1,2-Tetrachloroethane	0.357	0.408	0.379	0.390	0.392	0.338					0.377	6.8
Ethylbenzene	0.548	0.597	0.553	0.567	0.567	0.598					0.572	3.7
m,p-Xylene	0.704	0.734	0.693	0.701	0.701	0.833					0.728	7.4
o-Xylene	0.688	0.719	0.666	0.678	0.681	0.741					0.695	4.2
Xylene (Total)	0.698	0.729	0.684	0.693	0.694	0.803					0.717	6.3
Styrene	1.013	1.183	1.133	1.174	1.173	0.862					1.090	11.8
Bromoform	0.219	0.285	0.263	0.284	0.293	0.204					0.258	14.7
Isopropylbenzene	1.604	1.787	1.696	1.741	1.728	1.467					1.670	7.0
1,1,2,2-Tetrachloroethane	1.035	1.124	0.972	1.043	1.035	1.074					1.047	4.8
Bromobenzene	0.902	0.974	0.905	0.927	0.928	0.891					0.921	3.3
1,2,3-Trichloropropane	1.206	1.386	1.213	1.305	1.300	1.526					1.323	9.1
n-Propylbenzene	0.873	0.949	0.890	0.918	0.902	0.844					0.896	4.1
2-Chlorotoluene	0.845	0.902	0.836	0.846	0.838	0.818					0.848	3.4
1,3,5-Trimethylbenzene	2.780	3.025	2.807	2.874	2.840	2.755					2.847	3.4

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.: M0582 SAS No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.838	0.929	0.866	0.883	0.874	0.837					0.871	3.9
tert-Butylbenzene	2.729	3.052	2.832	2.882	2.870	2.591					2.826	5.5
1,2,4-Trimethylbenzene	2.858	3.052	2.833	2.897	2.842	3.008					2.915	3.2
sec-Butylbenzene	3.401	3.709	3.456	3.526	3.457	3.183					3.455	5.0
4-Isopropyltoluene	2.688	2.996	2.799	2.883	2.818	2.402					2.764	7.4
1,3-Dichlorobenzene	1.558	1.713	1.592	1.631	1.626	1.506					1.604	4.4
1,4-Dichlorobenzene	1.631	1.780	1.656	1.691	1.674	1.689					1.687	3.0
n-Butylbenzene	2.296	2.700	2.616	2.705	2.593	1.975					2.481	11.7
1,2-Dichlorobenzene	1.542	1.702	1.559	1.611	1.586	1.426					1.571	5.8
1,2-Dibromo-3-chloropropane	0.173	0.194	0.166	0.191	0.191	0.201					0.186	7.1
1,2,4-Trichlorobenzene	0.807	0.969	0.938	1.025	1.025	0.620					0.897	17.6
Hexachlorobutadiene	0.445	0.463	0.434	0.457	0.427	0.442					0.444	3.0
1,2,3-Trichlorobenzene	0.811	0.921	0.860	0.946	0.938	0.607					0.847	15.2
Naphthalene	1.742	2.051	1.906	2.296	2.294	1.506					1.966	15.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0582 SAS No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D

RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.254	0.250	0.252	0.255	0.255						0.253	0.8
1,2-Dichloroethane-d4	0.059	0.058	0.058	0.059	0.059						0.059	0.5
Toluene-d8	1.345	1.332	1.329	1.323	1.310						1.328	1.0
Bromofluorobenzene	0.490	0.494	0.493	0.493	0.495						0.493	0.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9275.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9275.d
Lab Smp Id: VSTD05010K Client Smp ID: VSTD05010K
Inj Date : 17-APR-2013 12:22
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD05010K,VSTD05010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 15-APR-2013 13:17 Cal File: V8B9226.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	1.654	1.654	(0.312)	543822	50.0000		(aQ)
2	Freon114	85	1.773	1.773	(0.334)	701264	50.0000		(aQ)
3	Chloromethane	50	1.828	1.828	(0.344)	707656	50.0000		(aQ)
4	Vinyl Chloride	62	1.927	1.927	(0.363)	732993	50.0000		(aQ)
5	Bromomethane	94	2.213	2.213	(0.417)	471521	50.0000		(aQ)
6	Chloroethane	64	2.300	2.300	(0.434)	407070	50.0000		(aQ)
7	Trichlorofluoromethane	101	2.512	2.512	(0.474)	925483	50.0000		(aQ)
126	Ethanol	46	2.641	2.641	(0.498)	230022	5000.00		(aQ)
8	Ether	59	2.737	2.737	(0.516)	581730	50.0000		(aQ)
9	Acrolein	56	2.840	2.840	(0.535)	768104	250.000		(aQ)
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	684719	50.0000		(aQ)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	695529	50.0000		(aQ)
12	Acetone	58	2.959	2.959	(0.558)	105435	50.0000		(aQ)
13	Iodomethane	142	3.059	3.059	(0.577)	731846	50.0000		(aQ)
14	Carbon Disulfide	76	3.123	3.123	(0.589)	2289765	50.0000		(aQ)
15	Acetonitrile	41	3.210	3.210	(0.605)	1260761	500.000		(aQ)
16	Allyl Chloride	39	3.210	3.210	(0.605)	821356	50.0000		(aQ)
17	Methyl Acetate	43	3.217	3.217	(0.606)	611009	50.0000		(aQ)
18	Methylene Chloride	84	3.303	3.303	(0.623)	766074	50.0000		(aQ)
19	tert-Butanol	59	3.364	3.364	(0.634)	117394	100.000		(a)
20	Acrylonitrile	53	3.490	3.490	(0.658)	267753	50.0000		(aQ)
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	734305	50.0000		(aQ)
22	Methyl tert-butyl ether	73	3.516	3.516	(0.663)	2048375	50.0000		(aQ)

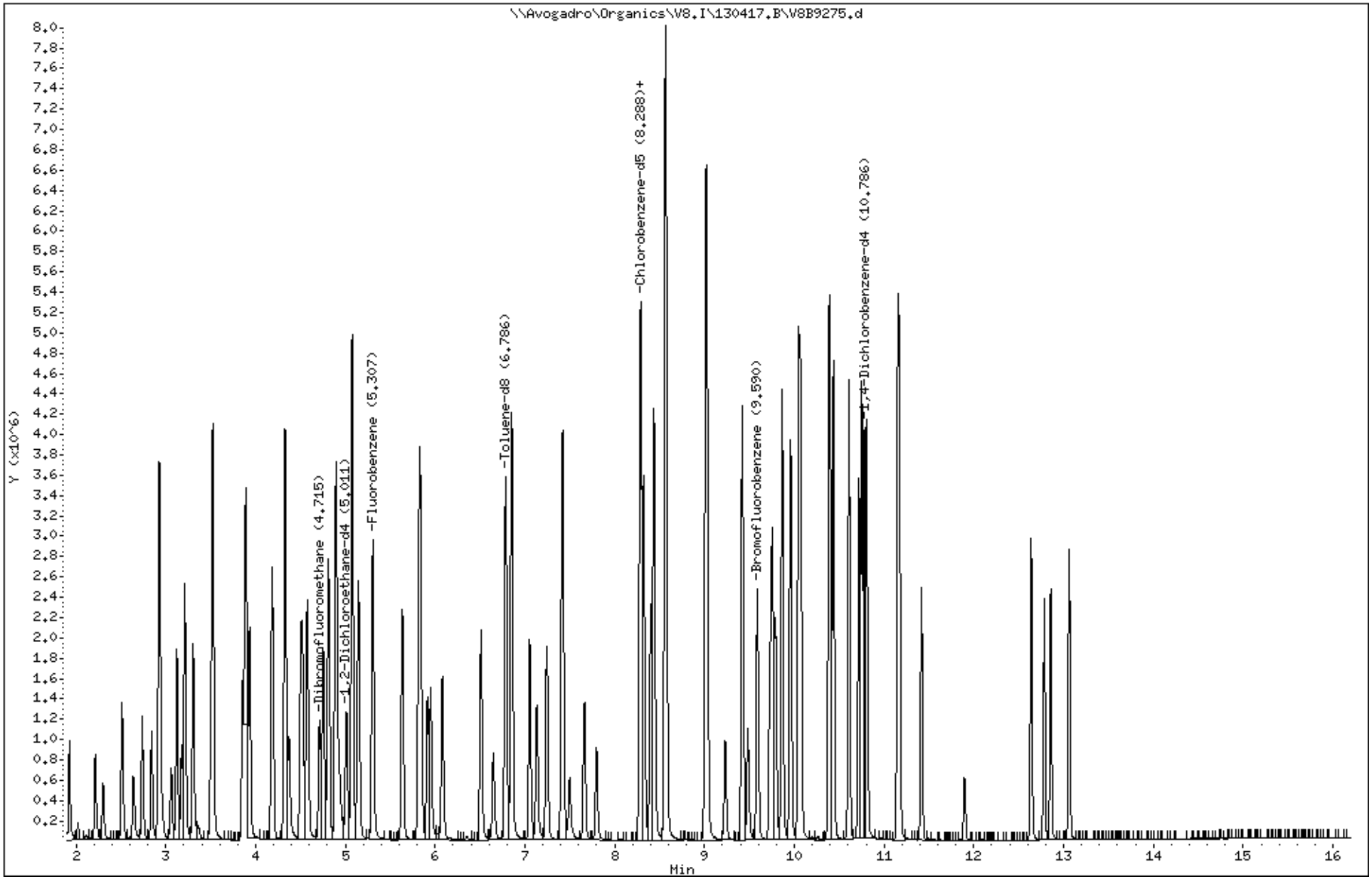
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
	23	1,1-Dichloroethane	63	3.856	3.856	(0.727)	1388570	50.0000		(aQ)
	24	Vinyl acetate	43	3.885	3.885	(0.732)	2179826	50.0000		(aQ)
	25	Diisopropyl Ether	45	3.895	3.895	(0.734)	2403920	50.0000		(aQ)
	26	2-Chloro-1,3-Butadiene	53	3.934	3.934	(0.741)	1125043	50.0000		(aQ)
	27	Ethyl tert-butyl ether	59	4.188	4.188	(0.789)	2242090	50.0000		(aQ)
	29	2,2-Dichloropropane	77	4.329	4.329	(0.816)	1163236	50.0000		(aQ)
	28	cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	797669	50.0000		(aQ)
	30	2-Butanone	72	4.326	4.326	(0.815)	97232	50.0000		(aQ)
	32	Propionitrile	54	4.371	4.371	(0.824)	972869	500.000		(aQ)
	33	Methacrylonitrile	41	4.503	4.503	(0.849)	819522	100.000		(aQ)
	34	Bromochloromethane	128	4.525	4.525	(0.853)	374332	50.0000		(aQ)
	31	Tetrahydrofuran	72	4.567	4.567	(0.861)	173297	100.000		(aQ)
	35	Chloroform	83	4.577	4.577	(0.862)	1348642	50.0000		(aQ)
$	36	Dibromofluoromethane	113	4.712	4.712	(0.888)	643169	50.0000		(a)
	37	1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	1154467	50.0000		(aQ)
	38	Cyclohexane	56	4.811	4.811	(0.907)	1230641	50.0000		(aQ)
	39	1,1-Dichloropropene	110	4.892	4.892	(0.922)	366735	50.0000		(aQ)
	40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	980581	50.0000		(aQ)
	41	Isobutyl Alcohol	43	4.930	4.930	(0.929)	532349	1000.00		(aQ)
$	42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	148417	50.0000		(a)
	43	Benzene	78	5.072	5.072	(0.956)	2989987	50.0000		(a)
	44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	1083157	50.0000		(aQ)
	45	tert-Amyl methyl ether	73	5.146	5.146	(0.970)	1968763	50.0000		(aQ)
M	50	1,2-Dichloroethene (Total)	96				1531974	100.000		(a)
*	46	Fluorobenzene	96	5.306	5.306	(1.000)	2549193	50.0000		(Q)
	47	Trichloroethene	130	5.634	5.634	(1.062)	744785	50.0000		(aQ)
	48	Methylcyclohexane	83	5.821	5.821	(1.097)	1178100	50.0000		(aQ)
	49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	778127	50.0000		(aQ)
	51	Methyl Methacrylate	69	5.914	5.914	(1.115)	557012	50.0000		(aQ)
	52	Dibromomethane	93	5.950	5.950	(1.121)	469996	50.0000		(aQ)
	53	1,4-Dioxane	88	5.953	5.953	(1.122)	154585	1000.00		(aQ)
	54	Bromodichloromethane	83	6.081	6.081	(1.146)	1034455	50.0000		(aQ)
	55	2-Chloroethyl vinyl ether	63	6.509	6.510	(1.227)	6623	50.0000		(TaQ)
	56	cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	1259538	50.0000		(aQ)
	57	4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	638881	50.0000		(aQ)
$	58	Toluene-d8	98	6.786	6.786	(0.819)	2471093	50.0000		(a)
	59	Toluene	91	6.853	6.853	(1.291)	3159672	50.0000		(aQ)
	60	trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	1149447	50.0000		(aQ)
	61	Ethyl Methacrylate	69	7.133	7.133	(1.344)	767196	50.0000		(aQ)
	62	1,1,2-Trichloroethane	97	7.242	7.242	(1.365)	639392	50.0000		(aQ)
	63	Tetrachloroethene	164	7.413	7.413	(0.894)	603236	50.0000		(aQ)
	64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	1132636	50.0000		(aQ)
	65	2-Hexanone	43	7.496	7.496	(0.904)	487956	50.0000		(aQ)
	66	Dibromochloromethane	129	7.660	7.660	(0.924)	758435	50.0000		(aQ)
	67	1,2-Dibromoethane	107	7.795	7.795	(0.940)	698262	50.0000		(aQ)
	69	1-Chlorohexane	91	8.281	8.281	(0.999)	1002645	50.0000		(aQ)
*	68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	1858917	50.0000		(Q)
	70	Chlorobenzene	112	8.322	8.322	(1.004)	1982186	50.0000		(aQ)
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	703764	50.0000		(aQ)
	72	Ethylbenzene	106	8.438	8.438	(1.018)	1028336	50.0000		(aQ)
	73	m,p-Xylene	106	8.567	8.567	(1.033)	2575071	100.000		(aQ)
	74	o-Xylene	106	9.014	9.014	(1.087)	1237205	50.0000		(aQ)
	75	Styrene	104	9.027	9.027	(1.089)	2106544	50.0000		(aQ)
	76	Bromoform	173	9.232	9.232	(1.114)	489062	50.0000		(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	77 Isopropylbenzene	105	9.422	9.422	(1.137)	3153058	50.0000		(aQ)
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	274797	50.0000		(aQ)
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	915607	50.0000		(aQ)
	80 1,1,2,2-Tetrachloroethane	83	9.728	9.728	(0.902)	884660	50.0000		(aQ)
	81 Bromobenzene	156	9.753	9.753	(0.905)	823980	50.0000		(aQ)
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	1104670	50.0000		(aQ)
	83 n-Propylbenzene	120	9.866	9.866	(0.915)	809950	50.0000		(aQ)
	84 2-Chlorotoluene	126	9.959	9.959	(0.924)	760979	50.0000		(aQ)
	85 1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	2555503	50.0000		(aQ)
	86 4-Chlorotoluene	126	10.072	10.072	(0.934)	788622	50.0000		(aQ)
M	94 Xylene (Total)	106				3812276	150.000		(a)
	87 tert-Butylbenzene	119	10.387	10.387	(0.963)	2578503	50.0000		(aQ)
	88 1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	2579582	50.0000		(aQ)
	89 sec-Butylbenzene	105	10.609	10.609	(0.984)	3146957	50.0000		(aQ)
	90 1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	1449724	50.0000		(aQ)
	91 4-Isopropyltoluene	119	10.753	10.753	(0.997)	2548545	50.0000		(aQ)
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	910478	50.0000		(Q)
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1507844	50.0000		(aQ)
	95 n-Butylbenzene	91	11.152	11.152	(1.034)	2381359	50.0000		(aQ)
	96 1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	1419080	50.0000		(aQ)
	97 Hexachloroethane	117	11.416	11.416	(1.059)	503607	50.0000		(aQ)
	98 1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	151441	50.0000		(aQ)
	141 1,3,5-Trichlorobenzene	182	12.637	12.637	(2.381)	819413	50.0000		(aQ)
	99 1,2,4-Trichlorobenzene	180	12.641	12.641	(1.172)	854043	50.0000		(aQ)
	100 Hexachlorobutadiene	225	12.785	12.785	(1.186)	394808	50.0000		(aQ)
	101 Naphthalene	128	12.856	12.856	(1.192)	1735774	50.0000		(a)
	102 1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	783434	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\V8.I\130417.B\V8B9275.d
Date : 17-APR-2013 12:22
Client ID: VSTD05010K
Instrument: V8.i
Sample Info: 5ML,VSTD05010K,VSTD05010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9276.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9276.d
Lab Smp Id: VSTD02010K Client Smp ID: VSTD02010K
Inj Date : 17-APR-2013 12:49
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD02010K,VSTD02010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 12:49 Cal File: V8B9276.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	1.654	1.654	(0.312)	216828	20.0000	20
2	Freon114	85	1.773	1.773	(0.334)	277710	20.0000	20
3	Chloromethane	50	1.828	1.828	(0.344)	301884	20.0000	21
4	Vinyl Chloride	62	1.927	1.927	(0.363)	307806	20.0000	20
5	Bromomethane	94	2.217	2.213	(0.418)	207747	20.0000	21
6	Chloroethane	64	2.300	2.300	(0.434)	172116	20.0000	20
7	Trichlorofluoromethane	101	2.516	2.512	(0.474)	372105	20.0000	20
126	Ethanol	46	2.641	2.641	(0.498)	110052	2000.00	2200(A)
8	Ether	59	2.741	2.737	(0.517)	262613	20.0000	21
9	Acrolein	56	2.844	2.840	(0.536)	358448	100.000	110
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	278062	20.0000	20
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	275008	20.0000	20
12	Acetone	58	2.959	2.959	(0.558)	43282	20.0000	20
13	Iodomethane	142	3.059	3.059	(0.577)	295794	20.0000	20
14	Carbon Disulfide	76	3.123	3.123	(0.589)	904312	20.0000	20
15	Acetonitrile	41	3.210	3.210	(0.605)	583290	200.000	210(A)
16	Allyl Chloride	39	3.213	3.210	(0.606)	362503	20.0000	21
17	Methyl Acetate	43	3.220	3.217	(0.607)	286966	20.0000	22
18	Methylene Chloride	84	3.307	3.303	(0.623)	334421	20.0000	21
19	tert-Butanol	59	3.364	3.364	(0.634)	60917	40.0000	45
20	Acrylonitrile	53	3.499	3.490	(0.660)	122258	20.0000	21
21	trans-1,2-Dichloroethene	96	3.528	3.525	(0.665)	302658	20.0000	20

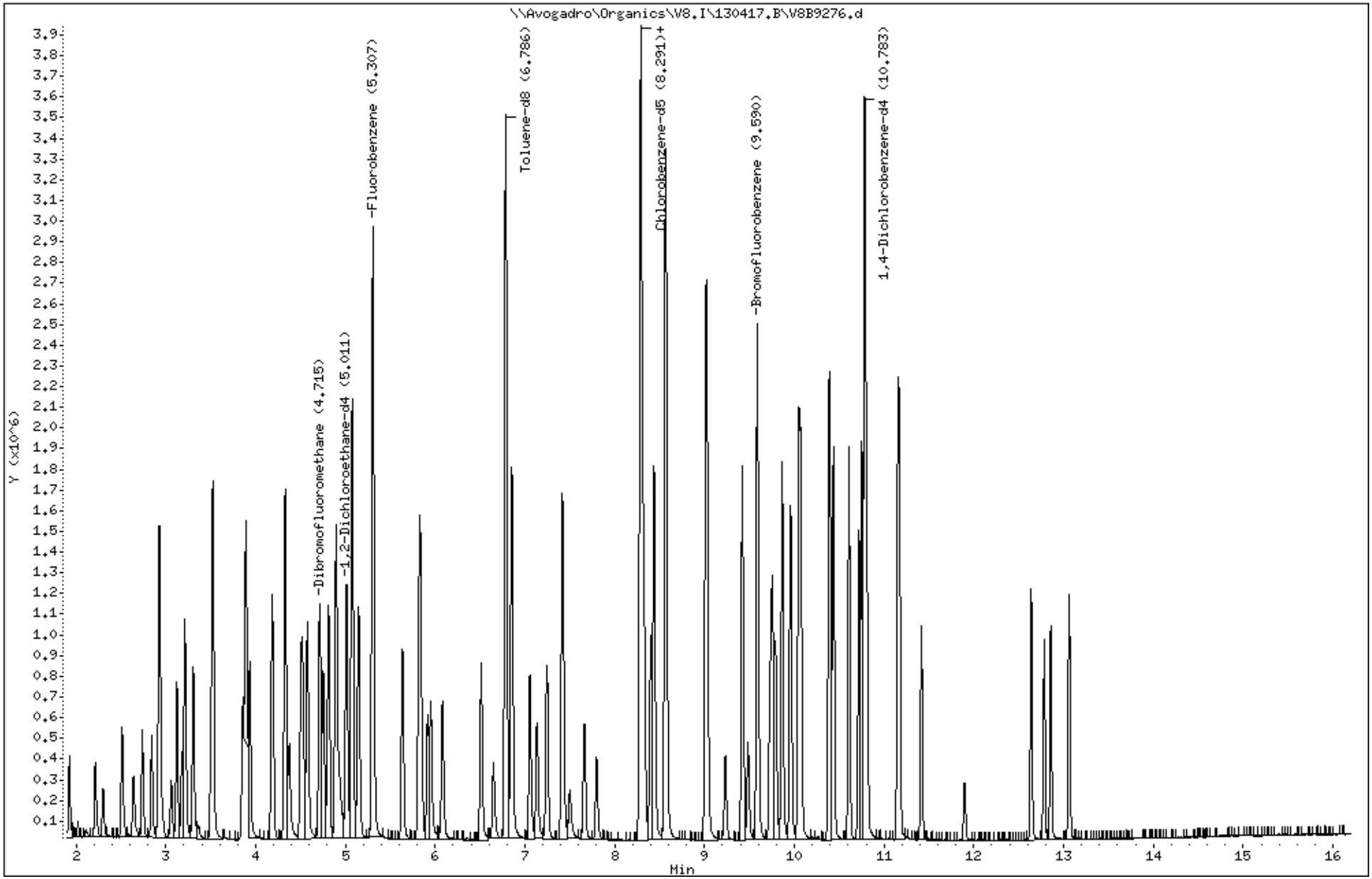
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.519	3.516	(0.663)	925207	20.0000	21
	23 1,1-Dichloroethane	63	3.860	3.856	(0.727)	590855	20.0000	21
	24 Vinyl acetate	43	3.889	3.885	(0.733)	957128	20.0000	21
	25 Diisopropyl Ether	45	3.895	3.895	(0.734)	1053429	20.0000	21
	26 2-Chloro-1,3-Butadiene	53	3.937	3.934	(0.742)	455796	20.0000	20
	27 Ethyl tert-butyl ether	59	4.188	4.188	(0.789)	986551	20.0000	21
	29 2,2-Dichloropropane	77	4.332	4.329	(0.816)	469602	20.0000	20
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	341728	20.0000	21
	30 2-Butanone	72	4.332	4.326	(0.816)	43299	20.0000	21
	32 Propionitrile	54	4.374	4.371	(0.824)	457706	200.000	220(A)
	33 Methacrylonitrile	41	4.506	4.503	(0.849)	373478	40.0000	43
	34 Bromochloromethane	128	4.525	4.525	(0.853)	164778	20.0000	21
	31 Tetrahydrofuran	72	4.570	4.567	(0.861)	79690	40.0000	43
	35 Chloroform	83	4.577	4.577	(0.862)	573551	20.0000	21
$	36 Dibromofluoromethane	113	4.715	4.712	(0.889)	634784	50.0000	50
	37 1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	484437	20.0000	20
	38 Cyclohexane	56	4.815	4.811	(0.907)	497773	20.0000	20
	39 1,1-Dichloropropene	110	4.895	4.892	(0.922)	149811	20.0000	20
	40 Carbon Tetrachloride	117	4.901	4.901	(0.924)	400991	20.0000	20
	41 Isobutyl Alcohol	43	4.933	4.930	(0.930)	245323	400.000	430(A)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	148068	50.0000	50
	43 Benzene	78	5.075	5.072	(0.956)	1294299	20.0000	21
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	471040	20.0000	21
	45 tert-Amyl methyl ether	73	5.146	5.146	(0.970)	870866	20.0000	21
M	50 1,2-Dichloroethene (Total)	96				644386	40.0000	41
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2539176	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	299444	20.0000	20
	48 Methylcyclohexane	83	5.824	5.821	(1.098)	473718	20.0000	20
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	333883	20.0000	21
	51 Methyl Methacrylate	69	5.917	5.914	(1.115)	254233	20.0000	21
	52 Dibromomethane	93	5.953	5.950	(1.122)	207730	20.0000	21
	53 1,4-Dioxane	88	5.956	5.953	(1.122)	71812	400.000	430(A)
	54 Bromodichloromethane	83	6.085	6.081	(1.147)	443070	20.0000	21
	55 2-Chloroethyl vinyl ether	63	6.512	6.510	(1.227)	3218	20.0000	22(T)
	56 cis-1,3-Dichloropropene	75	6.512	6.509	(1.227)	530951	20.0000	20
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	290574	20.0000	21
$	58 Toluene-d8	98	6.786	6.786	(0.819)	2454235	50.0000	50
	59 Toluene	91	6.853	6.853	(1.291)	1373683	20.0000	21
	60 trans-1,3-Dichloropropene	75	7.056	7.052	(1.330)	497269	20.0000	21
	61 Ethyl Methacrylate	69	7.133	7.133	(1.344)	332958	20.0000	21
	62 1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	286735	20.0000	21
	63 Tetrachloroethene	164	7.416	7.413	(0.895)	249679	20.0000	20
	64 1,3-Dichloropropane	76	7.425	7.422	(0.896)	499903	20.0000	21
	65 2-Hexanone	43	7.499	7.496	(0.905)	212412	20.0000	21
	66 Dibromochloromethane	129	7.663	7.660	(0.924)	322371	20.0000	21
	67 1,2-Dibromoethane	107	7.798	7.795	(0.941)	304292	20.0000	21
	69 1-Chlorohexane	91	8.284	8.281	(0.999)	412858	20.0000	20
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	1842094	50.0000	
	70 Chlorobenzene	112	8.322	8.322	(1.004)	841122	20.0000	21
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	300911	20.0000	21
	72 Ethylbenzene	106	8.438	8.438	(1.018)	439587	20.0000	21
	73 m,p-Xylene	106	8.567	8.567	(1.033)	1081595	40.0000	41
	74 o-Xylene	106	9.014	9.014	(1.087)	529887	20.0000	21
	75 Styrene	104	9.027	9.027	(1.089)	871347	20.0000	20

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.232	9.232	(1.114)	210200	20.0000	21
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	1316472	20.0000	20
	78	trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	118618	20.0000	21
$	79	Bromofluorobenzene	95	9.589	9.589	(1.157)	909891	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	400096	20.0000	21
	81	Bromobenzene	156	9.753	9.753	(0.905)	346790	20.0000	21
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	493360	20.0000	21
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	337809	20.0000	21
	84	2-Chlorotoluene	126	9.959	9.959	(0.924)	321017	20.0000	21
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	1076850	20.0000	21
	86	4-Chlorotoluene	126	10.072	10.072	(0.934)	330699	20.0000	21
M	94	Xylene (Total)	106				1611482	60.0000	62
	87	tert-Butylbenzene	119	10.387	10.387	(0.963)	1086318	20.0000	21
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	1086455	20.0000	21
	89	sec-Butylbenzene	105	10.609	10.609	(0.984)	1320153	20.0000	21
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	609601	20.0000	21
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	1066400	20.0000	21
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	889849	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	633711	20.0000	21
	95	n-Butylbenzene	91	11.155	11.152	(1.035)	961059	20.0000	20
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	605715	20.0000	21
	97	Hexachloroethane	117	11.419	11.416	(1.059)	207843	20.0000	20
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	69044	20.0000	22
	141	1,3,5-Trichlorobenzene	182	12.641	12.637	(2.382)	331272	20.0000	20(A)
	99	1,2,4-Trichlorobenzene	180	12.641	12.641	(1.172)	345031	20.0000	20
	100	Hexachlorobutadiene	225	12.785	12.785	(1.186)	164681	20.0000	21
	101	Naphthalene	128	12.856	12.856	(1.192)	729890	20.0000	21
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	327978	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\V8.I\130417.B\V8B9276.d
Date : 17-APR-2013 12:49
Client ID: VSTD02010K
Instrument: V8.i
Sample Info: 5ML,VSTD02010K,VSTD02010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9277.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9277.d
Lab Smp Id: VSTD00510K Client Smp ID: VSTD00510K
Inj Date : 17-APR-2013 13:17
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD00510K,VSTD00510K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 13:17 Cal File: V8B9277.d
Als bottle: 100 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 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	1.654	1.654	(0.312)	53906	5.00000	5.0
2	Freon114	85	1.773	1.773	(0.334)	68445	5.00000	5.0
3	Chloromethane	50	1.828	1.828	(0.344)	70895	5.00000	4.9
4	Vinyl Chloride	62	1.924	1.927	(0.363)	72601	5.00000	4.9
5	Bromomethane	94	2.213	2.213	(0.417)	52602	5.00000	5.2
6	Chloroethane	64	2.303	2.300	(0.434)	41343	5.00000	5.0
7	Trichlorofluoromethane	101	2.512	2.512	(0.474)	89795	5.00000	4.9
126	Ethanol	46	2.641	2.641	(0.498)	27151	500.000	530(A)
8	Ether	59	2.741	2.737	(0.517)	58826	5.00000	4.8
9	Acrolein	56	2.840	2.840	(0.535)	81101	25.0000	25
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	65712	5.00000	4.9
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.921	2.924	(0.550)	67755	5.00000	5.0
12	Acetone	58	2.959	2.959	(0.558)	10272	5.00000	4.9
13	Iodomethane	142	3.059	3.059	(0.577)	56639	5.00000	4.2
14	Carbon Disulfide	76	3.123	3.123	(0.589)	218863	5.00000	4.9
15	Acetonitrile	41	3.213	3.210	(0.606)	132804	50.0000	49
16	Allyl Chloride	39	3.210	3.210	(0.605)	89775	5.00000	5.2
17	Methyl Acetate	43	3.223	3.217	(0.607)	59903	5.00000	4.7
18	Methylene Chloride	84	3.307	3.303	(0.623)	83221	5.00000	5.2
19	tert-Butanol	59	3.371	3.364	(0.635)	13286	10.0000	9.9
20	Acrylonitrile	53	3.503	3.490	(0.660)	26587	5.00000	4.8
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	72592	5.00000	4.9

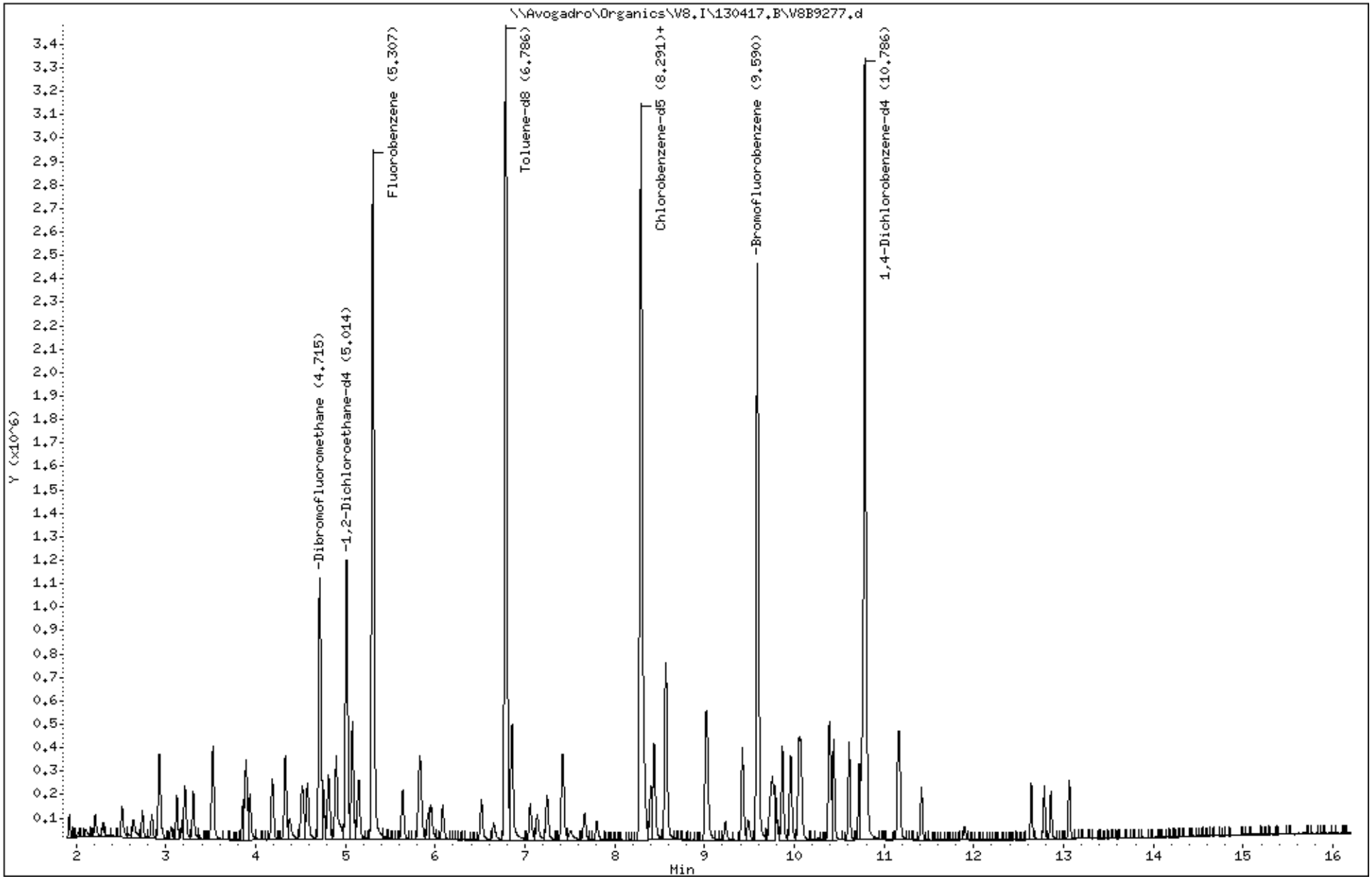
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.519	3.516	(0.663)	205964	5.00000	4.8
	23 1,1-Dichloroethane	63	3.860	3.856	(0.727)	135554	5.00000	4.8
	24 Vinyl acetate	43	3.892	3.885	(0.733)	199992	5.00000	4.6
	25 Diisopropyl Ether	45	3.898	3.895	(0.735)	239589	5.00000	4.8
	26 2-Chloro-1,3-Butadiene	53	3.937	3.934	(0.742)	105742	5.00000	4.8
	27 Ethyl tert-butyl ether	59	4.184	4.188	(0.789)	219875	5.00000	4.8
	29 2,2-Dichloropropane	77	4.332	4.329	(0.816)	105282	5.00000	4.7
	28 cis-1,2-Dichloroethene	96	4.329	4.326	(0.816)	78692	5.00000	4.9
	30 2-Butanone	72	4.335	4.326	(0.817)	8322	5.00000	4.3
	32 Propionitrile	54	4.380	4.371	(0.826)	95181	50.0000	47
	33 Methacrylonitrile	41	4.509	4.503	(0.850)	74635	10.0000	9.0
	34 Bromochloromethane	128	4.528	4.525	(0.853)	36681	5.00000	4.8
	31 Tetrahydrofuran	72	4.573	4.567	(0.862)	16676	10.0000	9.3
	35 Chloroform	83	4.580	4.577	(0.863)	134145	5.00000	4.9
$	36 Dibromofluoromethane	113	4.715	4.712	(0.889)	641850	50.0000	50
	37 1,1,1-Trichloroethane	97	4.757	4.753	(0.896)	113001	5.00000	4.9
	38 Cyclohexane	56	4.815	4.811	(0.907)	119848	5.00000	4.9
	39 1,1-Dichloropropene	110	4.895	4.892	(0.922)	33093	5.00000	4.6
	40 Carbon Tetrachloride	117	4.898	4.901	(0.923)	91636	5.00000	4.8
	41 Isobutyl Alcohol	43	4.808	4.930	(0.906)	12524	100.000	30(T)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	148736	50.0000	50
	43 Benzene	78	5.078	5.072	(0.957)	310424	5.00000	5.0
	44 1,2-Dichloroethane	62	5.081	5.078	(0.958)	107758	5.00000	4.9
	45 tert-Amyl methyl ether	73	5.149	5.146	(0.970)	195627	5.00000	4.8
M	50 1,2-Dichloroethene (Total)	96				151284	10.0000	9.8
*	46 Fluorobenzene	96	5.307	5.306	(1.000)	2526263	50.0000	
	47 Trichloroethene	130	5.638	5.634	(1.062)	71710	5.00000	4.9
	48 Methylcyclohexane	83	5.824	5.821	(1.098)	110688	5.00000	4.8
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	76397	5.00000	4.8
	51 Methyl Methacrylate	69	5.924	5.914	(1.116)	50973	5.00000	4.5
	52 Dibromomethane	93	5.953	5.950	(1.122)	46729	5.00000	4.8
	53 1,4-Dioxane	88	5.956	5.953	(1.122)	15135	100.000	94
	54 Bromodichloromethane	83	6.085	6.081	(1.147)	95514	5.00000	4.6
	55 2-Chloroethyl vinyl ether	63	6.512	6.510	(1.227)	553	5.00000	4.1(T)
	56 cis-1,3-Dichloropropene	75	6.515	6.509	(1.228)	116156	5.00000	4.7
	57 4-Methyl-2-pentanone	43	6.651	6.647	(1.253)	61104	5.00000	4.6
$	58 Toluene-d8	98	6.786	6.786	(0.819)	2445146	50.0000	50
	59 Toluene	91	6.856	6.853	(1.292)	363185	5.00000	5.4
	60 trans-1,3-Dichloropropene	75	7.059	7.052	(1.330)	102381	5.00000	4.5
	61 Ethyl Methacrylate	69	7.139	7.133	(1.345)	65986	5.00000	4.4
	62 1,1,2-Trichloroethane	97	7.249	7.242	(1.366)	65041	5.00000	4.9
	63 Tetrachloroethene	164	7.416	7.413	(0.895)	58564	5.00000	4.9
	64 1,3-Dichloropropane	76	7.425	7.422	(0.896)	111606	5.00000	4.8
	65 2-Hexanone	43	7.509	7.496	(0.906)	40121	5.00000	4.3
	66 Dibromochloromethane	129	7.667	7.660	(0.925)	66664	5.00000	4.5
	67 1,2-Dibromoethane	107	7.805	7.795	(0.941)	66191	5.00000	4.7
	69 1-Chlorohexane	91	8.287	8.281	(1.000)	95431	5.00000	4.8
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	1817887	50.0000	
	70 Chlorobenzene	112	8.326	8.322	(1.004)	190833	5.00000	4.8
	71 1,1,1,2-Tetrachloroethane	131	8.400	8.403	(1.013)	64882	5.00000	4.7
	72 Ethylbenzene	106	8.438	8.438	(1.018)	99650	5.00000	4.8
	73 m,p-Xylene	106	8.570	8.567	(1.034)	255798	10.0000	9.9
	74 o-Xylene	106	9.014	9.014	(1.087)	125007	5.00000	5.0
	75 Styrene	104	9.030	9.027	(1.089)	184193	5.00000	4.6

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.236	9.232	(1.114)	39879	5.00000	4.3
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	291524	5.00000	4.7
	78	trans-1,4-Dichloro-2-butene	75	9.490	9.486	(1.145)	22313	5.00000	4.3
$	79	Bromofluorobenzene	95	9.589	9.589	(1.157)	890475	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.734	9.728	(0.903)	88318	5.00000	5.0
	81	Bromobenzene	156	9.756	9.753	(0.905)	76900	5.00000	4.9
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	102844	5.00000	4.8
	83	n-Propylbenzene	120	9.869	9.866	(0.915)	74478	5.00000	4.8
	84	2-Chlorotoluene	126	9.956	9.959	(0.923)	72106	5.00000	4.9
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	237123	5.00000	4.8
	86	4-Chlorotoluene	126	10.075	10.072	(0.934)	71441	5.00000	4.8
M	94	Xylene (Total)	106				380805	15.0000	15
	87	tert-Butylbenzene	119	10.390	10.387	(0.963)	232804	5.00000	4.8
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	243823	5.00000	4.9
	89	sec-Butylbenzene	105	10.609	10.609	(0.984)	290102	5.00000	4.8
	90	1,3-Dichlorobenzene	146	10.724	10.718	(0.994)	132907	5.00000	4.8
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	229281	5.00000	4.8
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	853016	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	139144	5.00000	4.8
	95	n-Butylbenzene	91	11.155	11.152	(1.034)	195821	5.00000	4.5
	96	1,2-Dichlorobenzene	146	11.174	11.171	(1.036)	131496	5.00000	4.8
	97	Hexachloroethane	117	11.416	11.416	(1.058)	42542	5.00000	4.6
	98	1,2-Dibromo-3-chloropropane	75	11.898	11.895	(1.103)	14764	5.00000	4.9
	141	1,3,5-Trichlorobenzene	182	12.641	12.637	(2.382)	65009	5.00000	4.3(A)
	99	1,2,4-Trichlorobenzene	180	12.641	12.641	(1.172)	68816	5.00000	4.4
	100	Hexachlorobutadiene	225	12.782	12.785	(1.185)	37959	5.00000	5.0
	101	Naphthalene	128	12.856	12.856	(1.192)	148593	5.00000	4.6
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	69211	5.00000	4.7

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9277.d
Date : 17-APR-2013 13:17
Client ID: VSTD00510K
Instrument: V8.i
Sample Info: 5ML,VSTD00510K,VSTD00510K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9279.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9279.d
Lab Smp Id: VSTD00110K Client Smp ID: VSTD00110K
Inj Date : 17-APR-2013 14:12
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD00110K,VSTD00110K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 14:12 Cal File: V8B9279.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	1.651	1.654	(0.311)	9293	1.00000	0.87
2	Freon114	85	1.773	1.773	(0.334)	11993	1.00000	0.86
3	Chloromethane	50	1.827	1.828	(0.344)	15779	1.00000	1.1
4	Vinyl Chloride	62	1.924	1.927	(0.363)	13479	1.00000	0.92
5	Bromomethane	94	2.216	2.213	(0.418)	10760	1.00000	1.1
6	Chloroethane	64	2.307	2.300	(0.435)	7167	1.00000	0.90
7	Trichlorofluoromethane	101	2.516	2.512	(0.474)	16259	1.00000	0.90
126	Ethanol	46	2.644	2.641	(0.498)	6099	500.000	120
8	Ether	59	2.741	2.737	(0.517)	11237	1.00000	0.92
9	Acrolein	56	2.843	2.840	(0.536)	16451	5.00000	4.9
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	12906	1.00000	0.94
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.930	2.924	(0.552)	12046	1.00000	0.89
12	Acetone	58	2.962	2.959	(0.558)	3005	1.00000	1.5
13	Iodomethane	142	3.059	3.059	(0.576)	9318	1.00000	0.66
14	Carbon Disulfide	76	3.123	3.123	(0.589)	47566	1.00000	1.0
15	Acetonitrile	41	3.213	3.210	(0.606)	22732	1.00000	8.5
16	Allyl Chloride	39	3.213	3.210	(0.606)	13901	1.00000	0.80
17	Methyl Acetate	43	3.226	3.217	(0.608)	14209	1.00000	1.1
18	Methylene Chloride	84	3.306	3.303	(0.623)	21885	1.00000	1.3
19	tert-Butanol	59	3.374	3.364	(0.636)	4125	1.00000	3.0
20	Acrylonitrile	53	3.506	3.490	(0.661)	4365	1.00000	0.78
21	trans-1,2-Dichloroethene	96	3.532	3.525	(0.666)	13870	1.00000	0.94
22	Methyl tert-butyl ether	73	3.519	3.516	(0.663)	39815	1.00000	0.93

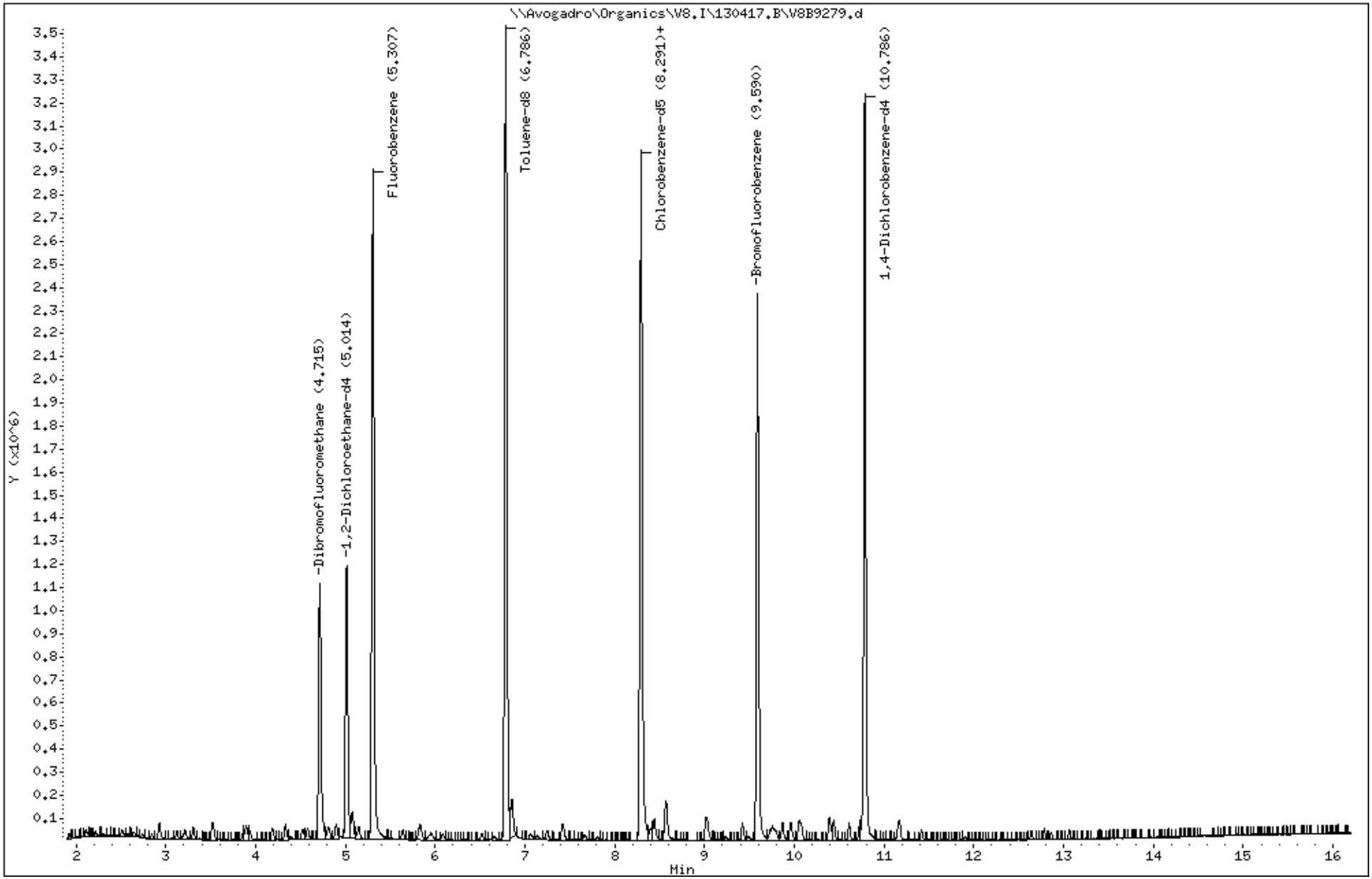
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.860	3.856	(0.727)	25957	1.00000	0.92
	24	Vinyl acetate	43	3.895	3.885	(0.734)	36801	1.00000	0.84
	25	Diisopropyl Ether	45	3.892	3.895	(0.733)	46606	1.00000	0.94
	26	2-Chloro-1,3-Butadiene	53	3.937	3.934	(0.742)	19667	1.00000	0.87
	27	Ethyl tert-butyl ether	59	4.191	4.188	(0.790)	42635	1.00000	0.92
	29	2,2-Dichloropropane	77	4.332	4.329	(0.816)	19097	1.00000	0.85
	28	cis-1,2-Dichloroethene	96	4.329	4.326	(0.816)	15688	1.00000	0.96
	30	2-Butanone	72	4.345	4.326	(0.819)	1039	1.00000	0.53
	32	Propionitrile	54	4.393	4.371	(0.828)	16950	1.00000	8.0
	33	Methacrylonitrile	41	4.515	4.503	(0.851)	14419	1.00000	1.6
	34	Bromochloromethane	128	4.528	4.525	(0.853)	7236	1.00000	0.95
	31	Tetrahydrofuran	72	4.577	4.567	(0.862)	3486	1.00000	1.8
	35	Chloroform	83	4.583	4.577	(0.864)	26111	1.00000	0.95
$	36	Dibromofluoromethane	113	4.715	4.712	(0.889)	637100	1.00000	49
	37	1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	21501	1.00000	0.92
	38	Cyclohexane	56	4.811	4.811	(0.907)	21985	1.00000	0.90
	39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	6428	1.00000	0.89
	40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	17250	1.00000	0.89
	41	Isobutyl Alcohol	43	4.930	4.930	(0.929)	286	1.00000	0.56
$	42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	150142	1.00000	50
	43	Benzene	78	5.075	5.072	(0.956)	72370	1.00000	1.1
	44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	22111	1.00000	0.98
	45	tert-Amyl methyl ether	73	5.149	5.146	(0.970)	38170	1.00000	0.92
M	50	1,2-Dichloroethene (Total)	96				29558	2.00000	(a)
*	46	Fluorobenzene	96	5.306	5.306	(1.000)	2569328	50.0000	
	47	Trichloroethene	130	5.644	5.634	(1.064)	14133	1.00000	0.95
	48	Methylcyclohexane	83	5.827	5.821	(1.098)	19260	1.00000	0.84
	49	1,2-Dichloropropane	63	5.843	5.840	(1.101)	15076	1.00000	0.94
	51	Methyl Methacrylate	69	5.924	5.914	(1.116)	8427	1.00000	0.70
	52	Dibromomethane	93	5.959	5.950	(1.123)	9077	1.00000	0.93
	53	1,4-Dioxane	88	5.972	5.953	(1.125)	3537	1.00000	21
	54	Bromodichloromethane	83	6.088	6.081	(1.147)	18439	1.00000	0.88
	55	2-Chloroethyl vinyl ether	63	6.506	6.510	(1.226)	140	1.00000	1.0(TM)M6 AM 04/22
	56	cis-1,3-Dichloropropene	75	6.519	6.509	(1.228)	20413	1.00000	0.82
	57	4-Methyl-2-pentanone	43	6.660	6.647	(1.255)	11517	1.00000	0.83
$	58	Toluene-d8	98	6.785	6.786	(0.819)	2469252	1.00000	51
	59	Toluene	91	6.856	6.853	(1.292)	118261	1.00000	1.6
	60	trans-1,3-Dichloropropene	75	7.068	7.052	(1.332)	18229	1.00000	0.80
	61	Ethyl Methacrylate	69	7.142	7.133	(1.346)	13270	1.00000	0.83
	62	1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	13761	1.00000	1.0
	63	Tetrachloroethene	164	7.416	7.413	(0.895)	11376	1.00000	0.96
	64	1,3-Dichloropropane	76	7.432	7.422	(0.896)	20454	1.00000	0.90
	65	2-Hexanone	43	7.525	7.496	(0.908)	7364	1.00000	0.76
	66	Dibromochloromethane	129	7.663	7.660	(0.924)	12582	1.00000	0.86
	67	1,2-Dibromoethane	107	7.805	7.795	(0.941)	12797	1.00000	0.92(T)
	69	1-Chlorohexane	91	8.287	8.281	(1.000)	21471	1.00000	1.1
*	68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	1814739	50.0000	
	70	Chlorobenzene	112	8.322	8.322	(1.004)	37044	1.00000	0.95
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	12276	1.00000	0.90
	72	Ethylbenzene	106	8.441	8.438	(1.018)	21716	1.00000	1.0
	73	m,p-Xylene	106	8.570	8.567	(1.034)	60497	2.00000	2.3
	74	o-Xylene	106	9.014	9.014	(1.087)	26908	1.00000	1.1
	75	Styrene	104	9.033	9.027	(1.090)	31281	1.00000	0.76
	76	Bromoform	173	9.235	9.232	(1.114)	7388	1.00000	0.79

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	77 Isopropylbenzene	105	9.419	9.422	(1.136)	53254	1.00000	0.88	
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	4472	1.00000	0.80	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	875893	1.00000	49	
	80 1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	18059	1.00000	1.0	
	81 Bromobenzene	156	9.760	9.753	(0.905)	14978	1.00000	0.97	
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	25662	1.00000	1.2	
	83 n-Propylbenzene	120	9.869	9.866	(0.915)	14193	1.00000	0.94	
	84 2-Chlorotoluene	126	9.962	9.959	(0.924)	13754	1.00000	0.96	
	85 1,3,5-Trimethylbenzene	105	10.052	10.049	(0.932)	46319	1.00000	0.96	
	86 4-Chlorotoluene	126	10.078	10.072	(0.934)	14083	1.00000	0.96	
M	94 Xylene (Total)	106				87405	3.00000	(a)	
	87 tert-Butylbenzene	119	10.393	10.387	(0.964)	43570	1.00000	0.92	
	88 1,2,4-Trimethylbenzene	105	10.441	10.435	(0.968)	50589	1.00000	1.0	
	89 sec-Butylbenzene	105	10.612	10.609	(0.984)	53525	1.00000	0.92	
	90 1,3-Dichlorobenzene	146	10.724	10.718	(0.994)	25318	1.00000	0.94	
	91 4-Isopropyltoluene	119	10.756	10.753	(0.997)	40399	1.00000	0.87	
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	840787	50.0000		
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	28409	1.00000	1.0	
	95 n-Butylbenzene	91	11.155	11.152	(1.034)	33211	1.00000	0.80	
	96 1,2-Dichlorobenzene	146	11.174	11.171	(1.036)	23971	1.00000	0.91	
	97 Hexachloroethane	117	11.415	11.416	(1.058)	7623	1.00000	0.84	
	98 1,2-Dibromo-3-chloropropane	75	11.901	11.895	(1.103)	3372	1.00000	1.1	
	141 1,3,5-Trichlorobenzene	182	12.647	12.637	(2.383)	10662	1.00000	0.68(A)	
	99 1,2,4-Trichlorobenzene	180	12.644	12.641	(1.172)	10434	1.00000	0.69	
	100 Hexachlorobutadiene	225	12.785	12.785	(1.185)	7426	1.00000	0.99	
	101 Naphthalene	128	12.859	12.856	(1.192)	25325	1.00000	0.77	
	102 1,2,3-Trichlorobenzene	180	13.065	13.062	(1.211)	10206	1.00000	0.72	

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\V8.I\130417.B\V8B9279.d
Date : 17-APR-2013 14:12
Client ID: VSTD00110K
Instrument: V8.i
Sample Info: 5ML,VSTD00110K,VSTD00110K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9280.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9280.d
Lab Smp Id: VSTD20010K Client Smp ID: VSTD20010K
Inj Date : 17-APR-2013 14:39
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD20010K,VSTD20010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 14:39 Cal File: V8B9280.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	1.654	1.654	(0.312)	2217912	200.000	210(A)
2	Freon114	85	1.773	1.773	(0.334)	2793924	200.000	200
3	Chloromethane	50	1.824	1.828	(0.344)	2829113	200.000	190
4	Vinyl Chloride	62	1.924	1.927	(0.363)	2859181	200.000	190
5	Bromomethane	94	2.204	2.213	(0.415)	1878896	200.000	180
6	Chloroethane	64	2.297	2.300	(0.433)	1526985	200.000	190
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	3637482	200.000	200
126	Ethanol	46	2.647	2.641	(0.499)	962191	20000.0	18000(A)
8	Ether	59	2.737	2.737	(0.516)	2488341	200.000	200
9	Acrolein	56	2.840	2.840	(0.535)	3467446	1000.00	1000(A)
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	2807628	200.000	200
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.921	2.924	(0.550)	2779682	200.000	200
12	Acetone	58	2.959	2.959	(0.558)	392618	200.000	190
13	Iodomethane	142	3.059	3.059	(0.576)	3500238	200.000	250(A)
14	Carbon Disulfide	76	3.120	3.123	(0.588)	9057871	200.000	200
15	Acetonitrile	41	3.210	3.210	(0.605)	5142798	2000.00	1900(A)
16	Allyl Chloride	39	3.210	3.210	(0.605)	3379736	200.000	190
17	Methyl Acetate	43	3.216	3.217	(0.606)	2734864	200.000	200
18	Methylene Chloride	84	3.303	3.303	(0.623)	3231347	200.000	180
19	tert-Butanol	59	3.371	3.364	(0.635)	599405	400.000	430(A)
20	Acrylonitrile	53	3.490	3.490	(0.658)	1220373	200.000	220(A)
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	3015281	200.000	200

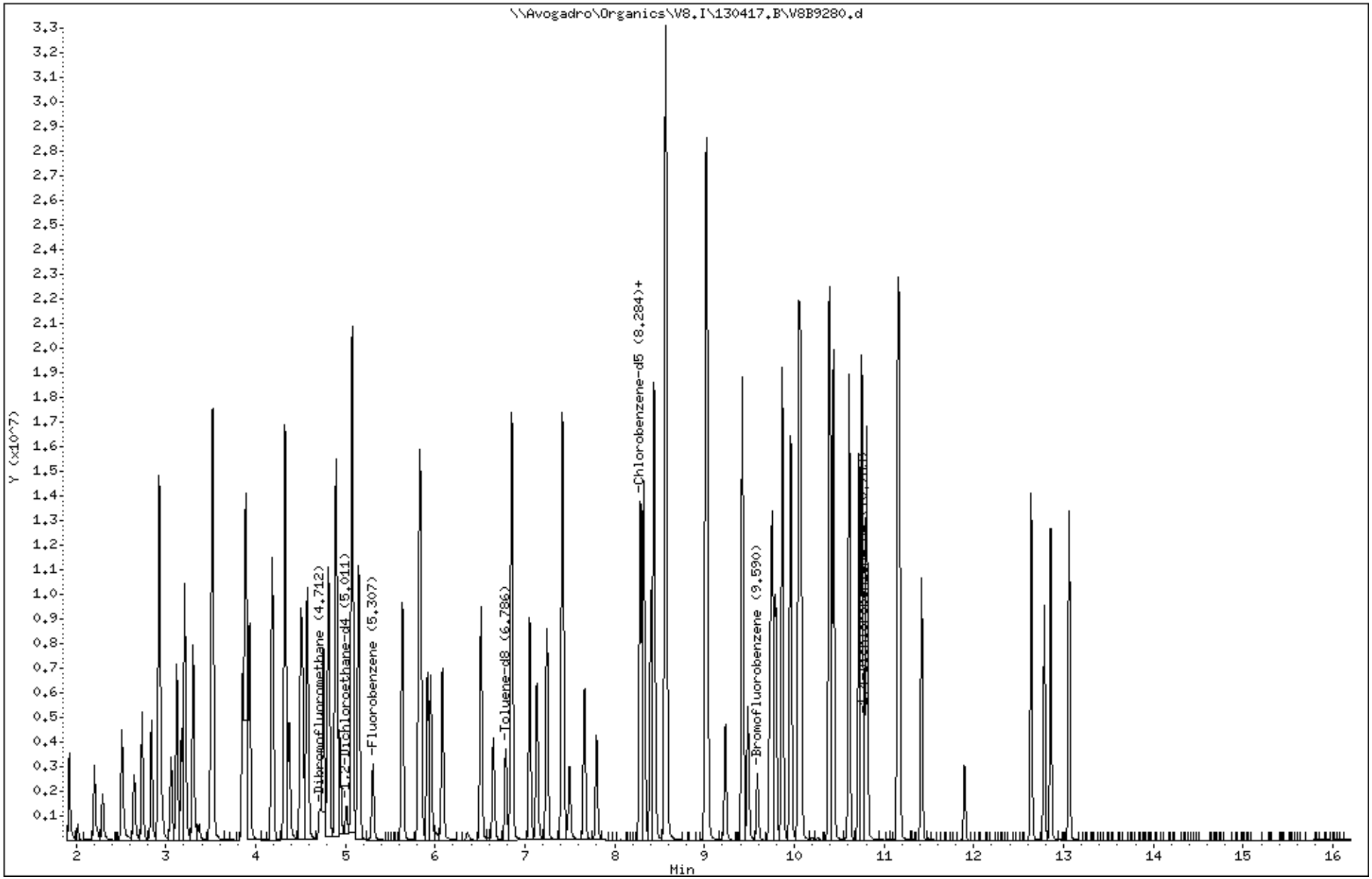
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.515	3.516	(0.663)	8923963	200.000	210(A)
	23 1,1-Dichloroethane	63	3.856	3.856	(0.727)	5819530	200.000	200(A)
	24 Vinyl acetate	43	3.882	3.885	(0.732)	9268020	200.000	210(A)
	25 Diisopropyl Ether	45	3.895	3.895	(0.734)	9971484	200.000	200
	26 2-Chloro-1,3-Butadiene	53	3.933	3.934	(0.741)	4660182	200.000	200
	27 Ethyl tert-butyl ether	59	4.184	4.188	(0.789)	9666090	200.000	210(A)
	29 2,2-Dichloropropane	77	4.332	4.329	(0.816)	4781333	200.000	210(A)
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	3338089	200.000	200
	30 2-Butanone	72	4.322	4.326	(0.815)	405090	200.000	200
	32 Propionitrile	54	4.374	4.371	(0.824)	4484183	2000.00	2100(A)
	33 Methacrylonitrile	41	4.503	4.503	(0.849)	3744454	400.000	430(A)
	34 Bromochloromethane	128	4.525	4.525	(0.853)	1520746	200.000	200
	31 Tetrahydrofuran	72	4.567	4.567	(0.861)	802162	400.000	430(A)
	35 Chloroform	83	4.577	4.577	(0.862)	5675991	200.000	200
$	36 Dibromofluoromethane	113	4.712	4.712	(0.888)	663031	50.0000	50
	37 1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	4828240	200.000	200(A)
	38 Cyclohexane	56	4.811	4.811	(0.907)	4965697	200.000	200
	39 1,1-Dichloropropene	110	4.892	4.892	(0.922)	1522702	200.000	210(A)
	40 Carbon Tetrachloride	117	4.898	4.901	(0.923)	4143873	200.000	210(A)
	41 Isobutyl Alcohol	43	4.937	4.930	(0.930)	2639061	4000.00	5400(A)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	153091	50.0000	50
	43 Benzene	78	5.075	5.072	(0.956)	12543492	200.000	190
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	4619709	200.000	200
	45 tert-Amyl methyl ether	73	5.149	5.146	(0.970)	8793167	200.000	210(A)
M	50 1,2-Dichloroethene (Total)	96				6353370	400.000	400
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2598834	50.0000	(T)
	47 Trichloroethene	130	5.634	5.634	(1.062)	3111355	200.000	210(A)
	48 Methylcyclohexane	83	5.824	5.821	(1.098)	4724647	200.000	210(A)
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	3256633	200.000	200
	51 Methyl Methacrylate	69	5.914	5.914	(1.115)	2593831	200.000	220(A)
	52 Dibromomethane	93	5.949	5.950	(1.121)	2048001	200.000	210(A)
	53 1,4-Dioxane	88	5.953	5.953	(1.122)	711975	4000.00	4200(A)
	54 Bromodichloromethane	83	6.081	6.081	(1.146)	4507995	200.000	220(A)
	55 2-Chloroethyl vinyl ether	63	6.509	6.510	(1.227)	27316	200.000	200(T)
	56 cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	5499792	200.000	220(A)
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	3003713	200.000	220(A)
$	58 Toluene-d8	98	6.785	6.786	(0.819)	2562333	50.0000	49
	59 Toluene	91	6.853	6.853	(1.291)	13129101	200.000	170
	60 trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	5116798	200.000	220(A)
	61 Ethyl Methacrylate	69	7.133	7.133	(1.344)	3524505	200.000	220(A)
	62 1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	2833773	200.000	200(A)
	63 Tetrachloroethene	164	7.412	7.413	(0.894)	2558058	200.000	200
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	5016891	200.000	210(A)
	65 2-Hexanone	43	7.496	7.496	(0.904)	2225193	200.000	220(A)
	66 Dibromochloromethane	129	7.663	7.660	(0.924)	3429847	200.000	220(A)
	67 1,2-Dibromoethane	107	7.798	7.795	(0.941)	3106505	200.000	210(A)
	69 1-Chlorohexane	91	8.284	8.281	(0.999)	4190399	200.000	190
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	1955387	50.0000	
	70 Chlorobenzene	112	8.322	8.322	(1.004)	8464511	200.000	200
	71 1,1,1,2-Tetrachloroethane	131	8.406	8.403	(1.014)	3067467	200.000	210(A)
	72 Ethylbenzene	106	8.438	8.438	(1.018)	4431677	200.000	200
	73 m,p-Xylene	106	8.567	8.567	(1.033)	10969748	400.000	380(A)
	74 o-Xylene	106	9.014	9.014	(1.087)	5322829	200.000	190
	75 Styrene	104	9.026	9.027	(1.089)	9170887	200.000	210(A)

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.232	9.232	(1.114)	2292771	200.000	230(A)
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	13518094	200.000	210(A)
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.486	(1.144)	1352192	200.000	230(A)
$	79	Bromofluorobenzene	95	9.589	9.589	(1.157)	968011	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	3995828	200.000	200
	81	Bromobenzene	156	9.756	9.753	(0.905)	3585389	200.000	200
	82	1,2,3-Trichloropropane	75	9.789	9.785	(0.908)	5019657	200.000	200
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	3484594	200.000	200
	84	2-Chlorotoluene	126	9.959	9.959	(0.924)	3235688	200.000	200
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	10968813	200.000	200
	86	4-Chlorotoluene	126	10.071	10.072	(0.934)	3374220	200.000	200
M	94	Xylene (Total)	106				16292577	600.000	580
	87	tert-Butylbenzene	119	10.390	10.387	(0.964)	11082936	200.000	200
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	10975898	200.000	190
	89	sec-Butylbenzene	105	10.608	10.609	(0.984)	13349681	200.000	200
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	6278463	200.000	200
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	10882927	200.000	200(A)
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	965491	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	6463939	200.000	200
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	10015061	200.000	210(A)
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	6123268	200.000	200
	97	Hexachloroethane	117	11.419	11.416	(1.059)	2221340	200.000	220(A)
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	736052	200.000	210(A)
	141	1,3,5-Trichlorobenzene	182	12.640	12.637	(2.382)	3791497	200.000	250(A)
	99	1,2,4-Trichlorobenzene	180	12.640	12.641	(1.172)	3958289	200.000	240(A)
	100	Hexachlorobutadiene	225	12.785	12.785	(1.186)	1649135	200.000	190
	101	Naphthalene	128	12.856	12.856	(1.192)	8860859	200.000	240(A)
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	3622103	200.000	230(A)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9280.d
Date : 17-APR-2013 14:39
Client ID: VSTD20010K
Instrument: V8.i
Sample Info: 5ML,VSTD20010K,VSTD20010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9281.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9281.d
Lab Smp Id: VSTD10010K Client Smp ID: VSTD10010K
Inj Date : 17-APR-2013 15:07
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD10010K,VSTD10010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 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	1.654	1.654	(0.312)	1098144	100.000	100
2	Freon114	85	1.773	1.773	(0.334)	1404288	100.000	100
3	Chloromethane	50	1.827	1.828	(0.344)	1494855	100.000	100
4	Vinyl Chloride	62	1.924	1.927	(0.363)	1478553	100.000	100
5	Bromomethane	94	2.210	2.213	(0.417)	919550	100.000	91
6	Chloroethane	64	2.300	2.300	(0.433)	766549	100.000	96
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	1801808	100.000	99
126	Ethanol	46	2.641	2.641	(0.498)	473211	10000.0	9300(A)
8	Ether	59	2.737	2.737	(0.516)	1241062	100.000	100
9	Acrolein	56	2.840	2.840	(0.535)	1720074	500.000	510
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	1402169	100.000	100
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	1382763	100.000	100
12	Acetone	58	2.959	2.959	(0.558)	173301	100.000	85
13	Iodomethane	142	3.059	3.059	(0.576)	1663266	100.000	120
14	Carbon Disulfide	76	3.123	3.123	(0.589)	4608083	100.000	100
15	Acetonitrile	41	3.210	3.210	(0.605)	2673585	1000.00	990(A)
16	Allyl Chloride	39	3.210	3.210	(0.605)	1671139	100.000	96
17	Methyl Acetate	43	3.216	3.217	(0.606)	1377194	100.000	100
18	Methylene Chloride	84	3.306	3.303	(0.623)	1613491	100.000	93
19	tert-Butanol	59	3.367	3.364	(0.635)	274738	200.000	200
20	Acrylonitrile	53	3.493	3.490	(0.658)	604255	100.000	110
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	1503523	100.000	100

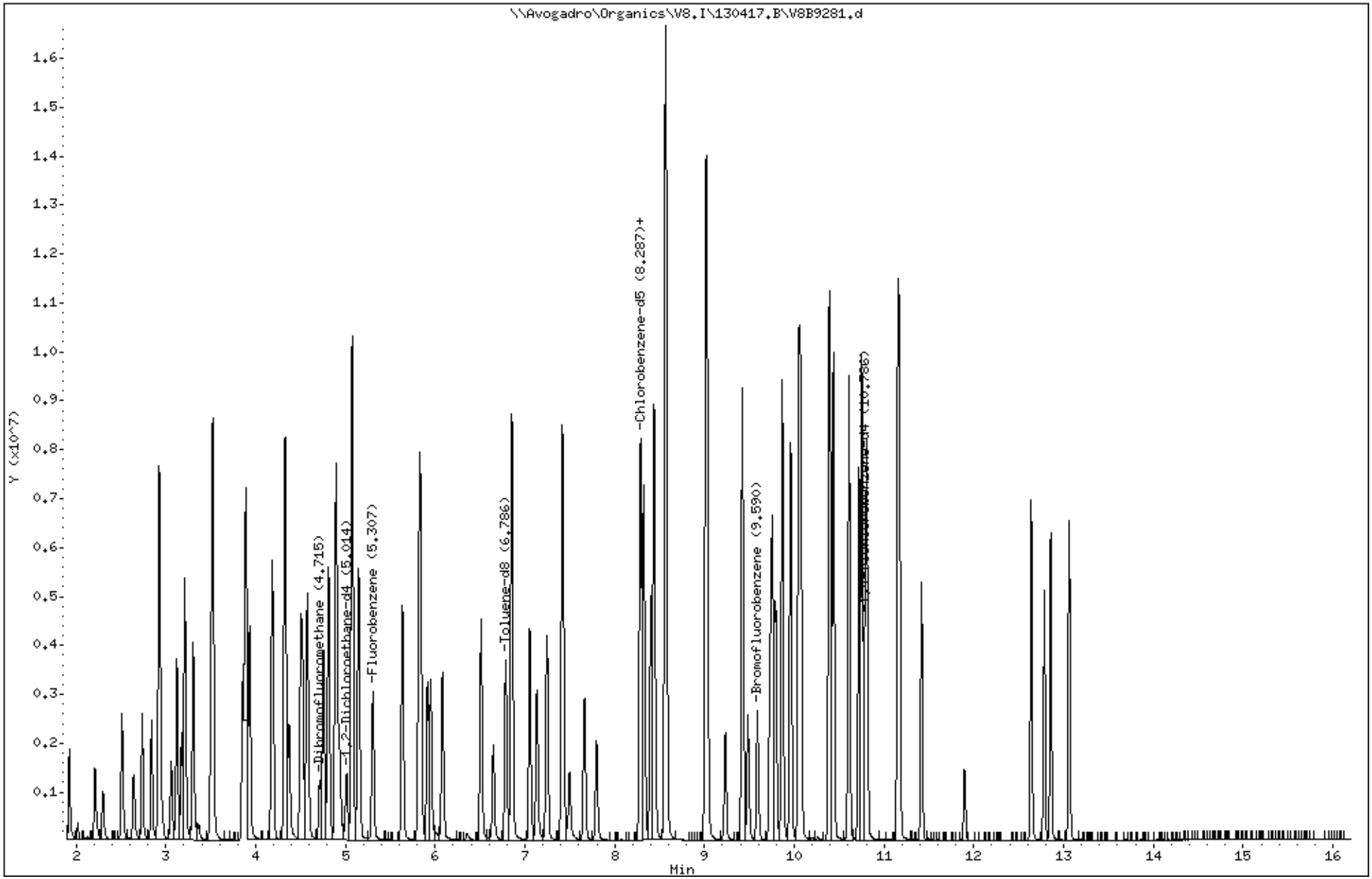
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
22	Methyl tert-butyl ether	73	3.515	3.516	(0.663)	4421618	100.000	100
23	1,1-Dichloroethane	63	3.856	3.856	(0.727)	2868226	100.000	100
24	Vinyl acetate	43	3.885	3.885	(0.732)	4641998	100.000	100
25	Diisopropyl Ether	45	3.895	3.895	(0.734)	5023045	100.000	100
26	2-Chloro-1,3-Butadiene	53	3.933	3.934	(0.741)	2321394	100.000	100
27	Ethyl tert-butyl ether	59	4.187	4.188	(0.789)	4856170	100.000	100
29	2,2-Dichloropropane	77	4.332	4.329	(0.816)	2329300	100.000	100
28	cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	1663628	100.000	100
30	2-Butanone	72	4.326	4.326	(0.815)	190260	100.000	97
32	Propionitrile	54	4.374	4.371	(0.824)	2212183	1000.00	1000(A)
33	Methacrylonitrile	41	4.502	4.503	(0.849)	1825100	200.000	210(A)
34	Bromochloromethane	128	4.525	4.525	(0.853)	763594	100.000	99
31	Tetrahydrofuran	72	4.570	4.567	(0.861)	398513	200.000	210(A)
35	Chloroform	83	4.580	4.577	(0.863)	2795457	100.000	100
$ 36	Dibromofluoromethane	113	4.715	4.712	(0.889)	660073	50.0000	50
37	1,1,1-Trichloroethane	97	4.756	4.753	(0.896)	2395459	100.000	100
38	Cyclohexane	56	4.814	4.811	(0.907)	2510241	100.000	100
39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	754204	100.000	100
40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	2043263	100.000	100
41	Isobutyl Alcohol	43	4.933	4.930	(0.930)	1280509	2000.00	2500(A)
$ 42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	151699	50.0000	50
43	Benzene	78	5.075	5.072	(0.956)	6258019	100.000	97
44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	2286468	100.000	100
45	tert-Amyl methyl ether	73	5.146	5.146	(0.970)	4325895	100.000	100
M 50	1,2-Dichloroethene (Total)	96				3167151	200.000	200
* 46	Fluorobenzene	96	5.306	5.306	(1.000)	2591614	50.0000	
47	Trichloroethene	130	5.634	5.634	(1.062)	1534484	100.000	100
48	Methylcyclohexane	83	5.824	5.821	(1.098)	2397094	100.000	100
49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	1635473	100.000	100
51	Methyl Methacrylate	69	5.914	5.914	(1.115)	1275918	100.000	100
52	Dibromomethane	93	5.949	5.950	(1.121)	1011517	100.000	100
53	1,4-Dioxane	88	5.953	5.953	(1.122)	354277	2000.00	2100(A)
54	Bromodichloromethane	83	6.081	6.081	(1.146)	2203571	100.000	100
55	2-Chloroethyl vinyl ether	63	6.512	6.510	(1.227)	13991	100.000	100(T)
56	cis-1,3-Dichloropropene	75	6.512	6.509	(1.227)	2701576	100.000	110
57	4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	1446482	100.000	100
$ 58	Toluene-d8	98	6.785	6.786	(0.818)	2526134	50.0000	50
59	Toluene	91	6.853	6.853	(1.291)	6505084	100.000	85
60	trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	2481234	100.000	110
61	Ethyl Methacrylate	69	7.133	7.133	(1.344)	1698250	100.000	100
62	1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	1391326	100.000	100
63	Tetrachloroethene	164	7.416	7.413	(0.894)	1252379	100.000	100
64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	2467341	100.000	100
65	2-Hexanone	43	7.496	7.496	(0.904)	1045749	100.000	100
66	Dibromochloromethane	129	7.663	7.660	(0.924)	1646463	100.000	110
67	1,2-Dibromoethane	107	7.798	7.795	(0.940)	1513525	100.000	100
69	1-Chlorohexane	91	8.284	8.281	(0.999)	2082498	100.000	99
* 68	Chlorobenzene-d5	117	8.293	8.290	(1.000)	1908769	50.0000	
70	Chlorobenzene	112	8.322	8.322	(1.003)	4132014	100.000	100
71	1,1,1,2-Tetrachloroethane	131	8.406	8.403	(1.014)	1489685	100.000	100
72	Ethylbenzene	106	8.438	8.438	(1.017)	2163208	100.000	99
73	m,p-Xylene	106	8.567	8.567	(1.033)	5352594	200.000	190
74	o-Xylene	106	9.014	9.014	(1.087)	2586759	100.000	97
75	Styrene	104	9.026	9.027	(1.088)	4482563	100.000	100

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.232	9.232	(1.113)	1085678	100.000	110
	77	Isopropylbenzene	105	9.422	9.422	(1.136)	6645402	100.000	100
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.486	(1.143)	645519	100.000	110
$	79	Bromofluorobenzene	95	9.589	9.589	(1.156)	941223	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	1957822	100.000	100
	81	Bromobenzene	156	9.756	9.753	(0.905)	1740138	100.000	100
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	2448948	100.000	99
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	1722516	100.000	100
	84	2-Chlorotoluene	126	9.959	9.959	(0.923)	1588182	100.000	100
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	5392837	100.000	100
	86	4-Chlorotoluene	126	10.071	10.072	(0.934)	1655993	100.000	100
M	94	Xylene (Total)	106				7939353	300.000	290
	87	tert-Butylbenzene	119	10.390	10.387	(0.963)	5408119	100.000	100
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	5435761	100.000	99
	89	sec-Butylbenzene	105	10.608	10.609	(0.984)	6615803	100.000	100
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	3060716	100.000	100
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	5409601	100.000	100
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	938191	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	3172263	100.000	100
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	5075540	100.000	110
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	3022829	100.000	100
	97	Hexachloroethane	117	11.419	11.416	(1.059)	1088645	100.000	110
	98	1,2-Dibromo-3-chloropropane	75	11.894	11.895	(1.103)	357694	100.000	100
	141	1,3,5-Trichlorobenzene	182	12.640	12.637	(2.382)	1830712	100.000	120(A)
	99	1,2,4-Trichlorobenzene	180	12.640	12.641	(1.172)	1923902	100.000	110
	100	Hexachlorobutadiene	225	12.785	12.785	(1.185)	857102	100.000	100
	101	Naphthalene	128	12.856	12.856	(1.192)	4309056	100.000	120
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	1775670	100.000	110

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9281.d
Date : 17-APR-2013 15:07
Client ID: VSTD10010K
Instrument: V8.i
Sample Info: 5ML,VSTD10010K,VSTD10010K
Purge Volume: 5.0
Operator: V10 SRC: V10
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.: M0582 Mod. Ref No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date: 04/25/2013 Time: 10:49

Lab File ID: V8B9353.D Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####) VSTD05010N Init. Calib. Time(s): 12:22 15:07

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	0.208	0.142	0.100	-31.7	20.0
Chloromethane	0.287	0.282	0.100	-1.9	20.0
Vinyl chloride	0.283	0.299	0.100	5.5	20.0
Bromomethane	0.194	0.202	0.100	4.1	20.0
Chloroethane	0.155	0.120	0.100	-22.0	20.0
Trichlorofluoromethane	0.350	0.386	0.100	10.3	20.0
1,1-Dichloroethene	0.266	0.265	0.100	-0.2	20.0
Acetone	0.039	0.034	0.100	-13.4	20.0
Iodomethane	0.274	0.286	0.100	4.7	20.0
Carbon disulfide	0.890	0.775	0.100	-13.0	20.0
Methylene chloride	0.335	0.235	0.100	-29.9	20.0
trans-1,2-Dichloroethene	0.287	0.290	0.100	0.8	20.0
Methyl tert-butyl ether	0.836	0.798	0.100	-4.5	20.0
1,1-Dichloroethane	0.547	0.531	0.200	-3.0	20.0
Vinyl acetate	0.849	0.764	0.100	-10.0	20.0
2-Butanone	0.038	0.035	0.100	-7.4	20.0
cis-1,2-Dichloroethene	0.318	0.317	0.100	-0.2	20.0
2,2-Dichloropropane	0.436	0.472	0.100	8.2	20.0
Bromochloromethane	0.148	0.155	0.100	4.5	20.0
Chloroform	0.536	0.541	0.200	0.9	20.0
1,1,1-Trichloroethane	0.454	0.460	0.100	1.4	20.0
1,1-Dichloropropene	0.140	0.142	0.100	1.2	20.0
Carbon tetrachloride	0.378	0.381	0.100	0.8	20.0
1,2-Dichloroethane	0.439	0.436	0.100	-0.5	20.0
Benzene	1.250	1.134	0.500	-9.2	20.0
Trichloroethene	0.290	0.275	0.200	-5.3	20.0
1,2-Dichloropropane	0.310	0.306	0.100	-1.1	20.0
Dibromomethane	0.190	0.181	0.100	-5.2	20.0
Bromodichloromethane	0.406	0.402	0.200	-1.0	20.0
cis-1,3-Dichloropropene	0.487	0.478	0.200	-1.9	20.0
4-Methyl-2-pentanone	0.269	0.229	0.100	-15.1	20.0
Toluene	1.475	1.121	0.400	-24.0	20.0
trans-1,3-Dichloropropene	0.445	0.434	0.100	-2.5	20.0
1,1,2-Trichloroethane	0.267	0.242	0.100	-9.1	20.0
1,3-Dichloropropane	0.625	0.638	0.100	2.0	20.0
Tetrachloroethene	0.326	0.299	0.200	-8.1	20.0
2-Hexanone	0.266	0.254	0.100	-4.5	20.0
Dibromochloromethane	0.405	0.413	0.100	1.9	20.0
1,2-Dibromoethane	0.383	0.374	0.100	-2.4	20.0
Chlorobenzene	1.074	1.056	0.500	-1.6	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date: 04/25/2013 Time: 10:49

Lab File ID: V8B9353.D Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####) VSTD05010N Init. Calib. Time(s): 12:22 15:07

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	0.377	0.381	0.100	0.8	20.0
Ethylbenzene	0.572	0.525	0.100	-8.1	20.0
m,p-Xylene	0.728	0.647	0.100	-11.1	20.0
o-Xylene	0.695	0.635	0.300	-8.6	20.0
Xylene (Total)	0.717	0.643	0.000	-10.3	20.0
Styrene	1.090	1.079	0.300	-1.0	20.0
Bromoform	0.258	0.249	0.100	-3.6	20.0
Isopropylbenzene	1.670	1.585	0.100	-5.1	20.0
1,1,2,2-Tetrachloroethane	1.047	0.965	0.300	-7.9	20.0
Bromobenzene	0.921	0.879	0.100	-4.6	20.0
1,2,3-Trichloropropane	1.323	1.181	0.100	-10.7	20.0
n-Propylbenzene	0.896	0.832	0.100	-7.1	20.0
2-Chlorotoluene	0.848	0.794	0.100	-6.4	20.0
1,3,5-Trimethylbenzene	2.847	2.626	0.100	-7.8	20.0
4-Chlorotoluene	0.871	0.842	0.100	-3.4	20.0
tert-Butylbenzene	2.826	2.965	0.100	4.9	20.0
1,2,4-Trimethylbenzene	2.915	2.503	0.100	-14.1	20.0
sec-Butylbenzene	3.455	3.324	0.100	-3.8	20.0
4-Isopropyltoluene	2.764	2.582	0.100	-6.6	20.0
1,3-Dichlorobenzene	1.604	1.514	0.600	-5.6	20.0
1,4-Dichlorobenzene	1.687	1.634	0.500	-3.1	20.0
n-Butylbenzene	2.481	2.311	0.100	-6.8	20.0
1,2-Dichlorobenzene	1.571	1.502	0.400	-4.4	20.0
1,2-Dibromo-3-chloropropane	0.186	0.159	0.050	-14.4	20.0
1,2,4-Trichlorobenzene	0.897	0.772	0.200	-13.9	20.0
Hexachlorobutadiene	0.444	0.454	0.100	2.2	20.0
1,2,3-Trichlorobenzene	0.847	0.699	0.100	-17.6	20.0
Naphthalene	1.966	1.500	0.100	-23.7	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Instrument ID: V10 Calibration Date: 04/25/2013 Time: 10:49

Lab File ID: V8B9353.D Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####) VSTD05010N Init. Calib. Time(s): 12:22 15:07

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
Dibromofluoromethane	0.253	0.263	0.100	4.0	20.0
1,2-Dichloroethane-d4	0.059	0.058	0.100	-1.2	20.0
Toluene-d8	1.328	1.336	0.100	0.6	20.0
Bromofluorobenzene	0.493	0.491	0.100	-0.4	20.0

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9353.d
Report Date: 30-Apr-2013 09:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9353.d
Lab Smp Id: VSTD05010N Client Smp ID: VSTD05010N
Inj Date : 25-APR-2013 10:49
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,VSTD05010N,VSTD05010N
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.660	1.660	(0.313)	375598	50.0000	34
2	Freon114	85	1.779	1.779	(0.335)	725403	50.0000	50
3	Chloromethane	50	1.876	1.876	(0.354)	746349	50.0000	49
4	Vinyl Chloride	62	1.930	1.930	(0.364)	791957	50.0000	53
5	Bromomethane	94	2.223	2.223	(0.419)	535715	50.0000	52
6	Chloroethane	64	2.310	2.310	(0.435)	319100	50.0000	39
7	Trichlorofluoromethane	101	2.519	2.519	(0.475)	1022566	50.0000	55
126	Ethanol	46	2.644	2.644	(0.498)	247151	5000.00	4800(AQ)
8	Ether	59	2.744	2.744	(0.517)	560237	50.0000	45
9	Acrolein	56	2.843	2.843	(0.536)	657700	250.000	190
10	1,1-Dichloroethene	96	2.933	2.933	(0.553)	702399	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.927	2.927	(0.552)	700015	50.0000	50
12	Acetone	58	2.966	2.966	(0.559)	89819	50.0000	43
13	Iodomethane	142	3.065	3.065	(0.578)	758469	50.0000	52
14	Carbon Disulfide	76	3.126	3.126	(0.589)	2052552	50.0000	44
15	Acetonitrile	41	3.213	3.213	(0.606)	1249129	500.000	450(A)
16	Allyl Chloride	39	3.213	3.213	(0.606)	889903	50.0000	50
17	Methyl Acetate	43	3.220	3.220	(0.607)	550939	50.0000	40
18	Methylene Chloride	84	3.310	3.310	(0.624)	621651	50.0000	35
19	tert-Butanol	59	3.371	3.371	(0.635)	110068	100.000	77
20	Acrylonitrile	53	3.496	3.496	(0.659)	238961	50.0000	42
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	767013	50.0000	50
22	Methyl tert-butyl ether	73	3.522	3.522	(0.664)	2114452	50.0000	48

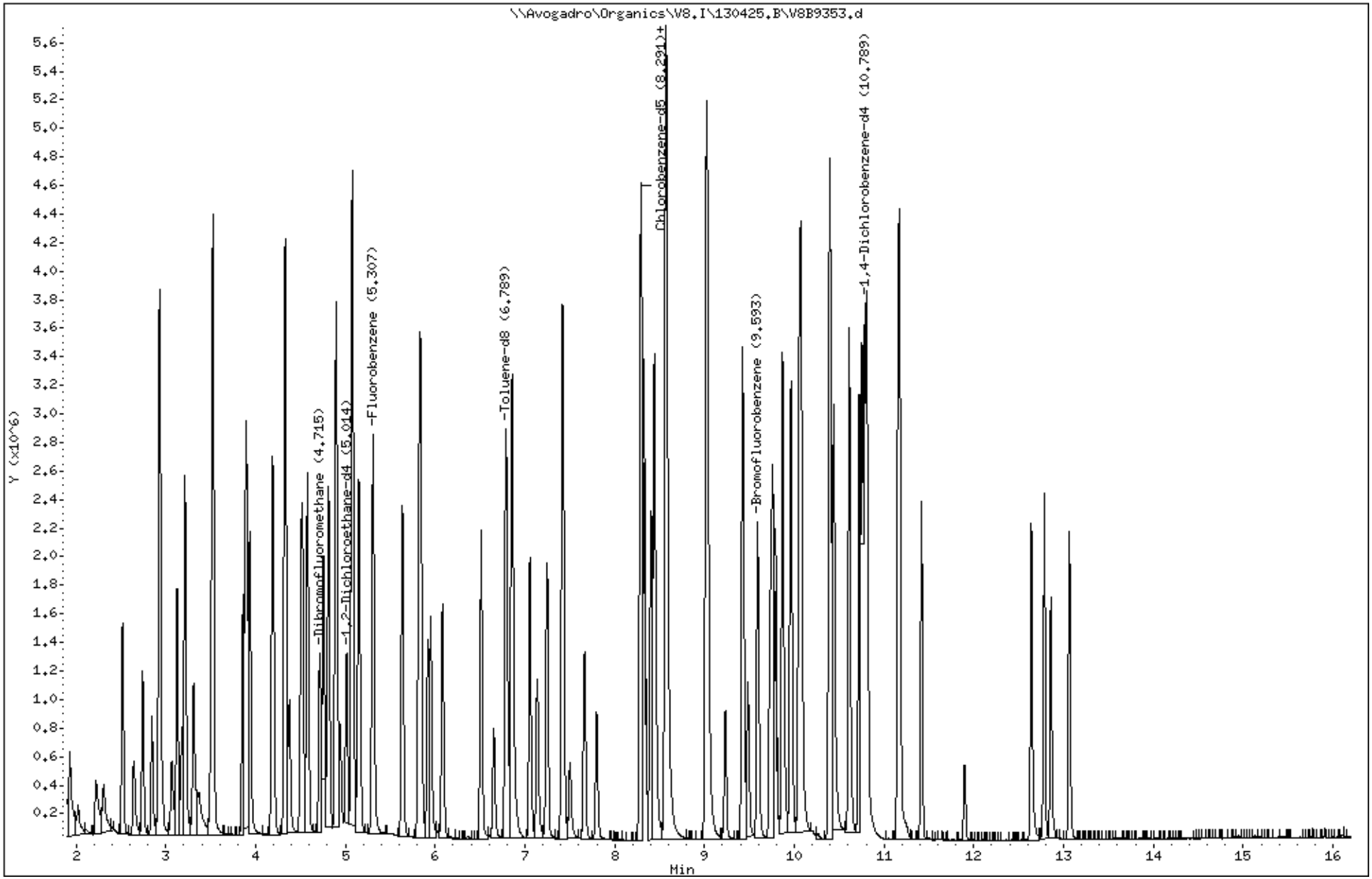
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.859	3.859	(0.727)	1405989	50.0000	48
	24 Vinyl acetate	43	3.888	3.888	(0.733)	2024353	50.0000	45
	25 Diisopropyl Ether	45	3.898	3.898	(0.735)	2222893	50.0000	44
	26 2-Chloro-1,3-Butadiene	53	3.937	3.937	(0.742)	1108572	50.0000	47
	27 Ethyl tert-butyl ether	59	4.191	4.191	(0.790)	2278582	50.0000	48
	29 2,2-Dichloropropane	77	4.332	4.332	(0.816)	1249371	50.0000	54
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	840633	50.0000	50
	30 2-Butanone	72	4.326	4.326	(0.815)	92966	50.0000	46
	32 Propionitrile	54	4.377	4.377	(0.825)	872840	500.000	400(A)
	33 Methacrylonitrile	41	4.506	4.506	(0.849)	725559	100.000	81
	34 Bromochloromethane	128	4.525	4.525	(0.853)	410104	50.0000	52
	31 Tetrahydrofuran	72	4.573	4.573	(0.862)	164664	100.000	85
	35 Chloroform	83	4.580	4.580	(0.863)	1434340	50.0000	50
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	698020	50.0000	52
	37 1,1,1-Trichloroethane	97	4.756	4.756	(0.896)	1218734	50.0000	51
	38 Cyclohexane	56	4.811	4.811	(0.907)	1100350	50.0000	44
	39 1,1-Dichloropropene	110	4.892	4.892	(0.922)	375219	50.0000	51
	40 Carbon Tetrachloride	117	4.901	4.901	(0.924)	1010363	50.0000	50
	41 Isobutyl Alcohol	43	4.814	4.814	(0.907)	101622	1000.00	190
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	153326	50.0000	49
	43 Benzene	78	5.075	5.075	(0.956)	3005318	50.0000	45
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	1156220	50.0000	50
	45 tert-Amyl methyl ether	73	5.149	5.149	(0.970)	2011052	50.0000	47
M	50 1,2-Dichloroethene (Total)	96				1607646	100.000	100
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2649134	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	727977	50.0000	47
	48 Methylcyclohexane	83	5.824	5.824	(1.098)	1088176	50.0000	46
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	811950	50.0000	49
	51 Methyl Methacrylate	69	5.920	5.920	(1.116)	555551	50.0000	45
	52 Dibromomethane	93	5.949	5.949	(1.121)	478380	50.0000	47
	53 1,4-Dioxane	88	5.962	5.962	(1.124)	135326	1000.00	780(A)
	54 Bromodichloromethane	83	6.081	6.081	(1.146)	1065384	50.0000	49
	55 2-Chloroethyl vinyl ether	63	6.515	6.515	(1.228)	6553	50.0000	46(Q)
	56 cis-1,3-Dichloropropene	75	6.512	6.512	(1.227)	1266411	50.0000	49
	57 4-Methyl-2-pentanone	43	6.654	6.654	(1.254)	605583	50.0000	42
$	58 Toluene-d8	98	6.789	6.789	(0.819)	2407559	50.0000	50
	59 Toluene	91	6.856	6.856	(1.292)	2968465	50.0000	38
	60 trans-1,3-Dichloropropene	75	7.055	7.055	(1.330)	1150151	50.0000	49
	61 Ethyl Methacrylate	69	7.139	7.139	(1.345)	692772	50.0000	42
	62 1,1,2-Trichloroethane	97	7.245	7.245	(1.365)	642054	50.0000	45
	63 Tetrachloroethene	164	7.416	7.416	(0.894)	539271	50.0000	46
	64 1,3-Dichloropropane	76	7.425	7.425	(0.895)	1149196	50.0000	51
	65 2-Hexanone	43	7.499	7.499	(0.904)	457719	50.0000	48
	66 Dibromochloromethane	129	7.663	7.663	(0.924)	743281	50.0000	51
	67 1,2-Dibromoethane	107	7.801	7.801	(0.941)	674029	50.0000	49
	69 1-Chlorohexane	91	8.287	8.287	(0.999)	881214	50.0000	44
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1801541	50.0000	
	70 Chlorobenzene	112	8.325	8.325	(1.004)	1902812	50.0000	49
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.013)	685519	50.0000	50
	72 Ethylbenzene	106	8.441	8.441	(1.018)	945857	50.0000	46
	73 m,p-Xylene	106	8.570	8.570	(1.033)	2331441	100.000	89
	74 o-Xylene	106	9.017	9.017	(1.087)	1144543	50.0000	46
	75 Styrene	104	9.030	9.030	(1.089)	1943410	50.0000	48
	76 Bromoform	173	9.232	9.232	(1.113)	448472	50.0000	48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Isopropylbenzene	105	9.425	9.425	(1.136)	2854601	50.0000	47
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	250698	50.0000	45
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	884612	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	835694	50.0000	46
	81 Bromobenzene	156	9.759	9.759	(0.905)	761535	50.0000	48
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	1022896	50.0000	45
	83 n-Propylbenzene	120	9.869	9.869	(0.915)	720936	50.0000	46
	84 2-Chlorotoluene	126	9.962	9.962	(0.924)	687465	50.0000	47
	85 1,3,5-Trimethylbenzene	105	10.055	10.055	(0.932)	2274546	50.0000	46
	86 4-Chlorotoluene	126	10.075	10.075	(0.934)	729030	50.0000	48
M	94 Xylene (Total)	106				3475984	150.000	130
	87 tert-Butylbenzene	119	10.393	10.393	(0.964)	2568464	50.0000	52
	88 1,2,4-Trimethylbenzene	105	10.438	10.438	(0.968)	2168161	50.0000	43
	89 sec-Butylbenzene	105	10.612	10.612	(0.984)	2878977	50.0000	48
	90 1,3-Dichlorobenzene	146	10.724	10.724	(0.994)	1311715	50.0000	47
	91 4-Isopropyltoluene	119	10.756	10.756	(0.997)	2236349	50.0000	47
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	866192	50.0000	
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1415389	50.0000	48
	95 n-Butylbenzene	91	11.155	11.155	(1.034)	2001608	50.0000	46
	96 1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	1300815	50.0000	48
	97 Hexachloroethane	117	11.415	11.415	(1.058)	472146	50.0000	50
	98 1,2-Dibromo-3-chloropropane	75	11.894	11.894	(1.103)	137818	50.0000	43
	141 1,3,5-Trichlorobenzene	182	12.640	12.640	(2.382)	640753	50.0000	40(A)
	99 1,2,4-Trichlorobenzene	180	12.640	12.640	(1.172)	669017	50.0000	43
	100 Hexachlorobutadiene	225	12.785	12.785	(1.185)	393597	50.0000	51
	101 Naphthalene	128	12.859	12.859	(1.192)	1298860	50.0000	38
	102 1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	605094	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\V8.I\130425.B\V8B9353.d
Date : 25-APR-2013 10:49
Client ID: VSTD05010N
Instrument: V8.i
Sample Info: 5ML,VSTD05010N,VSTD05010N
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9274.d
Lab Smp Id: BFB10K Client Smp ID: BFB10K
Inj Date : 17-APR-2013 11:11
Operator : V10 SRC: V10 Inst ID: V8.i
Smp Info : 5ML,BFB10K,BFB10K
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\130417.B\BFBSOM_V10.m
Meth Date : 13-Mar-2013 07:47 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 100 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

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		
5.306	4.900	(0.000)	95	373795			0.00- 100.00	100.00
5.306	4.900	(0.000)	50	71011			15.00- 40.00	19.00
5.306	4.900	(0.000)	75	182951			30.00- 80.00	48.94
5.306	4.900	(0.000)	96	24553			5.00- 9.00	6.57
5.306	4.900	(0.000)	173	1868			0.00- 2.00	0.60
5.306	4.900	(0.000)	174	309532			50.00- 120.00	82.81
5.306	4.900	(0.000)	175	20973			5.00- 9.00	6.78
5.306	4.900	(0.000)	176	299527			95.00- 101.00	96.77
5.306	4.900	(0.000)	177	19216			5.00- 9.00	6.42

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9274.d

Date : 17-APR-2013 11:11

Client ID: BFB10K

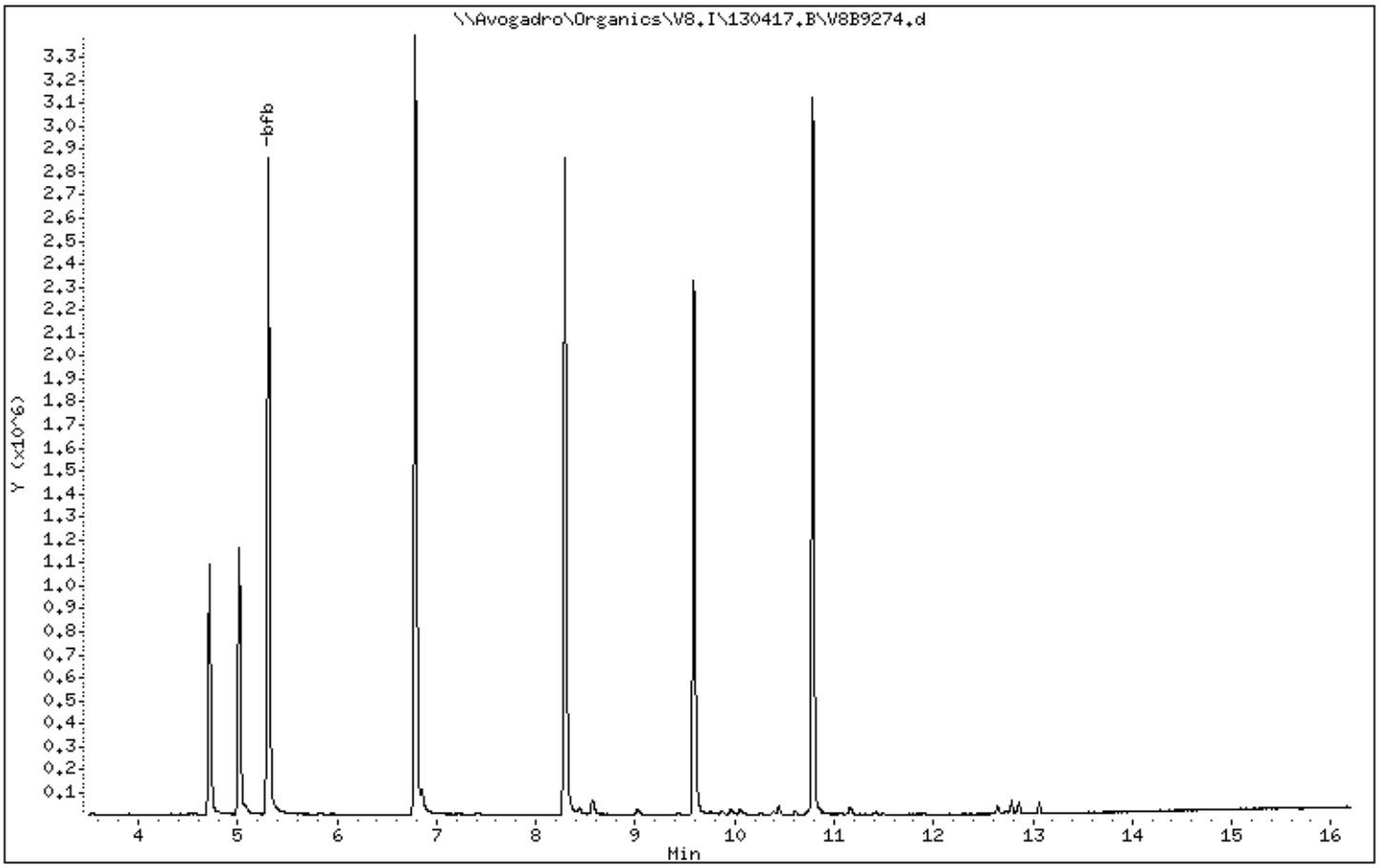
Instrument: V8.i

Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9274.d

Date : 17-APR-2013 11:11

Client ID: BFB10K

Instrument: V8.i

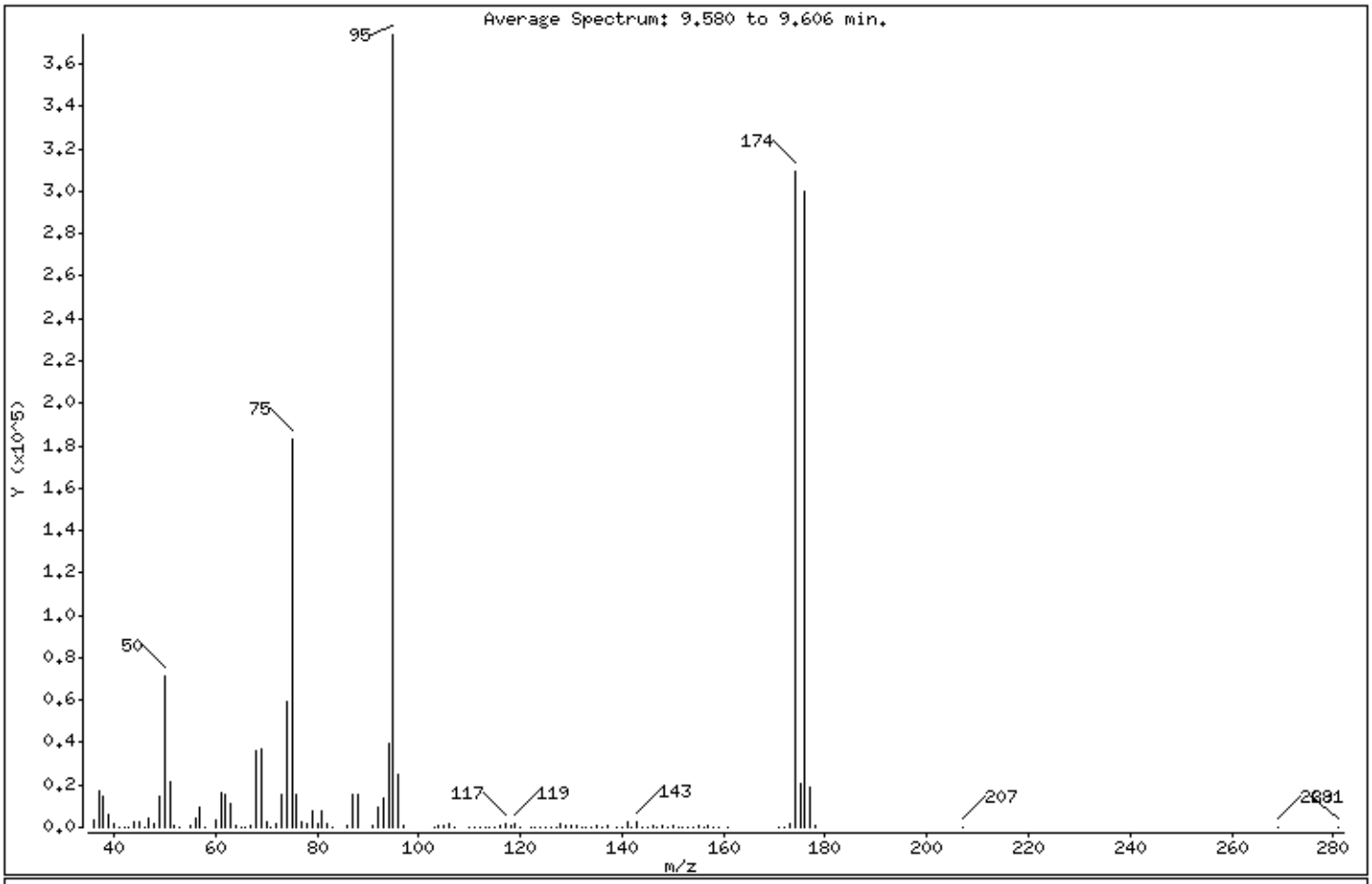
Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

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	19.00
75	30.00 - 80.00% of mass 95	48.94
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.50 (0.60)
174	50.00 - 120.00% of mass 95	82.81
175	5.00 - 9.00% of mass 174	5.61 (6.78)
176	95.00 - 101.00% of mass 174	80.13 (96.77)
177	5.00 - 9.00% of mass 176	5.14 (6.42)

Date : 17-APR-2013 11:11

Client ID: BFB10K Instrument: V8.i

Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

Column phase: DB-624 Column diameter: 0.25

Data File: V8B9274.d
Spectrum: Average Spectrum: 9.580 to 9.606 min.
Location of Maximum: 95.00
Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3032	69.00	37296	111.00	214	144.00	200
37.00	16800	70.00	2756	112.00	121	145.00	304
38.00	14568	71.00	55	113.00	183	146.00	537
39.00	5643	72.00	1728	114.00	26	147.00	196
40.00	2109	73.00	15149	115.00	422	148.00	893
41.00	76	74.00	59128	116.00	1215	149.00	253
42.00	66	75.00	182912	117.00	1883	150.00	470
43.00	212	76.00	15214	118.00	1180	151.00	27
44.00	2921	77.00	2186	119.00	1547	152.00	153
45.00	2908	78.00	1611	120.00	54	153.00	244
46.00	213	79.00	8028	122.00	46	154.00	204
47.00	4485	80.00	2096	123.00	87	155.00	834
48.00	1985	81.00	7818	124.00	216	156.00	91
49.00	14366	82.00	1687	125.00	69	157.00	582
50.00	71008	83.00	169	126.00	53	158.00	25
51.00	21304	86.00	447	127.00	113	159.00	380
52.00	940	87.00	15820	128.00	1299	161.00	338
53.00	11	88.00	15386	129.00	593	171.00	29
55.00	821	91.00	1097	130.00	1120	172.00	293
56.00	4715	92.00	9477	131.00	508	173.00	1868
57.00	9096	93.00	14041	132.00	28	174.00	309504
58.00	421	94.00	39704	133.00	21	175.00	20968
60.00	3068	95.00	373760	134.00	62	176.00	299520
61.00	16225	96.00	24552	135.00	559	177.00	19216
62.00	15859	97.00	640	136.00	32	178.00	523
63.00	11572	103.00	136	137.00	576	207.00	191
64.00	1166	104.00	1261	139.00	93	269.00	14
65.00	186	105.00	480	140.00	233	281.00	12
66.00	33	106.00	1296	141.00	2709		
67.00	905	107.00	344	142.00	388		
68.00	36304	110.00	133	143.00	2868		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9352.d
Lab Smp Id: BFB10N Client Smp ID: BFB10N
Inj Date : 25-APR-2013 10:12
Operator : V10 SRC: V10 Inst ID: V8.i
Smp Info : 5ML,BFB10N,BFB10N
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\130425.B\BFBSOM_V10.m
Meth Date : 30-Apr-2013 09:49 cmosher Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 100 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

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		
4.519	4.900	(0.000)	95	322490			0.00- 100.00	100.00
4.519	4.900	(0.000)	50	63746			15.00- 40.00	19.77
4.519	4.900	(0.000)	75	162664			30.00- 80.00	50.44
4.519	4.900	(0.000)	96	20746			5.00- 9.00	6.43
4.519	4.900	(0.000)	173	1445			0.00- 2.00	0.58
4.519	4.900	(0.000)	174	250984			50.00- 120.00	77.83
4.519	4.900	(0.000)	175	17402			5.00- 9.00	6.93
4.519	4.900	(0.000)	176	242947			95.00- 101.00	96.80
4.519	4.900	(0.000)	177	15715			5.00- 9.00	6.47

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9352.d

Date : 25-APR-2013 10:12

Client ID: BFB10N

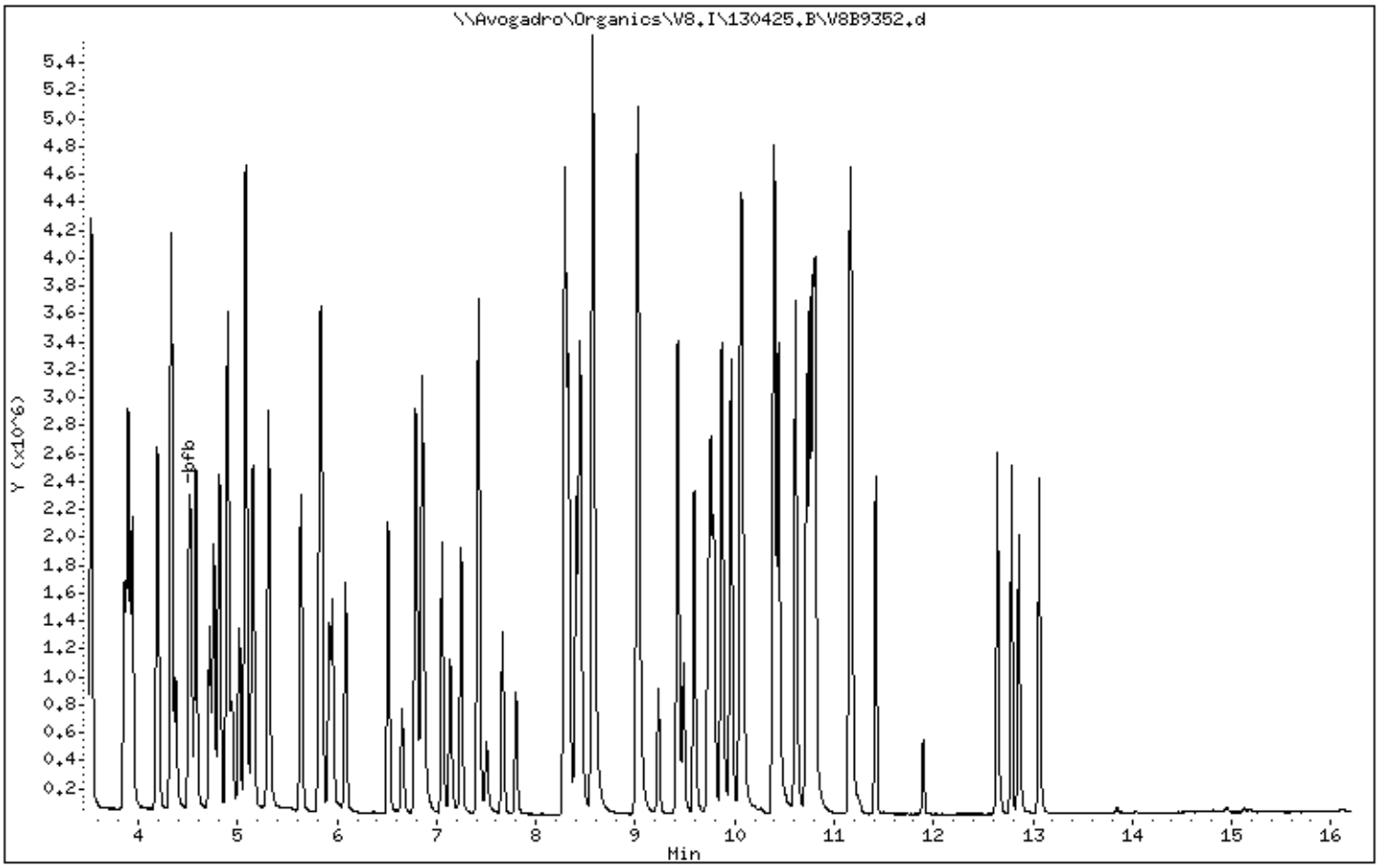
Instrument: V8.i

Sample Info: 5ML,BFB10N,BFB10N

Operator: V10 SRC: V10

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9352.d

Date : 25-APR-2013 10:12

Client ID: BFB10N

Instrument: V8.i

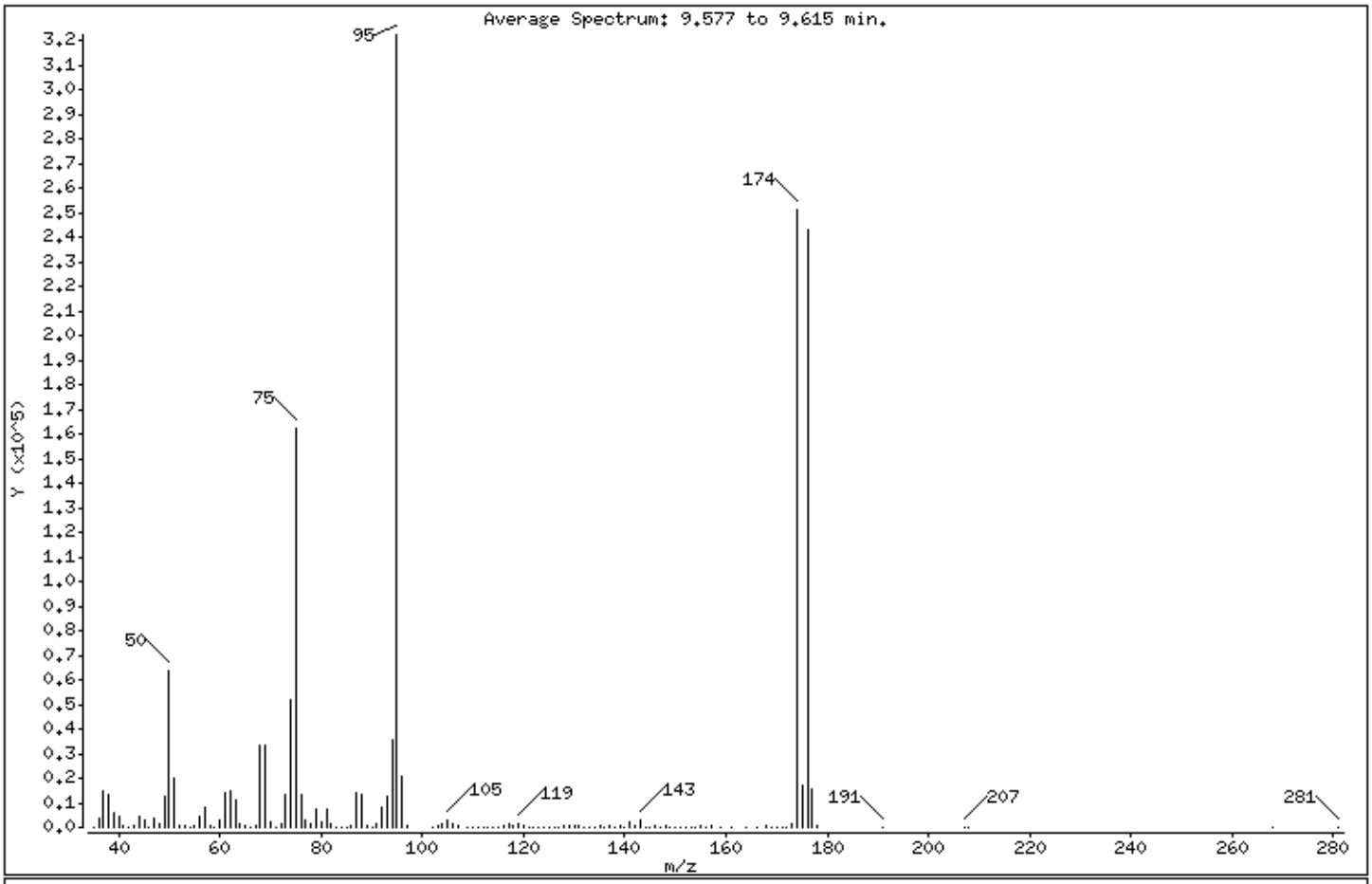
Sample Info: 5ML,BFB10N,BFB10N

Operator: V10 SRC: V10

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	19.77
75	30.00 - 80.00% of mass 95	50.44
96	5.00 - 9.00% of mass 95	6.43
173	Less than 2.00% of mass 174	0.45 (0.58)
174	50.00 - 120.00% of mass 95	77.83
175	5.00 - 9.00% of mass 174	5.40 (6.93)
176	95.00 - 101.00% of mass 174	75.33 (96.80)
177	5.00 - 9.00% of mass 176	4.87 (6.47)

Date : 25-APR-2013 10:12

Client ID: BFB10N Instrument: V8.i

Sample Info: 5ML,BFB10N,BFB10N

Operator: V10 SRC: V10

Column phase: DB-624 Column diameter: 0.25

Data File: V8B9352.d
Spectrum: Average Spectrum: 9.577 to 9.615 min.
Location of Maximum: 95.00
Number of points: 138

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	10	70.00	2469	110.00	175	145.00	243
36.00	3512	71.00	97	111.00	319	146.00	464
37.00	14923	72.00	1625	112.00	214	147.00	189
38.00	13592	73.00	13682	113.00	241	148.00	695
39.00	5976	74.00	52232	114.00	21	149.00	222
40.00	4266	75.00	162624	115.00	357	150.00	235
41.00	440	76.00	13319	116.00	1030	151.00	62
42.00	282	77.00	2631	117.00	1762	152.00	121
43.00	720	78.00	1843	118.00	1048	153.00	265
44.00	4498	79.00	7514	119.00	1439	154.00	211
45.00	2918	80.00	2338	120.00	658	155.00	951
46.00	279	81.00	7582	121.00	59	156.00	128
47.00	4068	82.00	1770	122.00	20	157.00	504
48.00	1781	83.00	211	123.00	50	159.00	328
49.00	12851	84.00	87	124.00	157	161.00	368
50.00	63744	85.00	101	125.00	76	164.00	10
51.00	20048	86.00	387	126.00	155	166.00	10
52.00	1012	87.00	13954	127.00	155	168.00	622
53.00	860	88.00	13665	128.00	1070	169.00	85
54.00	350	89.00	477	129.00	567	170.00	186
55.00	1028	90.00	289	130.00	1066	171.00	52
56.00	4422	91.00	1673	131.00	408	172.00	367
57.00	8519	92.00	8400	132.00	32	173.00	1445
58.00	380	93.00	12542	133.00	21	174.00	250944
59.00	56	94.00	35728	134.00	17	175.00	17400
60.00	3167	95.00	322432	135.00	510	176.00	242944
61.00	14334	96.00	20744	136.00	59	177.00	15715
62.00	14709	97.00	668	137.00	592	178.00	447
63.00	10818	102.00	37	138.00	25	191.00	8
64.00	1122	103.00	557	139.00	381	207.00	218
65.00	536	104.00	1406	140.00	250	208.00	16
66.00	119	105.00	2599	141.00	2585	268.00	10
67.00	869	106.00	1548	142.00	371	281.00	22
68.00	33480	107.00	533	143.00	2666		
69.00	33160	109.00	161	144.00	135		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71366

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9356.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71366

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9356.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9356.d
Report Date: 30-Apr-2013 09:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

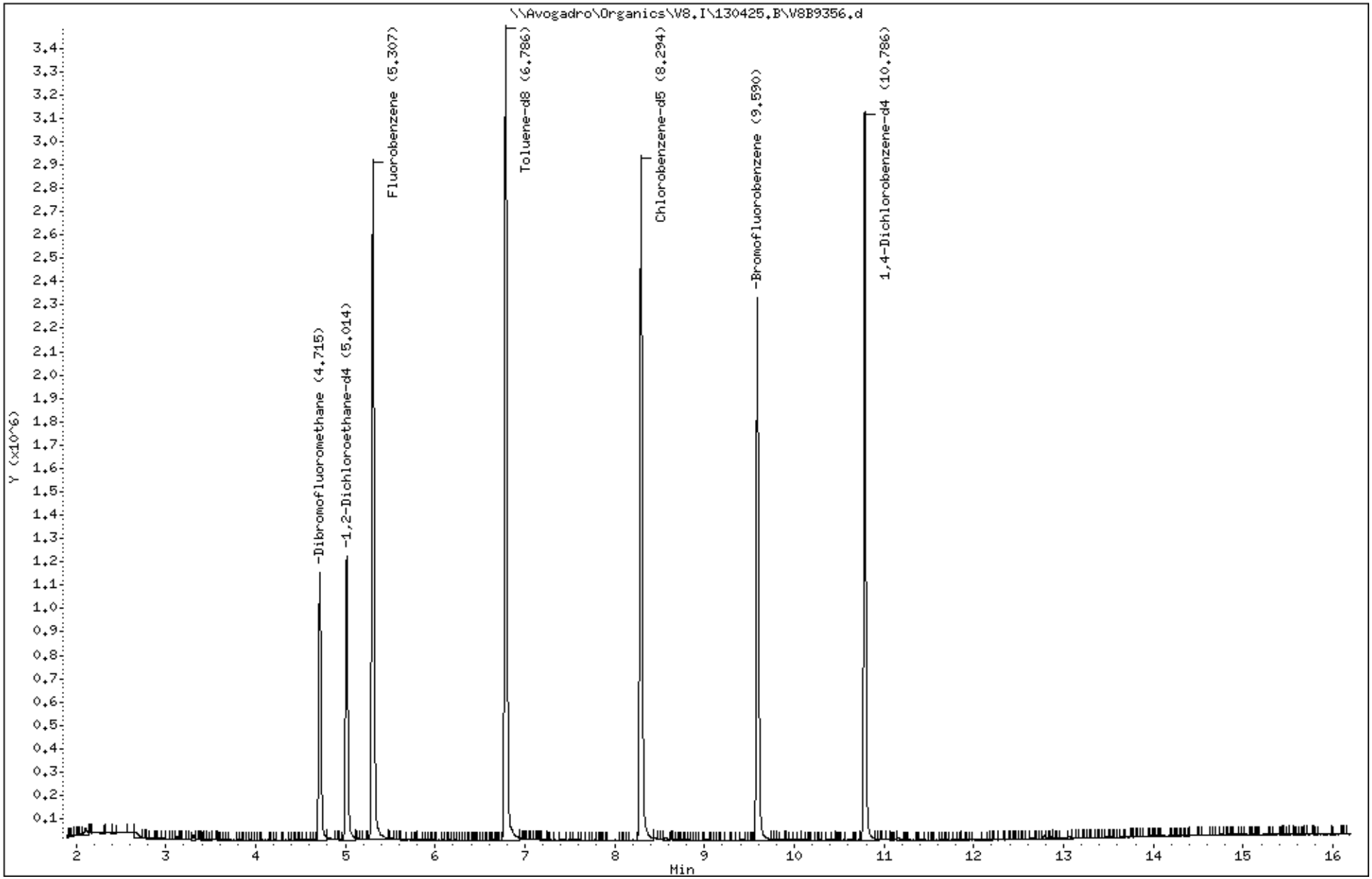
Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9356.d
Lab Smp Id: MB-71366 Client Smp ID: MB-71366
Inj Date : 25-APR-2013 13:00
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-71366,MB-71366,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	4.715	4.715	(0.889)	640530	50.7648	51
$ 42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	145834	49.9726	50
* 46 Fluorobenzene	96	5.306	5.306	(1.000)	2491251	50.0000	
$ 58 Toluene-d8	98	6.785	6.789	(0.818)	2392800	50.7565	51
* 68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1774815	50.0000	
$ 79 Bromofluorobenzene	95	9.589	9.589	(1.156)	864365	49.4035	49
* 92 1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	786560	50.0000	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9356.d
Date : 25-APR-2013 13:00
Client ID: MB-71366
Instrument: V8.i
Sample Info: 5ML,MB-71366,MB-71366,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042313MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9374.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

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	44	
75-01-4	Vinyl chloride	48	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	59	
75-35-4	1,1-Dichloroethene	43	
67-64-1	Acetone	29	
74-88-4	Iodomethane	52	
75-15-0	Carbon disulfide	41	
75-09-2	Methylene chloride	41	
156-60-5	trans-1,2-Dichloroethene	43	
1634-04-4	Methyl tert-butyl ether	46	
75-34-3	1,1-Dichloroethane	47	
108-05-4	Vinyl acetate	44	
78-93-3	2-Butanone	36	
156-59-2	cis-1,2-Dichloroethene	43	
594-20-7	2,2-Dichloropropane	42	
74-97-5	Bromochloromethane	46	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	43	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	42	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	46	
74-95-3	Dibromomethane	48	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	45	
108-10-1	4-Methyl-2-pentanone	41	
108-88-3	Toluene	36	
10061-02-6	trans-1,3-Dichloropropene	46	
79-00-5	1,1,2-Trichloroethane	45	
142-28-9	1,3-Dichloropropane	45	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042313MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9374.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

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	36	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	43	
108-90-7	Chlorobenzene	42	
630-20-6	1,1,1,2-Tetrachloroethane	46	
100-41-4	Ethylbenzene	41	
179601-23-1	m,p-Xylene	79	
95-47-6	o-Xylene	40	
1330-20-7	Xylene (Total)	120	
100-42-5	Styrene	42	
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	40	
103-65-1	n-Propylbenzene	41	
95-49-8	2-Chlorotoluene	42	
108-67-8	1,3,5-Trimethylbenzene	43	
106-43-4	4-Chlorotoluene	41	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	42	
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	42	
104-51-8	n-Butylbenzene	46	
95-50-1	1,2-Dichlorobenzene	43	
96-12-8	1,2-Dibromo-3-chloropropane	40	
120-82-1	1,2,4-Trichlorobenzene	41	
87-68-3	Hexachlorobutadiene	43	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	36	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9374.d
Report Date: 30-Apr-2013 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9374.d
Lab Smp Id: M0582-06AMS Client Smp ID: MW-4-042313MS
Inj Date : 25-APR-2013 21:08
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-06AMS,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	1.654	1.660	(0.312)	329361	42.2496	42
	3 Chloromethane	50	1.828	1.876	(0.344)	472266	43.8169	44
	4 Vinyl Chloride	62	1.927	1.930	(0.363)	510046	47.9480	48
	5 Bromomethane	94	2.217	2.223	(0.418)	317242	43.5233	44
	6 Chloroethane	64	2.303	2.310	(0.434)	314673	54.2644	54
	7 Trichlorofluoromethane	101	2.516	2.519	(0.474)	769966	58.6489	59
	10 1,1-Dichloroethene	96	2.930	2.933	(0.552)	433428	43.4631	43(Q)
	12 Acetone	58	2.959	2.966	(0.558)	42632	29.0012	29(Q)
	13 Iodomethane	142	3.062	3.065	(0.577)	535784	52.1819	52
	14 Carbon Disulfide	76	3.123	3.126	(0.589)	1379047	41.2780	41
	18 Methylene Chloride	84	3.303	3.310	(0.623)	519524	41.3780	41(Q)
	21 trans-1,2-Dichloroethene	96	3.528	3.525	(0.665)	467627	43.3774	43
	22 Methyl tert-butyl ether	73	3.516	3.522	(0.663)	1444762	46.0459	46
	23 1,1-Dichloroethane	63	3.860	3.859	(0.727)	961597	46.8491	47
	24 Vinyl acetate	43	3.889	3.888	(0.733)	1400999	43.9819	44
	28 cis-1,2-Dichloroethene	96	4.329	4.326	(0.816)	516840	43.2997	43
	29 2,2-Dichloropropane	77	4.332	4.332	(0.816)	691772	42.2687	42
	30 2-Butanone	72	4.326	4.326	(0.815)	51096	35.9425	36(Q)
	34 Bromochloromethane	128	4.525	4.525	(0.853)	256787	46.1930	46(Q)
	35 Chloroform	83	4.580	4.580	(0.863)	986017	48.9811	49
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	512090	53.8798	54
	37 1,1,1-Trichloroethane	97	4.753	4.756	(0.896)	858781	50.4343	50

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9374.d
Report Date: 30-Apr-2013 09:50

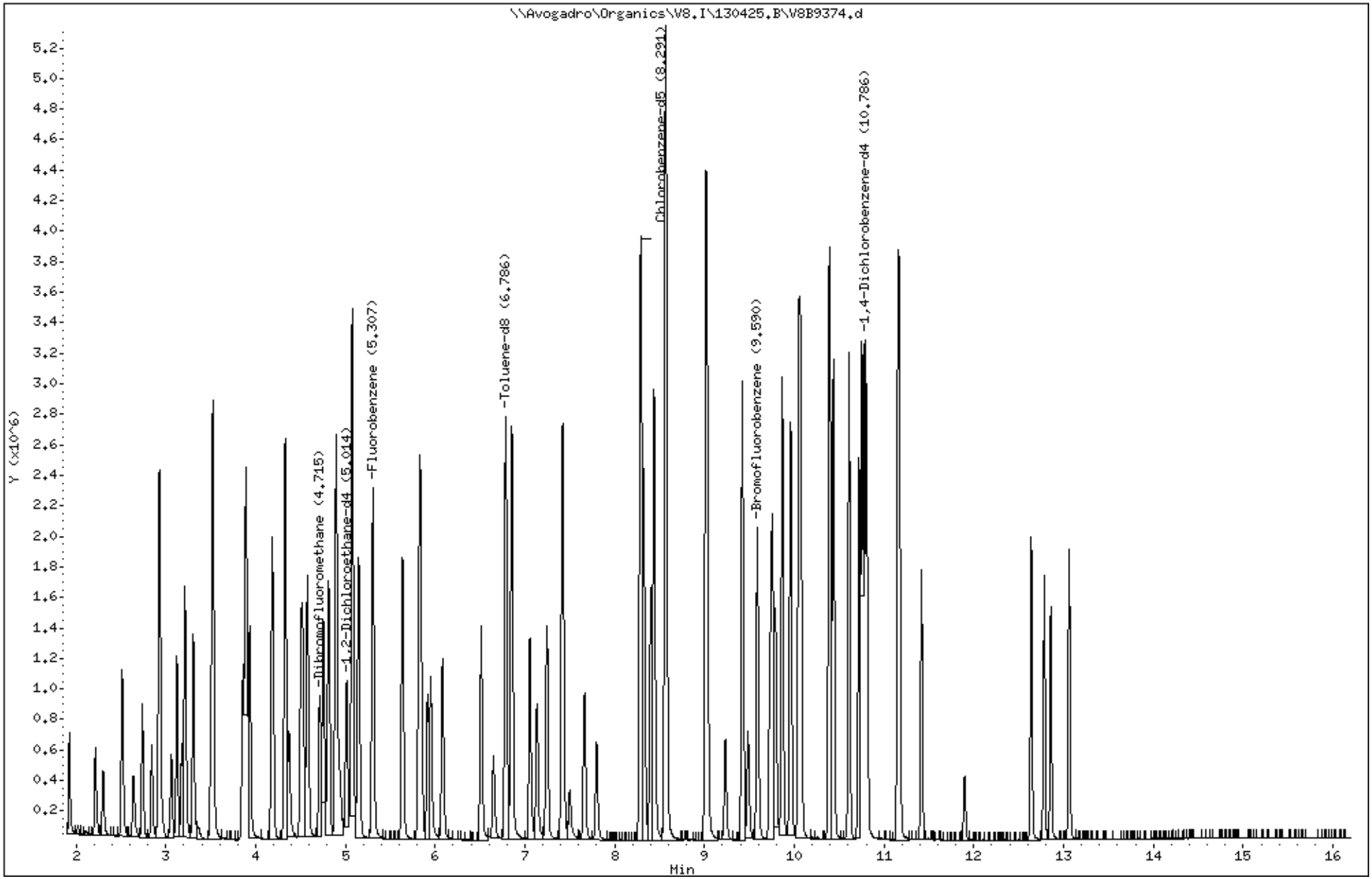
		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	224434	42.7425	43(Q)
	40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	724092	50.9787	51
$	42	1,2-Dichloroethane-d4	102	5.011	5.014	(0.944)	107488	48.8979	49
	43	Benzene	78	5.075	5.075	(0.956)	1969123	41.9822	42
	44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	867920	52.7366	53
*	46	Fluorobenzene	96	5.307	5.306	(1.000)	1876554	50.0000	
	47	Trichloroethene	130	5.634	5.634	(1.062)	566359	51.9991	52
	49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	536694	45.6811	46
	52	Dibromomethane	93	5.953	5.949	(1.122)	343567	48.0673	48
	54	Bromodichloromethane	83	6.085	6.081	(1.147)	771721	50.6097	51
	56	cis-1,3-Dichloropropene	75	6.512	6.512	(1.227)	815969	44.6099	45
	57	4-Methyl-2-pentanone	43	6.651	6.654	(1.253)	412562	40.8158	41
$	58	Toluene-d8	98	6.786	6.789	(0.818)	1858340	49.0902	49
	59	Toluene	91	6.853	6.856	(1.291)	2006533	36.2503	36(R)
	60	trans-1,3-Dichloropropene	75	7.056	7.055	(1.330)	775745	46.4231	46
	62	1,1,2-Trichloroethane	97	7.245	7.245	(1.365)	453900	45.3690	45
	63	Tetrachloroethene	164	7.416	7.416	(0.894)	369353	39.7883	40
	64	1,3-Dichloropropane	76	7.422	7.425	(0.895)	799338	44.8340	45
	65	2-Hexanone	43	7.499	7.499	(0.904)	276565	36.4795	36
	66	Dibromochloromethane	129	7.663	7.663	(0.924)	538216	46.6486	47
	67	1,2-Dibromoethane	107	7.798	7.801	(0.940)	473629	43.3675	43
*	68	Chlorobenzene-d5	117	8.294	8.293	(1.000)	1425179	50.0000	
	70	Chlorobenzene	112	8.322	8.325	(1.003)	1289776	42.1396	42
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.013)	490517	45.5965	46
	72	Ethylbenzene	106	8.438	8.441	(1.017)	663327	40.7143	41
	73	m,p-Xylene	106	8.567	8.570	(1.033)	1641746	79.1570	79
	74	o-Xylene	106	9.014	9.017	(1.087)	800270	40.3794	40
	75	Styrene	104	9.027	9.030	(1.088)	1343246	41.5151	42
	76	Bromoform	173	9.232	9.232	(1.113)	322107	43.7776	44
	77	Isopropylbenzene	105	9.422	9.425	(1.136)	2054736	43.1537	43
$	79	Bromofluorobenzene	95	9.586	9.589	(1.156)	727987	51.8165	52
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	609303	40.8349	41
	81	Bromobenzene	156	9.756	9.759	(0.905)	539549	41.1044	41
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	746482	39.6084	40
	83	n-Propylbenzene	120	9.866	9.869	(0.915)	526787	41.2609	41
	84	2-Chlorotoluene	126	9.959	9.962	(0.923)	502550	41.6144	42
	85	1,3,5-Trimethylbenzene	105	10.052	10.055	(0.932)	1749735	42.8576	43
	86	4-Chlorotoluene	126	10.072	10.075	(0.934)	514124	41.4215	41
	87	tert-Butylbenzene	119	10.390	10.393	(0.963)	1752583	43.5231	44
M	94	Xylene (Total)	106				2442016	119.536	120(R)
	88	1,2,4-Trimethylbenzene	105	10.435	10.438	(0.968)	1757824	42.3176	42
	89	sec-Butylbenzene	105	10.609	10.612	(0.984)	2141584	43.4979	43
	90	1,3-Dichlorobenzene	146	10.721	10.724	(0.994)	964234	42.1821	42
	91	4-Isopropyltoluene	119	10.753	10.756	(0.997)	1744967	44.2999	44
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	712446	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1003174	41.7351	42
	95	n-Butylbenzene	91	11.152	11.155	(1.034)	1609108	45.5222	46
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	966327	43.1779	43
	98	1,2-Dibromo-3-chloropropane	75	11.898	11.894	(1.103)	105656	39.8966	40
	99	1,2,4-Trichlorobenzene	180	12.641	12.640	(1.172)	528204	41.3044	41
	100	Hexachlorobutadiene	225	12.785	12.785	(1.185)	273699	43.2183	43
	101	Naphthalene	128	12.856	12.859	(1.192)	1003597	35.8259	36
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	490897	40.6554	41

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9374.d
Report Date: 30-Apr-2013 09:50

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9374.d
Date : 25-APR-2013 21:08
Client ID: MW-4-042313MS
Instrument: V8.i
Sample Info: 5ML,M0582-06AMS,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042313MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9375.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

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	49	
74-83-9	Bromomethane	47	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	58	
75-35-4	1,1-Dichloroethene	43	
67-64-1	Acetone	29	
74-88-4	Iodomethane	54	
75-15-0	Carbon disulfide	41	
75-09-2	Methylene chloride	42	
156-60-5	trans-1,2-Dichloroethene	43	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	46	
108-05-4	Vinyl acetate	44	
78-93-3	2-Butanone	37	
156-59-2	cis-1,2-Dichloroethene	44	
594-20-7	2,2-Dichloropropane	41	
74-97-5	Bromochloromethane	47	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	43	
56-23-5	Carbon tetrachloride	50	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	42	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	46	
74-95-3	Dibromomethane	48	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	45	
108-10-1	4-Methyl-2-pentanone	43	
108-88-3	Toluene	36	
10061-02-6	trans-1,3-Dichloropropene	47	
79-00-5	1,1,2-Trichloroethane	46	
142-28-9	1,3-Dichloropropane	46	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042313MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9375.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

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	37	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	44	
108-90-7	Chlorobenzene	42	
630-20-6	1,1,1,2-Tetrachloroethane	46	
100-41-4	Ethylbenzene	40	
179601-23-1	m,p-Xylene	79	
95-47-6	o-Xylene	40	
1330-20-7	Xylene (Total)	120	
100-42-5	Styrene	42	
75-25-2	Bromoform	45	
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	40	
103-65-1	n-Propylbenzene	40	
95-49-8	2-Chlorotoluene	41	
108-67-8	1,3,5-Trimethylbenzene	42	
106-43-4	4-Chlorotoluene	41	
98-06-6	tert-Butylbenzene	43	
95-63-6	1,2,4-Trimethylbenzene	41	
135-98-8	sec-Butylbenzene	42	
99-87-6	4-Isopropyltoluene	43	
541-73-1	1,3-Dichlorobenzene	41	
106-46-7	1,4-Dichlorobenzene	41	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	43	
96-12-8	1,2-Dibromo-3-chloropropane	40	
120-82-1	1,2,4-Trichlorobenzene	41	
87-68-3	Hexachlorobutadiene	42	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	38	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9375.d
Report Date: 30-Apr-2013 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9375.d
Lab Smp Id: M0582-06AMSD Client Smp ID: MW-4-042313MSD
Inj Date : 25-APR-2013 21:35
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0582-06AMSD,,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.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	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	1.654	1.660	(0.312)	348702	43.2884	43
	3 Chloromethane	50	1.827	1.876	(0.344)	512802	46.0438	46
	4 Vinyl Chloride	62	1.927	1.930	(0.363)	543258	49.4234	49
	5 Bromomethane	94	2.216	2.223	(0.418)	355723	47.2290	47
	6 Chloroethane	64	2.303	2.310	(0.434)	326171	54.4336	54
	7 Trichlorofluoromethane	101	2.512	2.519	(0.473)	782135	57.6549	58
	10 1,1-Dichloroethene	96	2.933	2.933	(0.553)	444729	43.1584	43
	12 Acetone	58	2.962	2.966	(0.558)	44458	29.2682	29(Q)
	13 Iodomethane	142	3.059	3.065	(0.576)	576119	54.3011	54
	14 Carbon Disulfide	76	3.123	3.126	(0.589)	1426049	41.3086	41
	18 Methylene Chloride	84	3.306	3.310	(0.623)	540620	41.6698	42(Q)
	21 trans-1,2-Dichloroethene	96	3.528	3.525	(0.665)	477420	42.8578	43
	22 Methyl tert-butyl ether	73	3.519	3.522	(0.663)	1518900	46.8478	47
	23 1,1-Dichloroethane	63	3.859	3.859	(0.727)	978106	46.1169	46
	24 Vinyl acetate	43	3.892	3.888	(0.733)	1439194	43.7242	44
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	545281	44.2094	44
	29 2,2-Dichloropropane	77	4.332	4.332	(0.816)	700843	41.4422	41
	30 2-Butanone	72	4.329	4.326	(0.816)	54633	37.1913	37(Q)
	34 Bromochloromethane	128	4.525	4.525	(0.853)	270334	47.0619	47(Q)
	35 Chloroform	83	4.580	4.580	(0.863)	1016615	48.8728	49
$	36 Dibromofluoromethane	113	4.715	4.715	(0.889)	527035	53.6642	54
	37 1,1,1-Trichloroethane	97	4.757	4.756	(0.896)	860804	48.9231	49

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9375.d
Report Date: 30-Apr-2013 09:51

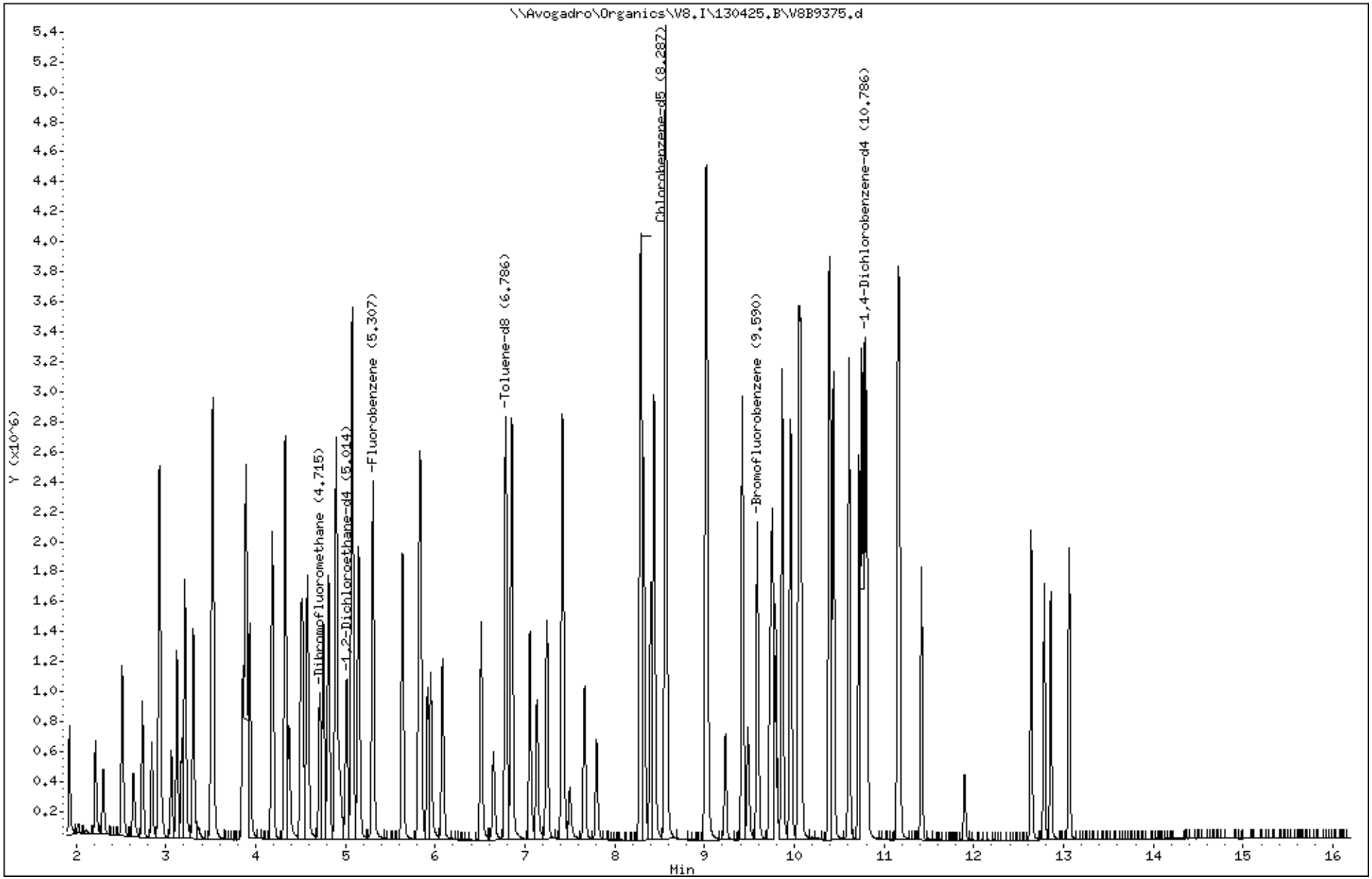
			QUANT SIG					CONCENTRATIONS	
								ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	232134	42.7835	43
	40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	732884	49.9340	50
$	42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	111867	49.2490	49
	43	Benzene	78	5.075	5.075	(0.956)	2015458	41.5846	42
	44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	894280	52.5862	52
*	46	Fluorobenzene	96	5.306	5.306	(1.000)	1939077	50.0000	
	47	Trichloroethene	130	5.638	5.634	(1.062)	587229	52.1768	52
	49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	555352	45.7451	46
	52	Dibromomethane	93	5.949	5.949	(1.121)	356960	48.3308	48
	54	Bromodichloromethane	83	6.084	6.081	(1.147)	791556	50.2367	50
	56	cis-1,3-Dichloropropene	75	6.512	6.512	(1.227)	856192	45.2997	45
	57	4-Methyl-2-pentanone	43	6.650	6.654	(1.253)	444586	42.5658	42
$	58	Toluene-d8	98	6.785	6.789	(0.818)	1922268	49.3920	49
	59	Toluene	91	6.853	6.856	(1.291)	2046111	35.7734	36(R)
	60	trans-1,3-Dichloropropene	75	7.055	7.055	(1.330)	812683	47.0655	47
	62	1,1,2-Trichloroethane	97	7.245	7.245	(1.365)	474424	45.8915	46
	63	Tetrachloroethene	164	7.416	7.416	(0.894)	381754	40.0010	40
	64	1,3-Dichloropropane	76	7.422	7.425	(0.895)	837599	45.6969	46
	65	2-Hexanone	43	7.499	7.499	(0.904)	286860	36.8040	37
	66	Dibromochloromethane	129	7.663	7.663	(0.924)	559862	47.1993	47
	67	1,2-Dibromoethane	107	7.798	7.801	(0.940)	498253	44.3761	44
*	68	Chlorobenzene-d5	117	8.293	8.293	(1.000)	1465198	50.0000	
	70	Chlorobenzene	112	8.326	8.325	(1.004)	1328248	42.2113	42
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.013)	506982	45.8398	46
	72	Ethylbenzene	106	8.438	8.441	(1.017)	671810	40.1087	40
	73	m,p-Xylene	106	8.567	8.570	(1.033)	1678089	78.6994	79
	74	o-Xylene	106	9.014	9.017	(1.087)	818836	40.1878	40
	75	Styrene	104	9.026	9.030	(1.088)	1392804	41.8711	42
	76	Bromoform	173	9.232	9.232	(1.113)	340590	45.0253	45
	77	Isopropylbenzene	105	9.422	9.425	(1.136)	2106899	43.0407	43
$	79	Bromofluorobenzene	95	9.589	9.589	(1.156)	746736	51.6993	52
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	638503	41.3574	41
	81	Bromobenzene	156	9.756	9.759	(0.905)	561025	41.3078	41
	82	1,2,3-Trichloropropane	75	9.782	9.785	(0.907)	784432	40.2268	40
	83	n-Propylbenzene	120	9.866	9.869	(0.915)	531343	40.2227	40
	84	2-Chlorotoluene	126	9.959	9.962	(0.923)	509788	40.7987	41
	85	1,3,5-Trimethylbenzene	105	10.049	10.055	(0.932)	1764721	41.7758	42
	86	4-Chlorotoluene	126	10.071	10.075	(0.934)	529389	41.2217	41
	87	tert-Butylbenzene	119	10.390	10.393	(0.963)	1787986	42.9139	43
M	94	Xylene (Total)	106				2496925	118.887	120(R)
	88	1,2,4-Trimethylbenzene	105	10.435	10.438	(0.968)	1782652	41.4768	41
	89	sec-Butylbenzene	105	10.608	10.612	(0.984)	2155341	42.3099	42
	90	1,3-Dichlorobenzene	146	10.721	10.724	(0.994)	978898	41.3881	41
	91	4-Isopropyltoluene	119	10.753	10.756	(0.997)	1761455	43.2195	43
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.785	(1.000)	737156	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1018109	40.9366	41
	95	n-Butylbenzene	91	11.152	11.155	(1.034)	1614672	44.1484	44
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	990861	42.7901	43
	98	1,2-Dibromo-3-chloropropane	75	11.898	11.894	(1.103)	109278	39.8811	40
	99	1,2,4-Trichlorobenzene	180	12.640	12.640	(1.172)	544210	41.1295	41
	100	Hexachlorobutadiene	225	12.785	12.785	(1.185)	274588	41.9053	42
	101	Naphthalene	128	12.856	12.859	(1.192)	1087486	37.5193	38
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	512640	41.0329	41

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9375.d
Report Date: 30-Apr-2013 09:51

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9375.d
Date : 25-APR-2013 21:35
Client ID: MW-4-042313MSD
Instrument: V8.i
Sample Info: 5ML,M0582-06AMSD,,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71366

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9354.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/25/2013

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	48	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	46	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	46	
67-64-1	Acetone	43	
74-88-4	Iodomethane	63	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	44	
156-60-5	trans-1,2-Dichloroethene	46	
1634-04-4	Methyl tert-butyl ether	48	
75-34-3	1,1-Dichloroethane	48	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	43	
156-59-2	cis-1,2-Dichloroethene	46	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	49	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	47	
563-58-6	1,1-Dichloropropene	45	
56-23-5	Carbon tetrachloride	47	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	44	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	46	
108-88-3	Toluene	39	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	47	
142-28-9	1,3-Dichloropropane	49	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71366

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71366

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9354.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/25/2013

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	47	
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	48	
100-41-4	Ethylbenzene	45	
179601-23-1	m,p-Xylene	88	
95-47-6	o-Xylene	45	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	46	
75-25-2	Bromoform	47	
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	46	
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	50	
95-63-6	1,2,4-Trimethylbenzene	48	
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	56	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	54	
87-68-3	Hexachlorobutadiene	51	
87-61-6	1,2,3-Trichlorobenzene	52	
91-20-3	Naphthalene	53	

Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9354.d
Report Date: 30-Apr-2013 09:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130425.B\V8B9354.d
Lab Smp Id: LCS-71366 Client Smp ID: LCS-71366
Inj Date : 25-APR-2013 12:06
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCS-71366,LCS-71366,71366
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130425.B\v108260Gadd-6lvl.m
Meth Date : 30-Apr-2013 09:48 cmosher Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100 QC Sample: LCS
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)
1	Dichlorodifluoromethane	85	1.654	1.660	(0.312)	434871	41.9780	42
2	Freon114	85	1.773	1.779	(0.334)	569365	41.9965	42
3	Chloromethane	50	1.827	1.876	(0.345)	683799	47.7413	48
4	Vinyl Chloride	62	1.927	1.930	(0.363)	722434	51.1057	51
5	Bromomethane	94	2.216	2.223	(0.418)	450043	46.4617	46
6	Chloroethane	64	2.303	2.310	(0.434)	417459	54.1726	54
7	Trichlorofluoromethane	101	2.512	2.519	(0.474)	882767	50.5994	50
126	Ethanol	46	2.638	2.644	(0.497)	251878	5154.13	5200(A)
8	Ether	59	2.737	2.744	(0.516)	609145	51.7118	52
9	Acrolein	56	2.840	2.843	(0.536)	790023	242.350	240
10	1,1-Dichloroethene	96	2.930	2.933	(0.553)	605861	45.7180	46
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.927	2.927	(0.552)	587487	44.7199	45
12	Acetone	58	2.959	2.966	(0.558)	83950	42.9746	43
13	Iodomethane	142	3.059	3.065	(0.577)	853628	62.5619	62(R)
14	Carbon Disulfide	76	3.123	3.126	(0.589)	1987062	44.7571	45
15	Acetonitrile	41	3.210	3.213	(0.605)	1234223	474.963	470(A)
16	Allyl Chloride	39	3.210	3.213	(0.605)	775946	46.2479	46
17	Methyl Acetate	43	3.216	3.220	(0.607)	628618	48.3327	48
18	Methylene Chloride	84	3.303	3.310	(0.623)	738878	44.2840	44
19	tert-Butanol	59	3.364	3.371	(0.634)	108442	80.7426	81
20	Acrylonitrile	53	3.493	3.496	(0.659)	273093	50.5774	50
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.665)	663177	46.2917	46
22	Methyl tert-butyl ether	73	3.515	3.522	(0.663)	2014185	48.3064	48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	23 1,1-Dichloroethane	63	3.856	3.859	(0.727)	1318891	48.3534	48
	24 Vinyl acetate	43	3.885	3.888	(0.733)	2131176	50.3462	50
	25 Diisopropyl Ether	45	3.892	3.898	(0.734)	2380185	49.6783	50
	26 2-Chloro-1,3-Butadiene	53	3.933	3.937	(0.742)	1013411	46.0787	46
	27 Ethyl tert-butyl ether	59	4.184	4.191	(0.789)	2209841	49.0705	49
	29 2,2-Dichloropropane	77	4.329	4.332	(0.816)	1063448	48.8971	49
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.816)	734581	46.3104	46
	30 2-Butanone	72	4.326	4.326	(0.816)	81405	43.0906	43(Q)
	32 Propionitrile	54	4.371	4.377	(0.824)	989692	479.960	480(A)
	33 Methacrylonitrile	41	4.503	4.506	(0.849)	820802	96.9811	97
	34 Bromochloromethane	128	4.525	4.525	(0.853)	358465	48.5244	48(Q)
	31 Tetrahydrofuran	72	4.567	4.573	(0.861)	165673	90.6346	91
	35 Chloroform	83	4.577	4.580	(0.863)	1280476	47.8659	48
$	36 Dibromofluoromethane	113	4.712	4.715	(0.888)	644079	50.9952	51
	37 1,1,1-Trichloroethane	97	4.753	4.756	(0.896)	1066704	47.1409	47
	38 Cyclohexane	56	4.811	4.811	(0.907)	1082255	45.8911	46
	39 1,1-Dichloropropene	110	4.892	4.892	(0.922)	316592	45.3714	45
	40 Carbon Tetrachloride	117	4.898	4.901	(0.924)	888042	47.0478	47
	41 Isobutyl Alcohol	43	4.930	4.814	(0.930)	502562	1006.78	1000(A)
$	42 1,2-Dichloroethane-d4	102	5.011	5.014	(0.945)	148619	50.8762	51
	43 Benzene	78	5.072	5.075	(0.956)	2766619	44.3867	44
	44 1,2-Dichloroethane	62	5.075	5.078	(0.957)	1074498	49.1302	49
	45 tert-Amyl methyl ether	73	5.146	5.149	(0.970)	1921757	47.8914	48
M	50 1,2-Dichloroethene (Total)	96				1397758	92.6022	93
*	46 Fluorobenzene	96	5.303	5.306	(1.000)	2493736	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	652421	45.0757	45
	48 Methylcyclohexane	83	5.821	5.824	(1.098)	1057090	47.8354	48
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	753413	48.2563	48
	51 Methyl Methacrylate	69	5.914	5.920	(1.115)	546856	47.0071	47
	52 Dibromomethane	93	5.949	5.949	(1.122)	462453	48.6874	49
	53 1,4-Dioxane	88	5.949	5.962	(1.122)	144715	884.366	880(A)
	54 Bromodichloromethane	83	6.081	6.081	(1.147)	1018124	50.2441	50
	55 2-Chloroethyl vinyl ether	63	6.509	6.515	(1.227)	6189	46.7124	47
	56 cis-1,3-Dichloropropene	75	6.509	6.512	(1.227)	1201904	49.4468	49
	57 4-Methyl-2-pentanone	43	6.647	6.654	(1.253)	621441	46.2647	46
$	58 Toluene-d8	98	6.785	6.789	(0.819)	2437500	49.9648	50
	59 Toluene	91	6.853	6.856	(1.292)	2834200	38.5307	38
	60 trans-1,3-Dichloropropene	75	7.052	7.055	(1.330)	1111098	50.0355	50
	61 Ethyl Methacrylate	69	7.133	7.139	(1.345)	730900	47.0708	47
	62 1,1,2-Trichloroethane	97	7.242	7.245	(1.366)	628245	47.2540	47
	63 Tetrachloroethene	164	7.412	7.416	(0.894)	524737	43.8637	44
	64 1,3-Dichloropropane	76	7.422	7.425	(0.895)	1133791	49.3470	49
	65 2-Hexanone	43	7.496	7.499	(0.904)	456438	46.7180	47
	66 Dibromochloromethane	129	7.663	7.663	(0.924)	729412	49.0574	49
	67 1,2-Dibromoethane	107	7.798	7.801	(0.941)	671401	47.7044	48
	69 1-Chlorohexane	91	8.281	8.287	(0.999)	913849	45.2685	45
*	68 Chlorobenzene-d5	117	8.290	8.293	(1.000)	1836619	50.0000	
	70 Chlorobenzene	112	8.322	8.325	(1.004)	1819476	46.1289	46
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	661491	47.7146	48
	72 Ethylbenzene	106	8.438	8.441	(1.018)	946228	45.0677	45
	73 m,p-Xylene	106	8.567	8.570	(1.033)	2338838	87.5052	88
	74 o-Xylene	106	9.010	9.017	(1.087)	1140314	44.6476	45
	75 Styrene	104	9.027	9.030	(1.089)	1932164	46.3388	46
	76 Bromoform	173	9.229	9.232	(1.113)	448756	47.3274	47

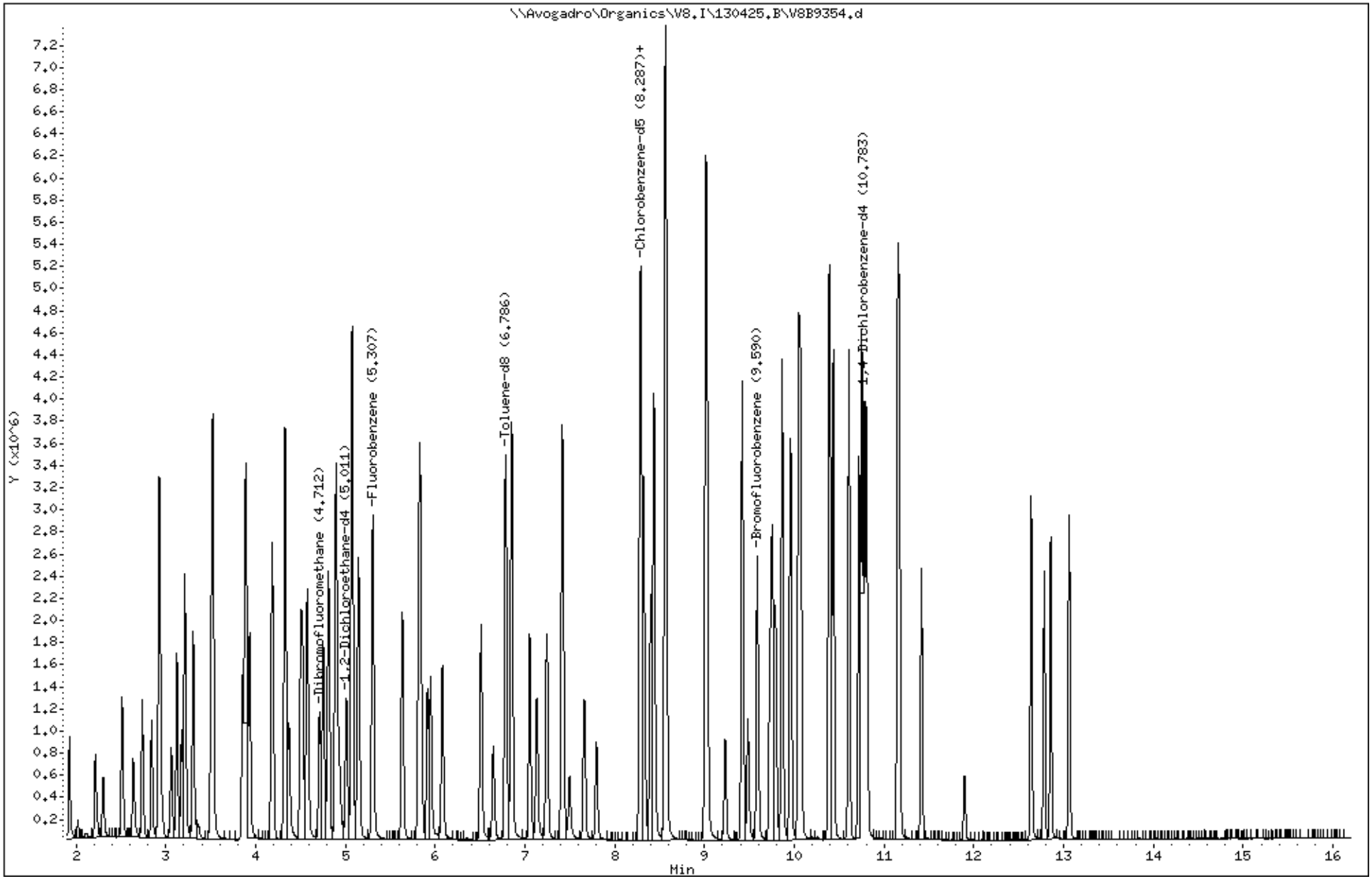
Data File: \\Avogadro\Organics\V8.I\130425.B\V8B9354.d
Report Date: 30-Apr-2013 09:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	77 Isopropylbenzene	105	9.422	9.425	(1.137)	2929595	47.7442	48
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	262556	46.2029	46
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	914281	50.4980	50
	80 1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	861143	46.5804	46
	81 Bromobenzene	156	9.753	9.759	(0.905)	751501	46.2079	46
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	1070957	45.8637	46
	83 n-Propylbenzene	120	9.866	9.869	(0.915)	754361	47.6884	48
	84 2-Chlorotoluene	126	9.956	9.962	(0.923)	693358	46.3395	46
	85 1,3,5-Trimethylbenzene	105	10.049	10.055	(0.932)	2420718	47.8552	48
	86 4-Chlorotoluene	126	10.071	10.075	(0.934)	724531	47.1134	47
M	94 Xylene (Total)	106				3479152	132.153	130
	87 tert-Butylbenzene	119	10.387	10.393	(0.963)	2470470	49.5165	50
	88 1,2,4-Trimethylbenzene	105	10.435	10.438	(0.968)	2463554	47.8671	48
	89 sec-Butylbenzene	105	10.608	10.612	(0.984)	3043992	49.9006	50
	90 1,3-Dichlorobenzene	146	10.721	10.724	(0.994)	1345709	47.5145	48
	91 4-Isopropyltoluene	119	10.753	10.756	(0.997)	2505776	51.3437	51
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.785	(1.000)	882719	50.0000	
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1403215	47.1171	47
	95 n-Butylbenzene	91	11.152	11.155	(1.034)	2438798	55.6856	56
	96 1,2-Dichlorobenzene	146	11.168	11.171	(1.036)	1338451	48.2692	48
	97 Hexachloroethane	117	11.415	11.415	(1.059)	492319	51.5706	52
	98 1,2-Dibromo-3-chloropropane	75	11.895	11.894	(1.103)	146053	44.5125	44
	141 1,3,5-Trichlorobenzene	182	12.641	12.640	(2.383)	819483	53.8613	54(A)
	99 1,2,4-Trichlorobenzene	180	12.641	12.640	(1.172)	853889	53.8921	54
	100 Hexachlorobutadiene	225	12.785	12.785	(1.186)	403813	51.4641	51
	101 Naphthalene	128	12.856	12.859	(1.192)	1831394	52.7654	53
	102 1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	784407	52.4322	52

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\V8.I\130425.B\V8B9354.d
Date : 25-APR-2013 12:06
Client ID: LCS-71366
Instrument: V8.i
Sample Info: 5ML,LCS-71366,LCS-71366,71366
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



[redacted]NSTI[redacted]ENT[redacted] [redacted]ctrun[redacted]lytic[redacted]. RI [redacted]ion

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W/624 ANALYST: [redacted]
ICAL DATE: 4/7/13

BATCH: 130417.B

Start: 17-APR-13 11:11
End: 17-APR-13 21:53

Comments:

Standards: STD VW130307A 2 uL
ISTD VW130403A [redacted] uL
SURR VW130403A ___ uL
_____ ___ uL

Reviewed By: [redacted] 4/22/13 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
V8B9274	11:11	BFB10K	BFB10K		AQ									1		OK	
V8B9275	12:22	VSTD05010K	VSTD05010K		AQ		100	100	100					1		OK	
V8B9276	12:49	VSTD02010K	VSTD02010K		AQ		100	99	98					1		OK	
V8B9277	13:17	VSTD00510K	VSTD00510K		AQ		99	98	94					1		OK	
V8B9279	14:12	VSTD00110K	VSTD00110K		AQ		101	98	92					1		OK	
V8B9280	14:39	VSTD20010K	VSTD20010K		AQ		102	105	106					1		OK	
V8B9281	15:07	VSTD10010K	VSTD10010K		AQ		102	103	103					1		OK	
V8B9282	15:35	VICV05010K	VICV05010K		AQ		101	101	100	100	100	101	101	1	ER	RR NEXT DAY	
V8B9283	16:02	LCS-71259	LCS-71259	71259	AQ		102	101	101	100	101	102	101	1	E	OK	
V8B9284	16:30	LCSD-71259	LCSD-71259	71259	AQ		101	100	100	100	97	100	101	1	E	OK	
V8B9285	16:57	MB-71259	MB-71259	71259	AQ		101	99	91	99	96	100	96	1	E	INT UFOM	
V8B9286	17:25	MB-71259	MB-71259	71259	AQ		98	97	89	99	100	101	97	1		OK	2
V8B9287	17:52	M0537-02A	TRIP BLANK	71259	AQ	1	98	97	88	100	101	102	97	1		OK	
V8B9288	18:19	M0498-02A	TRIP BLANKS	71259	AQ	1	97	95	88	99	99	102	99	1		OK	
V8B9289	18:46	M0498-01A	ET01 GRAB	71259	AQ	1	96	94	86	100	100	100	98	1		OK	
V8B9290	19:13	M0537-01A	WW #1	71259	AQ	1	94	93	84	100	100	102	97	1		OK	
V8B9291	19:40	M0529-01B	SB67585-01	71259	AQ	1	94	91	86	100	102	102	98	1		OK	
V8B9292	20:06	M0530-01B	SB67594-01	71259	AQ	1	94	93	87	101	100	101	98	1		OK	
V8B9293	20:33	M0477-01C	PTMT	71259	AQ	1	93	91	85	101	98	102	98	10		OK	
V8B9294	21:00	M0477-02C	BET	71259	AQ	1	90	88	81	101	98	102	97	10		OK	
V8B9295	21:27	M0477-03C	POS-T	71259	AQ	1	92	90	82	101	99	102	97	10		OK	2
V8B9296	21:53	VBLK	VBLK		AQ		89	88	80	103	99	103	98	1		INT UFOM	

* - 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

4-18-13

M0582

Spectrum Analytical, Inc. RI Division V10 Injection Log METHOD: 8260W ANALYST: [redacted] BATCH: 130425.B Start: 25-APR-13 10:12
Volatiles Laboratory ICAL DATE: 4-15-13 End: 25-APR-13 22:02

Comments:

Standards: BFB VM130503A 2 uL
ISTD VM130415A ATTN uL
STD VM130415A 20 uL
uL

Reviewed By: 04/26/13 Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8B9352	10:12	BFB10N	BFB10N		AQ									1		OK	
V8B9353	10:49	VSTD05010N	VSTD05010N		AQ		100	100	100					1		OK	
V8B9354	12:06	LCS-71366	LCS-71366	71366	AQ		94	102	102	102	102	100	101	1	ER	OK	
V8B9355	12:33	MB-71366	MB-71366	71366	AQ		95	101	92	101	101	101	98	1	E	MT USED	
V8B9356	13:00	MB-71366	MB-71366	71366	AQ		94	99	91	102	100	102	99	1		OK	
V8B9357	13:27	M0582-08A	TRIP BLANK	71366	AQ	1	91	96	89	103	102	102	99	1		OK	2
V8B9358	13:54	M0582-01A	MW-1-042313	71366	AQ	1	88	94	91	104	99	100	100	1		OK	
V8B9359	14:22	M0582-02A	MW-2-042313	71366	AQ	1	87	93	88	103	100	100	99	1		OK	
V8B9360	14:49	M0582-03A	MW-9-042313	71366	AQ	1	84	89	85	105	102	101	99	1		OK	
V8B9361	15:16	M0582-04A	MW-6-042313	71366	AQ	1	82	88	82	104	101	100	98	1		OK	
V8B9362	15:43	M0582-05A	DUP-1-042313	71366	AQ	1	80	84	79	103	102	101	99	1		OK	
V8B9363	16:11	M0582-06A	MW-4-042313	71366	AQ	1	76	83	77	106	102	100	98	1		OK	
V8B9364	16:38	M0582-07A	MW-5-042313	71366	AQ	1	76	81	75	107	101	101	98	1		OK	
V8B9365	17:05	M0591-01A	GW42413MY002	71366	AQ	1	74	80	74	106	102	100	98	1		OK	
V8B9366	17:32	M0591-02A	GW42413MY003	71366	AQ	1	73	79	73	107	103	100	99	1	E	PCE = 308 RUN @ 4X	
V8B9367	18:00	M0591-03A	GW42413MY004	71366	AQ	1	72	78	71	109	102	100	97	1	E	PCE = 312 RUN @ 4X	
V8B9368	18:27	M0591-04A	GW42413MY005	71366	AQ	1	73	78	72	108	103	100	98	1		RUN @ 1X	
V8B9369	18:54	M0591-05A	GW42413MY006	71366	AQ	1	72	77	71	108	101	100	99	1		OK	
V8B9370	19:21	M0591-06A	GW42413MY007	71366	AQ	1	71	76	71	108	101	102	99	1		OK	
V8B9371	19:48	M0591-07A	GW42413MY008	71366	AQ	1	71	76	73	107	102	101	101	1	E	OK	2
V8B9372	20:15	VBLK	VBLK		AQ		70	75	70	108	100	100	98	1		MT USED	
V8B9373	20:41	M0591-08A	TB	71366	AQ	1	69	75	69	109	99	101	98	1		OK	2
V8B9374	21:08	M0582-06AMS	MW-4-042313MS	71366	AQ	2	71	79	82	108	98	98	104	1	ER	OK	2
V8B9375	21:35	M0582-06AMSD	MW-4-042313MSD	71366	AQ	3	73	81	85	108	98	99	103	1	ER	OK	2
V8B9376	22:02	VBLK	VBLK		AQ		72	77	71	106	98	102	99	1		MT USED	

* - 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

4-26-13

M0582

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
4/24/13	5016240	RIRRC	01	MK	JH	H	R10	
	M0580	Land Remediation	01			H	R10	
	M0581	EARTH_NY	01-10			H	R10	
	M0582	GZA	01-08	MK		H	R10	
4/24/13	M0586	EARTHNY	01-04	AED		H	R8	
	M0587	Labella	01			H	R8	
	M0588	LaBella	01-03			VS	R3	
4/24/13	M0569	GZA	01-05	AED	JH	H	R8	
4/25/13	M0592	GZA	01-04	JH	CG	H	R3	
	M0591	GZA	01-08	JH	CG	H	R3	
	5016242	RIRRC	01	JH	CG	H	R3	
4/25/13	M0590	Stantec	01-05	AED	JH	VS	R3	
4/26/13	M0603	Land Remediation	01	AED	JH	H	R8	
4-26-13	M0589	EPA	01-04,07	JH	CG	T	R3	

Logbook ID 90.0191-01/13

Reviewed By: JH 4-30-13

"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

* Wet Chemistry *

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: M0582

SM 3500D

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times with the following exceptions:
MW-1-042313 (M0582-01B) exceed by-1 Hour for Chromium, Hexavalent
MW-2-042313 (M0582-02B) exceed by-1 Hour for Chromium, Hexavalent

B. Sample Analysis:

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

III. METHODS

Samples were analyzed following procedures in laboratory test code: SM 3500D

IV. PREPARATION

Samples were prepared following procedures in laboratory test code: SM 3500D

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: SPEC2
Instrument Type: SP
Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on sample: MW-4-042313 (M0582-06BMS).

Percent recoveries were within the QC limits.

Replicate RPDs were within the advisory QC limits.

D. Duplicate sample:

Duplicate analyses were performed on sample: MW-4-042313 (M0582-06BDUP).

Relative percent differences were within the QC limits.

E. Dilutions:

No sample required dilution in this SDG.

F. Samples:

No other unusual occurrences were noted during sample analysis.

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



Signed:_____

Date:_____05/08/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-042313 **Project:** Maple Street
Lab ID: M0582-01 **Collection Date:** 04/23/13 11:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:14	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-042313 **Project:** Maple Street
Lab ID: M0582-02 **Collection Date:** 04/23/13 11:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:16	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-042313 **Project:** Maple Street
Lab ID: M0582-03 **Collection Date:** 04/23/13 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:19	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-042313 **Project:** Maple Street
Lab ID: M0582-04 **Collection Date:** 04/23/13 13:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:22	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-042313 **Project:** Maple Street
Lab ID: M0582-05 **Collection Date:** 04/23/13 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:25	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-042313 **Project:** Maple Street
Lab ID: M0582-06 **Collection Date:** 04/23/13 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:28	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-042313 **Project:** Maple Street
Lab ID: M0582-07 **Collection Date:** 04/23/13 15:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.92		0.030	mg/L	1	04/24/2013 12:39	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

M0582

CLIENT: GZA GeoEnvironmental of NY Buffalo
Work Order: M0582
Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+

SM 3500D -- CR VI by Colorimetric Method

Sample ID: **MB-71353** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **04/24/13 12:00** Run ID: **SPEC2_130424A**
Client ID: **MB-71353** Batch ID: **71353** Units: **mg/L** Analysis Date: **04/24/13 12:05** SeqNo: **1891077**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030									

Sample ID: **LCS-71353** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **04/24/13 12:00** Run ID: **SPEC2_130424A**
Client ID: **LCS-71353** Batch ID: **71353** Units: **mg/L** Analysis Date: **04/24/13 12:08** SeqNo: **1891078**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.4308	0.030	0.030	0.4000	0	108	80	120	0			

Sample ID: **M0582-06BDUP** SampType: **DUP** TestCode: **SM3500_CR+** Prep Date: **04/24/13 12:00** Run ID: **SPEC2_130424A**
Client ID: **MW-4-042313** Batch ID: **71353** Units: **mg/L** Analysis Date: **04/24/13 12:30** SeqNo: **1891086**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030	0	0	0	0	0	0	0	20	

Sample ID: **M0582-06BMS** SampType: **MS** TestCode: **SM3500_CR+** Prep Date: **04/24/13 12:00** Run ID: **SPEC2_130424A**
Client ID: **MW-4-042313** Batch ID: **71353** Units: **mg/L** Analysis Date: **04/24/13 12:36** SeqNo: **1891088**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.4409	0.030	0.030	0.4000	0	110	75	125	0			

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

SPEC2-130424A

M0582

Spectrum Analytical, Inc. RI Div. — Hexavalent Chromium Colorimetric Analysis Logbook

Analysis Date: 4/24/13 12:00 → 12:45 **Analyst:** RS

Sample ID	pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
SO	1	25	0.000	0	—	0		
SO.2	1	0.4/25	0.161	0.214		0.214	107%	
MB-71353	1	25	0.000	0		0		
LCS-71353	1	~~10/25~~ 10/25	0.311	0.430		0.430	107.5%	
M0574-03A	1	25 ml	0.0339	0.0311		0.0311	103.6%	
M0582-01B	1		0.293-0.290	-0.013		0		Background Correction used ~~out of hold~~
-02B	1		0.016	0.005		0		out of hold.
-03B	1		0.007	-0.007		0		
-04B	1		0.005	-0.010		0		
-05B	1		0.007	-0.007		0		
-06B	1		0.007	-0.007		0		
-07BDup	1		0.006	-0.009		0		
SO.4 ~~SO.4 -06BMS~~ RS 4/24/13	1	0.8/25	0.302	0.418		0.418	104.5%	
M0582-06BMS	1		0.318	~~0.441~~ 0.441		0.441	110.25%	
07B	1		0.649	0.918	↓	0.918		
SO.2	1	0.4/25	0.161	0.214	—	0.214	107%	

Wavelength= 540 nm
Pathlength= 1.0 cm
MRL= 0.03 mg/L
ChromaVer 3 Lot #: A225 8
Diphenylcarbizide Solution ID: —

Method# : SM3500 Cr B / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

m= 0.69335
b= 0.01233
r= 0.99830

CCV IWP120607A
LCS
MS IWP101227E 10 ml
TV 20 (mg/L)

Logbook ID: 100.0056-10/12

LIMS entry: 4/25/13

Reviewed By: 4/24/13

Internal Chain of Custody

Client: GZA_BUFFALO

Work Order: M0582 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
01A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
01B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
02A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
02A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
02B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
03A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
03A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
03B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
04A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
04A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
04B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
05A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
05A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
05B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06A	003	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06A	004	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06A	005	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06A	006	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06B	002	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
06B	003	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
07A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
07A	002	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
07B	001	SM3500_CR+	In	LOGIN: dcamara	4/24/2013 12:14:00 PM
08A	001	SW8260_W	In	LOGIN: dcamara	4/24/2013 12:14:00 PM

Last Page of Data Report

Report Date:
09-May-13 09:02

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: M0592
Project : Maple Street
Project #:

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0592-01	MW-3R-042413	Aqueous	24-Apr-13 11:10	25-Apr-13 10:05
M0592-02	MW-7-042413	Aqueous	24-Apr-13 11:20	25-Apr-13 10:05
M0592-03	MW-8-042413	Aqueous	24-Apr-13 11:30	25-Apr-13 10:05
M0592-04	TRIP BLANK	Aqueous	24-Apr-13 00:00	25-Apr-13 10:05

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. Featuring Hanibal Technology -- Rhode Island Division

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

Project Name : Maple Street **SDG :** M0592

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-3R-042413	M0592-01	SW8260_W				SEE DATA
MW-7-042413	M0592-02	SW8260_W				SEE DATA
MW-8-042413	M0592-03	SW8260_W				SEE DATA
TRIP BLANK	M0592-04	SW8260_W				

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

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

Project Name : Maple Street **SDG :** M0592

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
M0592-01A	AQ	4/24/2013	4/25/2013	NA	4/26/2013
M0592-02A	AQ	4/24/2013	4/25/2013	NA	4/26/2013
M0592-03A	AQ	4/24/2013	4/25/2013	NA	4/26/2013
M0592-04A	AQ	4/24/2013	4/25/2013	NA	4/26/2013

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

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

Project Name : Maple Street **SDG :** M0592

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
M0592-01A	AQ	SW8260_W	NA	LOW	1
M0592-02A	AQ	SW8260_W	NA	LOW	1
M0592-03A	AQ	SW8260_W	NA	LOW	1
M0592-04A	AQ	SW8260_W	NA	LOW	1

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

WorkOrder: M0592

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE,
Comments: N/A

Case:
SDG:
PO: 21.0056127.10

HC Due: 05/16/13
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0592-01A	MW-3R-042413	04/24/2013 11:10	04/25/2013	Aqueous	SW8260_W	/					VOA
M0592-01B	MW-3R-042413	04/24/2013 11:10	04/25/2013	Aqueous	SM3500_CR+	/					J1
M0592-02A	MW-7-042413	04/24/2013 11:20	04/25/2013	Aqueous	SW8260_W	/					VOA
M0592-02B	MW-7-042413	04/24/2013 11:20	04/25/2013	Aqueous	SM3500_CR+	/					J1
M0592-03A	MW-8-042413	04/24/2013 11:30	04/25/2013	Aqueous	SW8260_W	/					VOA
M0592-03B	MW-8-042413	04/24/2013 11:30	04/25/2013	Aqueous	SM3500_CR+	/					J1
M0592-04A	TRIP BLANK	04/24/2013 00:00	04/25/2013	Aqueous	SW8260_W	/					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: Veronica E Brizard

Sample Transmittal Documentation

M0592

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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: 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: GZA GEOENVIRONMENTAL OF NY
535 WASHINGTON ST 11TH FL
BUFFALO NY 14203
Telephone #: 716-884-7034
Project Mgr. DANIEL TROY

Invoice To: GZA

P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: EAST AURORA State: NY
Sampler(s): JIM BENNETT

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: 2

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 8260	CP+6
M0592-01	MW-3R-042413	4/24/13	1110	G	GW	2			1	X	X
-02	MW-7-042413	4/24/13	1120	G	GW	2			1	X	X
-03	MW-8-042413	4/24/13	1130	G	GW	2			1	X	X
M0592-04	TRIP BLANK	4/24/13	-	-	-	1				6	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards: ASP CAT B

Relinquished by:	Received by:	Date:	Time:	Temp°C
FEDEX	FEDEX	4/24/13	1200	
		4/25/13	10:05	5

☑ EDD Format NYSDEC EQUIS
☑ E-mail to DANIEL.TROY@GZA.COM

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

Page 3 of 116

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

Received By: AED	Page 01 of 00
Reviewed By: WM	Log-in Date 04/25/2013
Work Order: M0592	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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 7995 8180 4363
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	5 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	04/25/2013
12. Time Received	10:05

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
M0592-01						H	
M0592-02						H	
M0592-03						H	
M0592-04						H	

Sample Transfer

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

IR Temp Gun ID:MT-1

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

WO#:M0592 04204385 / CWID:006286

Sample Condition Form

* Volatiles *

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: M0592

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

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.

Replicate RPDs were within the advisory QC limits.

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

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

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:

VSTD00110K 2-Chloroethyl vinyl ether 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: 05/07/13

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-71381	107	98	99	103				0
02	LCSD-71381	107	100	98	103				0
03	MB-71381	106	101	101	99				0
04	TRIP BLANK	108	102	100	99				0
05	MW-3R-042413	107	102	101	99				0
06	MW-7-042413	108	102	100	99				0
07	MW-8-042413	108	101	100	99				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

som13.04.24.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab Sample ID: LCS-71381 LCS Lot No.:

Date Extracted: 04/26/2013 Date Analyzed (1): 04/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	48.3588	97		30 - 155
Chloromethane	50.0000	0.0000	47.5260	95		40 - 125
Vinyl chloride	50.0000	0.0000	50.8526	102		50 - 145
Bromomethane	50.0000	0.0000	51.0454	102		30 - 145
Chloroethane	50.0000	0.0000	56.8493	114		60 - 135
Trichlorofluoromethane	50.0000	0.0000	58.8118	118		60 - 145
1,1-Dichloroethene	50.0000	0.0000	44.5742	89		70 - 130
Acetone	50.0000	0.0000	52.4863	105		40 - 140
Iodomethane	50.0000	0.0000	57.2591	115		72 - 121
Carbon disulfide	50.0000	0.0000	45.0445	90		35 - 160
Methylene chloride	50.0000	0.0000	44.3644	89		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	46.0724	92		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.2955	101		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.0275	98		70 - 135
Vinyl acetate	50.0000	0.0000	52.3291	105		38 - 163
2-Butanone	50.0000	0.0000	50.8808	102		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	46.8161	94		70 - 125
2,2-Dichloropropane	50.0000	0.0000	52.8727	106		70 - 135
Bromochloromethane	50.0000	0.0000	49.8516	100		65 - 130
Chloroform	50.0000	0.0000	51.3177	103		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	50.5521	101		65 - 130
1,1-Dichloropropene	50.0000	0.0000	45.1139	90		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.5261	103		65 - 140
1,2-Dichloroethane	50.0000	0.0000	54.6556	109		70 - 130
Benzene	50.0000	0.0000	44.2306	88		80 - 120
Trichloroethene	50.0000	0.0000	45.6888	91		70 - 125
1,2-Dichloropropane	50.0000	0.0000	48.7406	97		75 - 125
Dibromomethane	50.0000	0.0000	51.7730	104		75 - 125
Bromodichloromethane	50.0000	0.0000	54.0754	108		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	50.8345	102		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.4484	97		60 - 135
Toluene	50.0000	0.0000	38.9863	78		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.6946	105		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	48.4503	97		75 - 125
1,3-Dichloropropane	50.0000	0.0000	49.4735	99		75 - 125
Tetrachloroethene	50.0000	0.0000	44.0564	88		45 - 150
2-Hexanone	50.0000	0.0000	48.8241	98		55 - 130
Dibromochloromethane	50.0000	0.0000	51.0107	102		60 - 135
1,2-Dibromoethane	50.0000	0.0000	48.3314	97		80 - 120
Chlorobenzene	50.0000	0.0000	46.1239	92		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	49.5448	99		80 - 130
Ethylbenzene	50.0000	0.0000	44.1071	88		75 - 125
m,p-Xylene	100.0000	0.0000	85.7476	86		75 - 130
o-Xylene	50.0000	0.0000	44.5321	89		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab Sample ID: LCS-71381 LCS Lot No.:

Date Extracted: 04/26/2013 Date Analyzed (1): 04/26/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	130.2797	87		81 - 121
Styrene	50.0000	0.0000	46.2850	93		65 - 135
Bromoform	50.0000	0.0000	50.0216	100		70 - 130
Isopropylbenzene	50.0000	0.0000	47.1237	94		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	46.0146	92		65 - 130
Bromobenzene	50.0000	0.0000	46.1406	92		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	45.5092	91		75 - 125
n-Propylbenzene	50.0000	0.0000	45.6080	91		70 - 130
2-Chlorotoluene	50.0000	0.0000	45.8944	92		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	47.0708	94		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.7558	94		75 - 130
tert-Butylbenzene	50.0000	0.0000	48.4480	97		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	46.9230	94		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.4304	97		70 - 125
4-Isopropyltoluene	50.0000	0.0000	49.7119	99		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.0880	94		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.1700	94		75 - 125
n-Butylbenzene	50.0000	0.0000	52.8638	106		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.6658	95		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	46.5512	93		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	49.2394	98		65 - 135
Hexachlorobutadiene	50.0000	0.0000	52.0790	104		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.2422	96		55 - 140
Naphthalene	50.0000	0.0000	43.9406	88		55 - 140

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab Sample ID: LCSD-71381 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	44.9264	90		7		40	30 - 155
Chloromethane	50.0000	48.2210	96		1		40	40 - 125
Vinyl chloride	50.0000	48.9700	98		4		40	50 - 145
Bromomethane	50.0000	51.0207	102		0		40	30 - 145
Chloroethane	50.0000	55.5678	111		3		40	60 - 135
Trichlorofluoromethane	50.0000	54.8910	110		7		40	60 - 145
1,1-Dichloroethene	50.0000	43.8202	88		1		40	70 - 130
Acetone	50.0000	47.7260	95		10		40	40 - 140
Iodomethane	50.0000	58.6665	117		2		40	72 - 121
Carbon disulfide	50.0000	42.6968	85		6		40	35 - 160
Methylene chloride	50.0000	46.3572	93		4		40	55 - 140
trans-1,2-Dichloroethene	50.0000	46.4721	93		1		40	60 - 140
Methyl tert-butyl ether	50.0000	54.6424	109		8		40	65 - 125
1,1-Dichloroethane	50.0000	50.9075	102		4		40	70 - 135
Vinyl acetate	50.0000	56.2133	112		6		40	38 - 163
2-Butanone	50.0000	49.7321	99		3		40	30 - 150
cis-1,2-Dichloroethene	50.0000	48.8043	98		4		40	70 - 125
2,2-Dichloropropane	50.0000	52.6830	105		1		40	70 - 135
Bromochloromethane	50.0000	51.8303	104		4		40	65 - 130
Chloroform	50.0000	52.9587	106		3		40	65 - 135
1,1,1-Trichloroethane	50.0000	50.1929	100		1		40	65 - 130
1,1-Dichloropropene	50.0000	44.2158	88		2		40	75 - 130
Carbon tetrachloride	50.0000	49.6870	99		4		40	65 - 140
1,2-Dichloroethane	50.0000	57.9864	116		6		40	70 - 130
Benzene	50.0000	46.0903	92		4		40	80 - 120
Trichloroethene	50.0000	45.7054	91		0		40	70 - 125
1,2-Dichloropropane	50.0000	50.6574	101		4		40	75 - 125
Dibromomethane	50.0000	55.4152	111		7		40	75 - 125
Bromodichloromethane	50.0000	56.3340	113		5		40	75 - 120
cis-1,3-Dichloropropene	50.0000	53.2832	107		5		40	70 - 130
4-Methyl-2-pentanone	50.0000	53.7168	107		10		40	60 - 135
Toluene	50.0000	39.7313	79		1		40	75 - 120
trans-1,3-Dichloropropene	50.0000	55.4619	111		6		40	55 - 140
1,1,2-Trichloroethane	50.0000	51.7665	104		7		40	75 - 125
1,3-Dichloropropane	50.0000	52.3267	105		6		40	75 - 125
Tetrachloroethene	50.0000	43.5179	87		1		40	45 - 150
2-Hexanone	50.0000	50.2180	100		2		40	55 - 130
Dibromochloromethane	50.0000	53.6363	107		5		40	60 - 135
1,2-Dibromoethane	50.0000	51.1815	102		5		40	80 - 120
Chlorobenzene	50.0000	47.5973	95		3		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	50.4144	101		2		40	80 - 130
Ethylbenzene	50.0000	45.0015	90		2		40	75 - 125
m,p-Xylene	100.0000	88.1998	88		2		40	75 - 130
o-Xylene	50.0000	45.7234	91		2		40	80 - 120
Xylene (Total)	150.0000	133.9232	89		2		40	81 - 121
Styrene	50.0000	47.7986	96		3		40	65 - 135

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab Sample ID: LCSD-71381 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	53.3245	107		7		40	70 - 130
Isopropylbenzene	50.0000	48.3855	97		3		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	50.2981	101		9		40	65 - 130
Bromobenzene	50.0000	47.5963	95		3		40	75 - 125
1,2,3-Trichloropropane	50.0000	49.2464	98		7		40	75 - 125
n-Propylbenzene	50.0000	46.4057	93		2		40	70 - 130
2-Chlorotoluene	50.0000	47.2089	94		2		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	48.2159	96		2		40	75 - 130
4-Chlorotoluene	50.0000	47.5774	95		1		40	75 - 130
tert-Butylbenzene	50.0000	49.2886	99		2		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	48.0220	96		2		40	75 - 130
sec-Butylbenzene	50.0000	49.1686	98		1		40	70 - 125
4-Isopropyltoluene	50.0000	50.3471	101		2		40	75 - 130
1,3-Dichlorobenzene	50.0000	48.6250	97		3		40	75 - 125
1,4-Dichlorobenzene	50.0000	48.3413	97		3		40	75 - 125
n-Butylbenzene	50.0000	52.9058	106		0		40	70 - 135
1,2-Dichlorobenzene	50.0000	50.0606	100		5		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	49.9078	100		7		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	50.9639	102		4		40	65 - 135
Hexachlorobutadiene	50.0000	48.4163	97		7		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	50.8067	102		6		40	55 - 140
Naphthalene	50.0000	48.8834	98		11		40	55 - 140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab File ID: V8B9385.D Lab Sample ID: MB-71381

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/26/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:02

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-71381	LCS-71381	V8B9382.D	9:39
02	LCSD-71381	LCSD-71381	V8B9383.D	10:06
03	TRIP BLANK	M0592-04A	V8B9386.D	11:29
04	MW-3R-042413	M0592-01A	V8B9387.D	11:57
05	MW-7-042413	M0592-02A	V8B9388.D	12:24
06	MW-8-042413	M0592-03A	V8B9389.D	12:51

COMMENTS:

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

EPA SAMPLE NO.
BFB10K

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab File ID: V8B9274.D BFB Injection Date: 04/17/2013

Instrument ID: V10 BFB Injection Time: 11:11

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.0
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	6.6
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 -120% of mass 95	82.8
175	5.0 - 9.0% of mass 174	5.6 (6.8)1
176	95.0 - 101% of mass 174	80.1 (96.8)1
177	5.0 - 9.0% of mass 176	5.1 (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	VSTD05010K	VSTD05010K	V8B9275.D	04/17/2013	12:22
02	VSTD02010K	VSTD02010K	V8B9276.D	04/17/2013	12:49
03	VSTD00510K	VSTD00510K	V8B9277.D	04/17/2013	13:17
04	VSTD00110K	VSTD00110K	V8B9279.D	04/17/2013	14:12
05	VSTD20010K	VSTD20010K	V8B9280.D	04/17/2013	14:39
06	VSTD10010K	VSTD10010K	V8B9281.D	04/17/2013	15:07

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

EPA SAMPLE NO.
BFB10O

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Lab File ID: V8B9380.D BFB Injection Date: 04/26/2013

Instrument ID: V10 BFB Injection Time: 8:35

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 80.0% of mass 95	50.7
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 (0.5)1
174	50.0 -120% of mass 95	81.3
175	5.0 - 9.0% of mass 174	5.6 (6.9)1
176	95.0 - 101% of mass 174	78.1 (96.2)1
177	5.0 - 9.0% of mass 176	5.0 (6.4)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050100	VSTD050100	V8B9381.D	04/26/2013	8:54
02	LCS-71381	LCS-71381	V8B9382.D	04/26/2013	9:39
03	LCSD-71381	LCSD-71381	V8B9383.D	04/26/2013	10:06
04	MB-71381	MB-71381	V8B9385.D	04/26/2013	11:02
05	TRIP BLANK	M0592-04A	V8B9386.D	04/26/2013	11:29
06	MW-3R-042413	M0592-01A	V8B9387.D	04/26/2013	11:57
07	MW-7-042413	M0592-02A	V8B9388.D	04/26/2013	12:24
08	MW-8-042413	M0592-03A	V8B9389.D	04/26/2013	12:51

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####): VSTD050100 Date Analyzed: 04/26/2013

Lab File ID (Standard): V8B9381.D Time Analyzed: 8:54

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	1962499		5.307		1489723		8.291		749565		10.786	
	UPPER LIMIT	3924998		5.807		2979446		8.791		1499130		11.286	
	LOWER LIMIT	981250		4.807		744862		7.791		374783		10.286	
	EPA SAMPLE NO.												
01	LCS-71381	2027610		5.307		1529212		8.291		758610		10.786	
02	LCSD-71381	2057084		5.307		1563734		8.294		774409		10.782	
03	MB-71381	1982644		5.307		1429077		8.294		645539		10.786	
04	TRIP BLANK	1938914		5.307		1427734		8.294		631200		10.786	
05	MW-3R-042413	1914646		5.307		1392078		8.294		621036		10.786	
06	MW-7-042413	1870419		5.307		1374523		8.294		612230		10.786	
07	MW-8-042413	1867432		5.307		1358472		8.294		599956		10.786	

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.

MW-3R-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9387.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

EPA SAMPLE NO.

MW-3R-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9387.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9387.d
Report Date: 03-May-2013 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

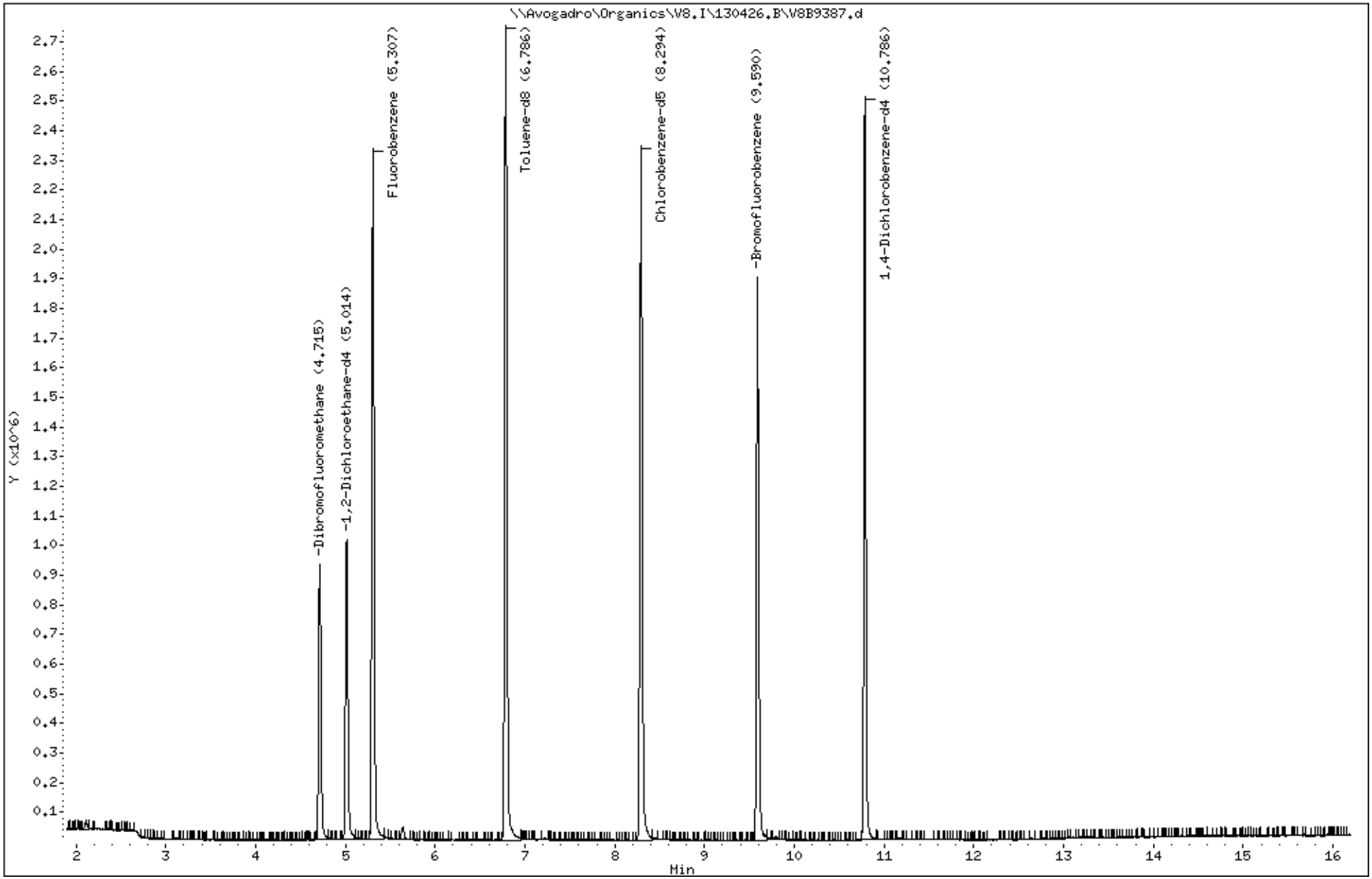
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Inj Date : 26-APR-2013 11:57
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0592-01A,,71381
Misc Info :
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Meth Date : 03-May-2013 11:27 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	4.715	4.712	(0.889)	520919	53.7183	54
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	114132	50.8874	51
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	1914646	50.0000	
	47 Trichloroethene	130	5.641	5.634	(1.063)	13567	1.22084	1.2
$	58 Toluene-d8	98	6.785	6.785	(0.818)	1866090	50.4670	50
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1392078	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	681010	49.6253	50
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	621036	50.0000	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9387.d
Date : 26-APR-2013 11:57
Client ID: MW-3R-042413
Instrument: V8.i
Sample Info: 5ML,M0592-01A,,71381
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9387.d

Date : 26-APR-2013 11:57

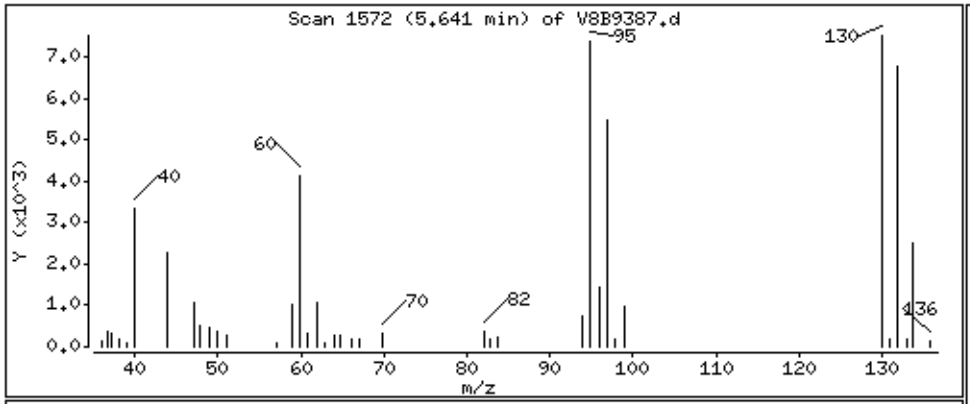
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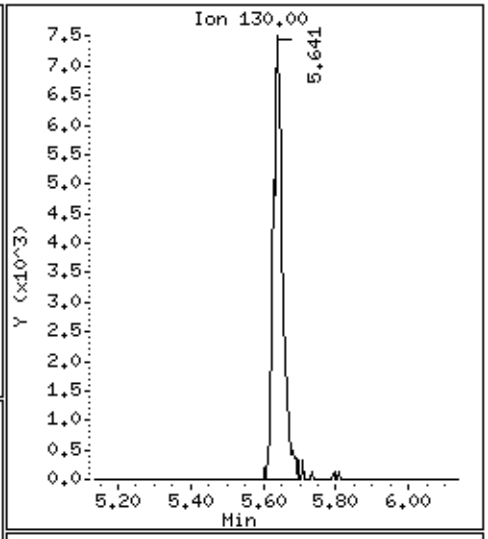
Sample Info: 5ML,M0592-01A,,71381

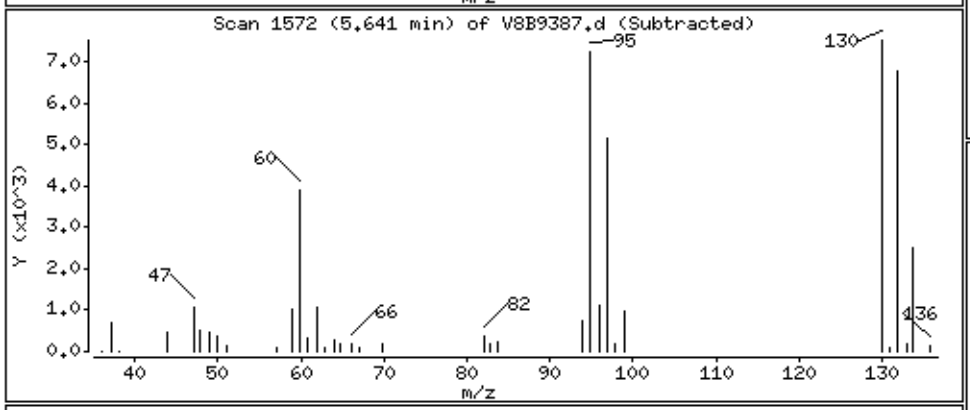
Purge Volume: 5.0 Operator: V10 SRC: LIMS

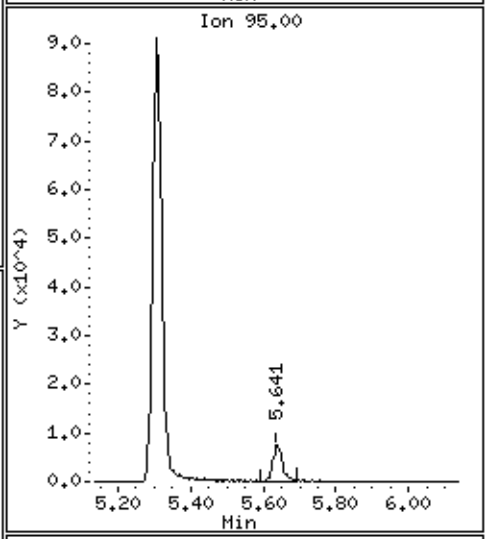
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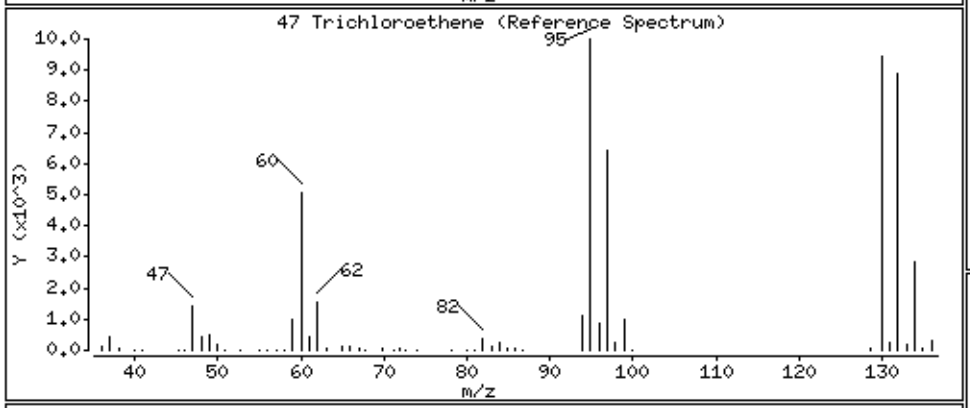
47 Trichloroethene Concentration: 1.2 ug/L

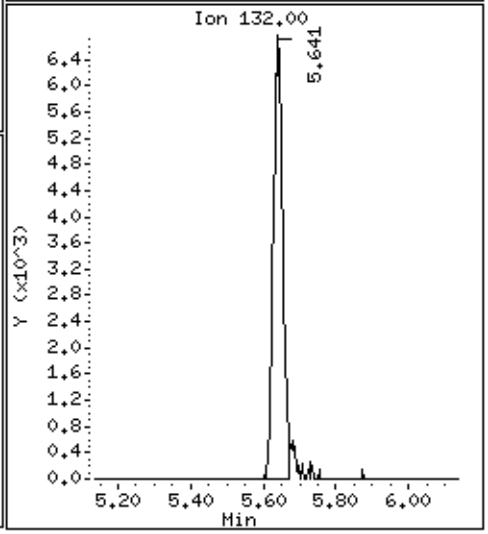


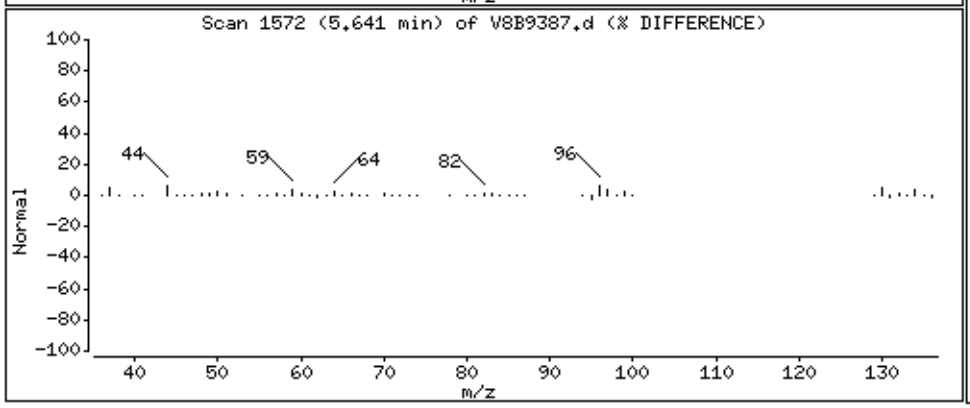












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9388.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	1.7	J
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

EPA SAMPLE NO.

MW-7-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9388.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9388.d
Report Date: 03-May-2013 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

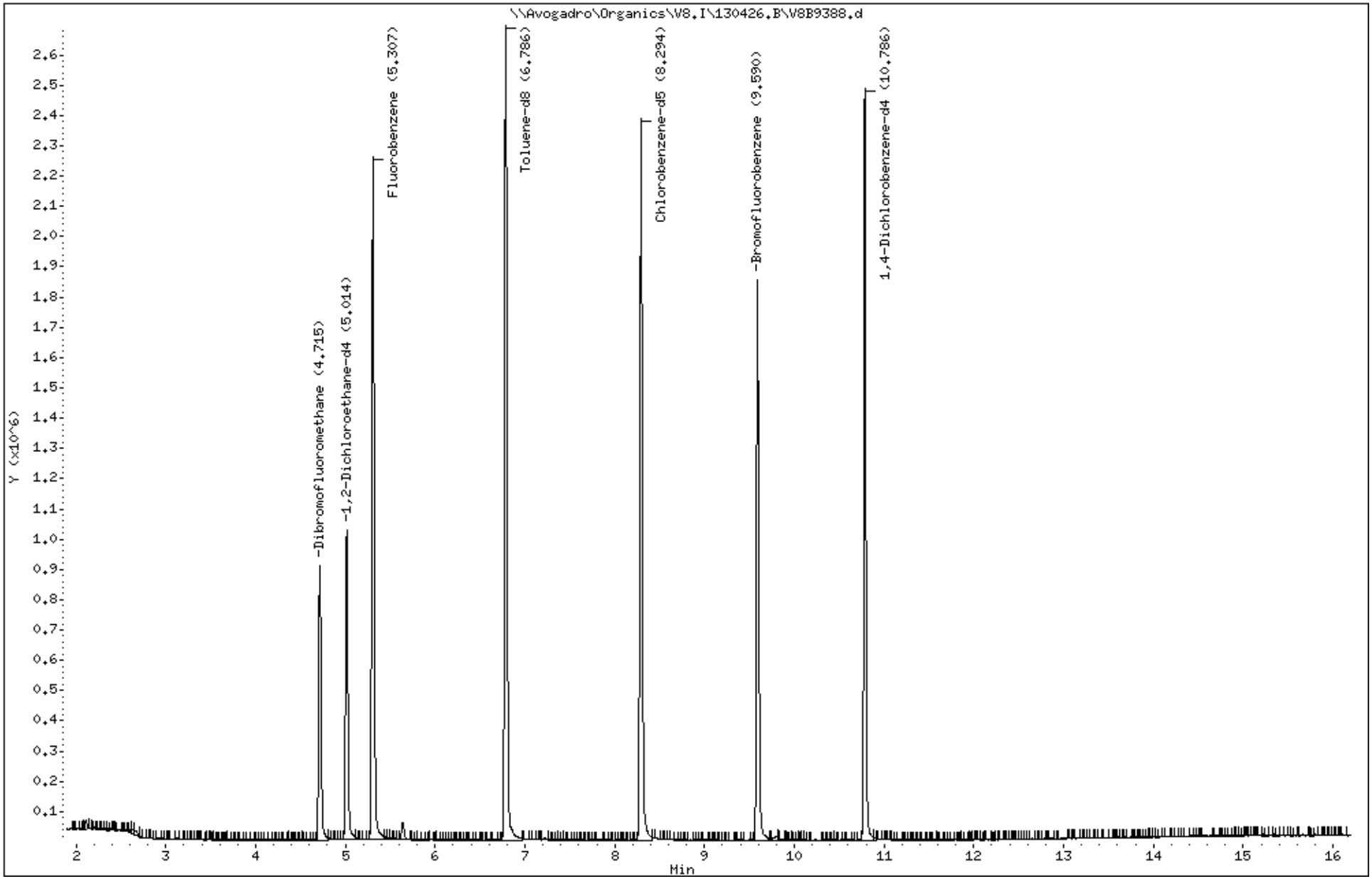
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Inj Date : 26-APR-2013 12:24
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0592-02A,,71381
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:27 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	4.715	4.712	(0.889)	510240	53.8612	54
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	111613	50.9409	51
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	1870419	50.0000	
	47 Trichloroethene	130	5.641	5.634	(1.063)	18267	1.68265	1.7
$	58 Toluene-d8	98	6.785	6.785	(0.818)	1830244	50.1298	50
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1374523	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	670338	49.4715	49
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	612230	50.0000	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9388.d
Date : 26-APR-2013 12:24
Client ID: MW-7-042413
Instrument: V8.i
Sample Info: 5ML,M0592-02A,,71381
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9388.d

Date : 26-APR-2013 12:24

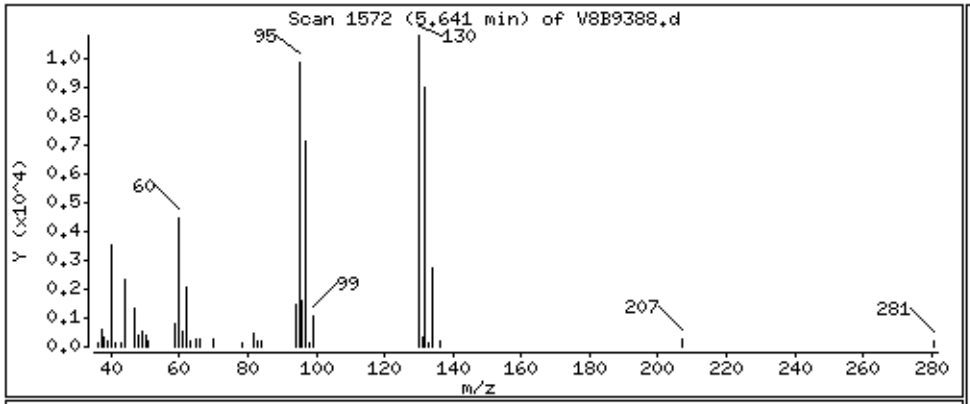
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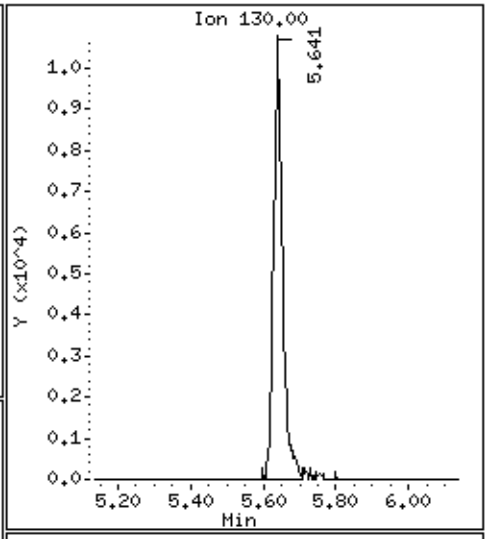
Sample Info: 5ML,M0592-02A,,71381

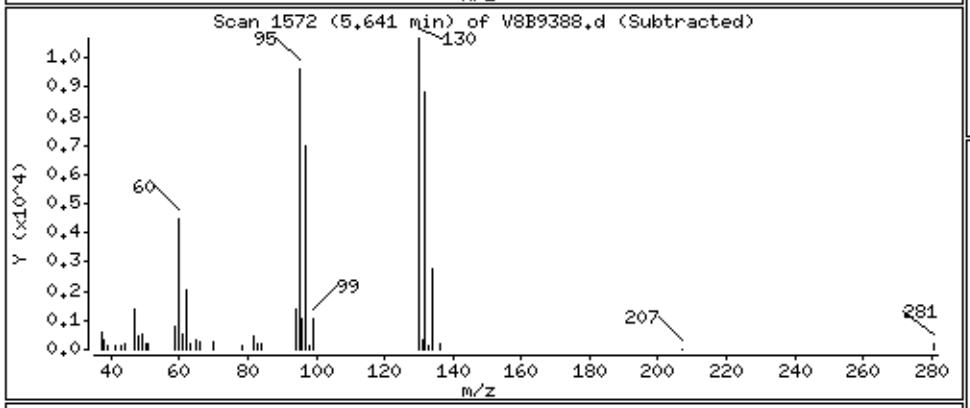
Purge Volume: 5.0 Operator: V10 SRC: LIMS

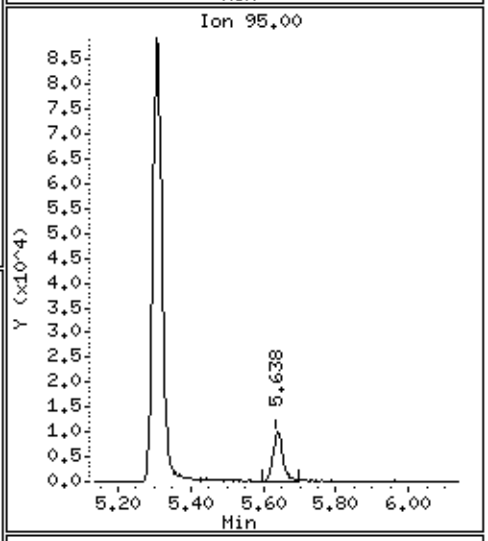
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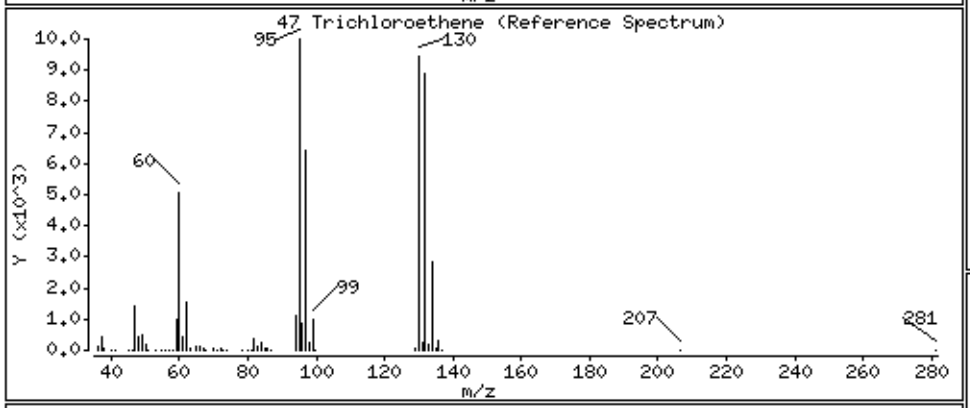
47 Trichloroethene Concentration: 1.7 ug/L

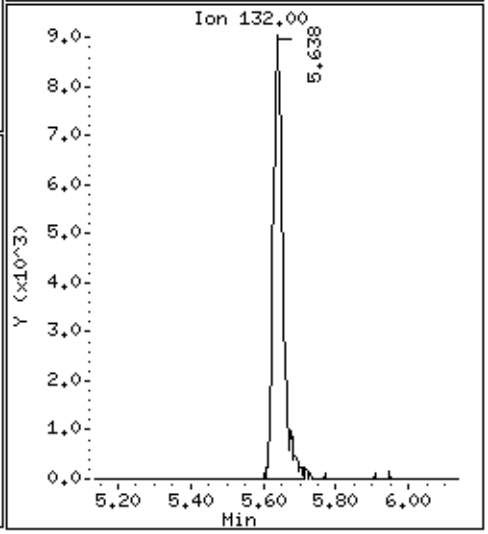


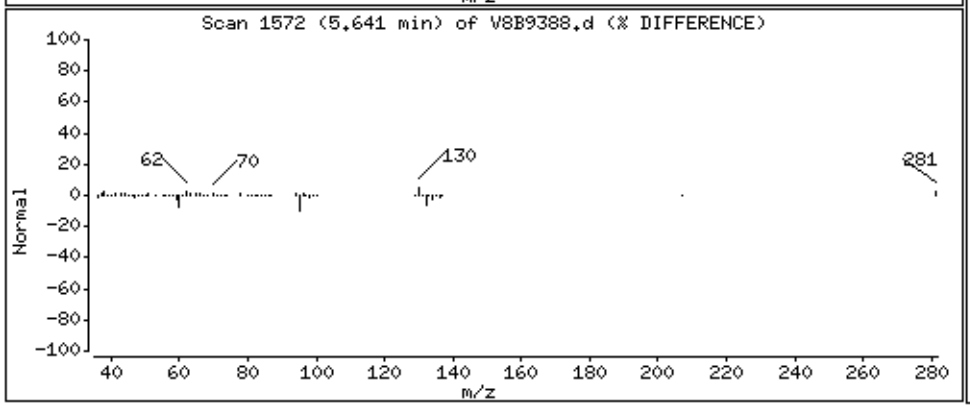












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9389.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	0.60	J
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	0.66	J
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	37	
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

EPA SAMPLE NO.

MW-8-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9389.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9389.d
Report Date: 03-May-2013 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

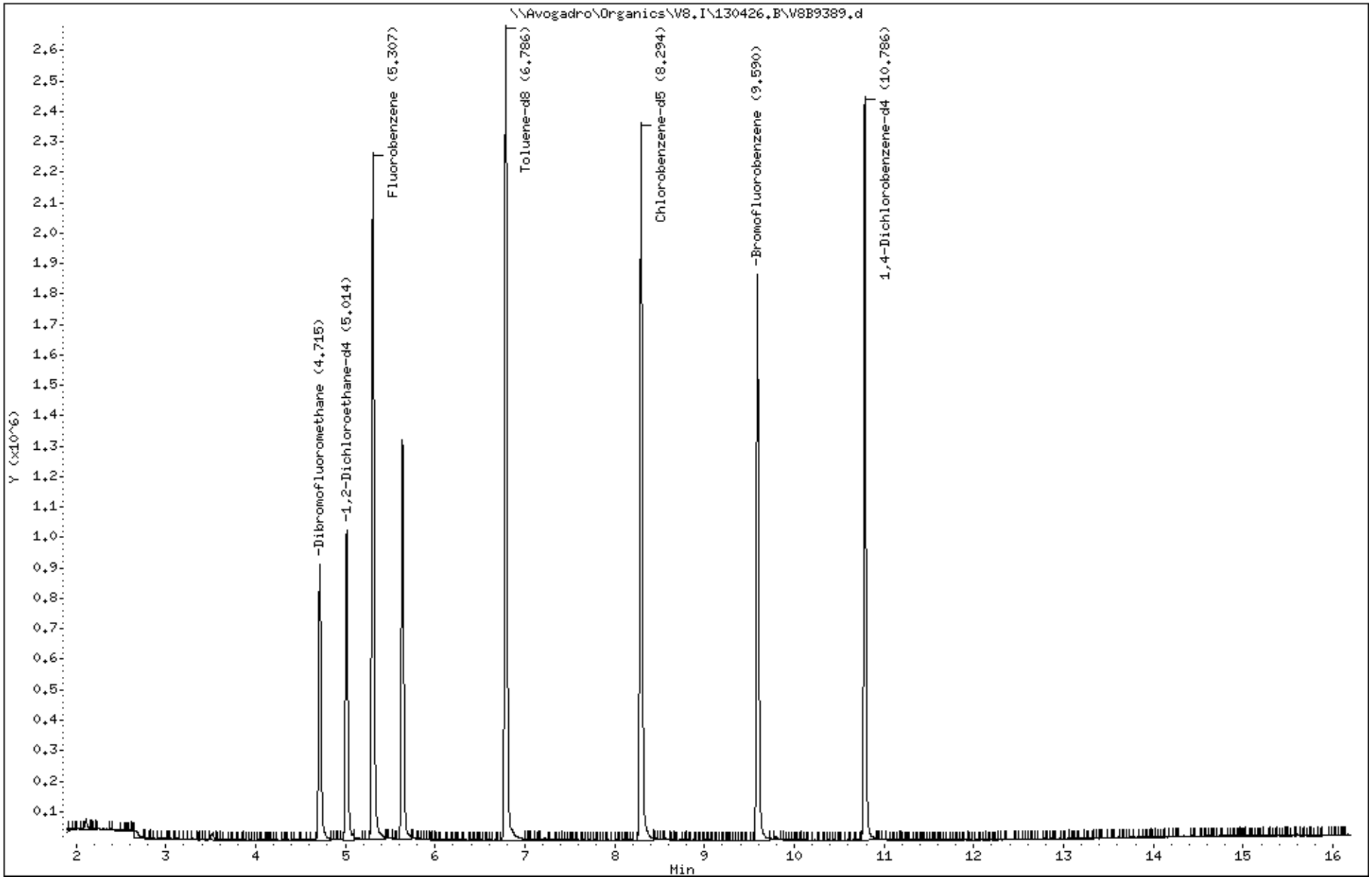
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Inj Date : 26-APR-2013 12:51
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0592-03A,,71381
Misc Info :
Comment   :
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Meth Date : 03-May-2013 11:27 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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)
	22 Methyl tert-butyl ether	73	3.519	3.515	(0.663)	18829	0.60303	0.60
$	36 Dibromofluoromethane	113	4.715	4.712	(0.889)	510930	54.0203	54
	37 1,1,1-Trichloroethane	97	4.757	4.753	(0.896)	11133	0.65701	0.66
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	109968	50.2704	50
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	1867432	50.0000	
	47 Trichloroethene	130	5.638	5.634	(1.062)	401293	37.0239	37
$	58 Toluene-d8	98	6.785	6.785	(0.818)	1805868	50.0465	50
*	68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1358472	50.0000	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	665225	49.6743	50
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	599956	50.0000	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9389.d
Date : 26-APR-2013 12:51
Client ID: MW-8-042413
Instrument: V8.i
Sample Info: 5ML,M0592-03A,,71381
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9389.d

Date : 26-APR-2013 12:51

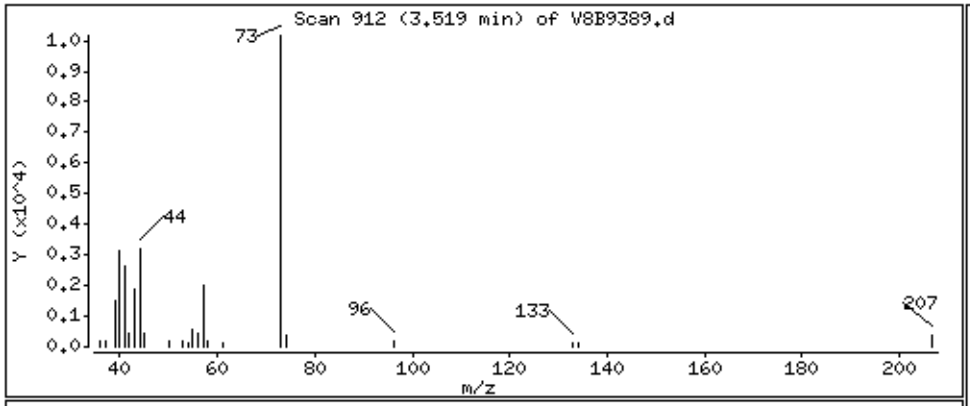
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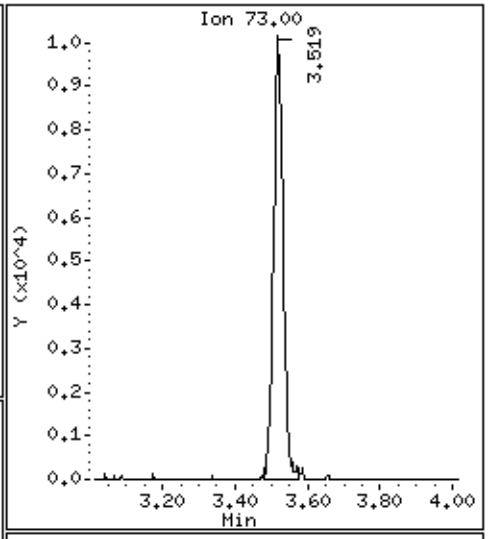
Sample Info: 5ML,M0592-03A,,71381

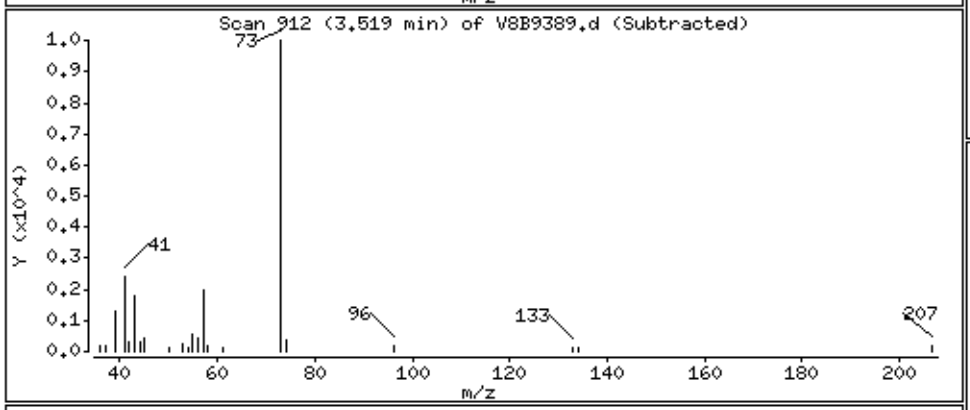
Purge Volume: 5.0 Operator: V10 SRC: LIMS

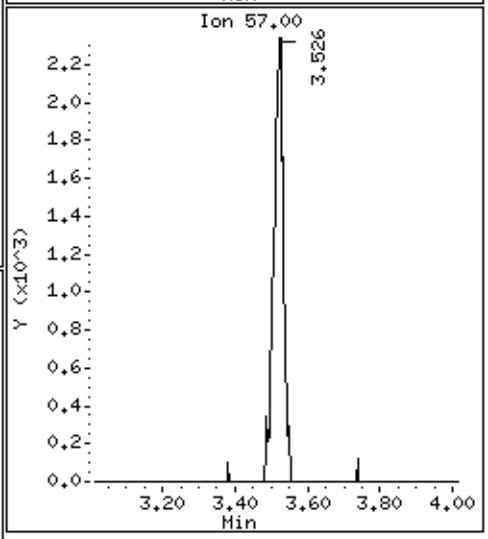
Column phase: DB-624 Column diameter: 0.25

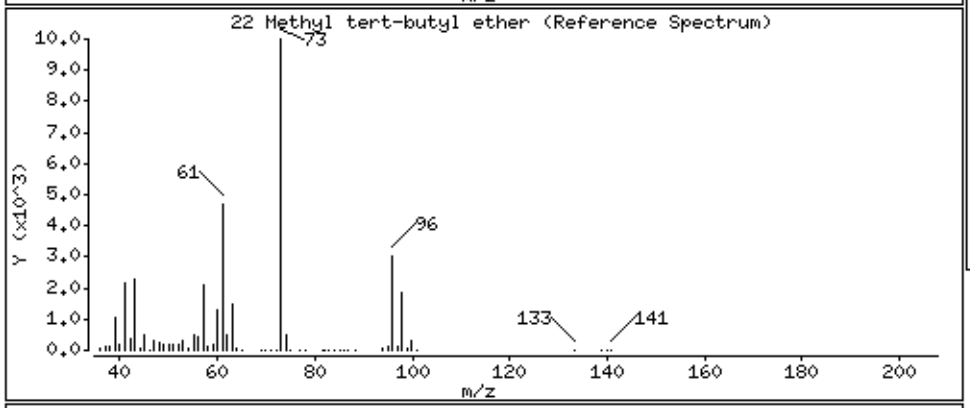
22 Methyl tert-butyl ether Concentration: 0.60 ug/L

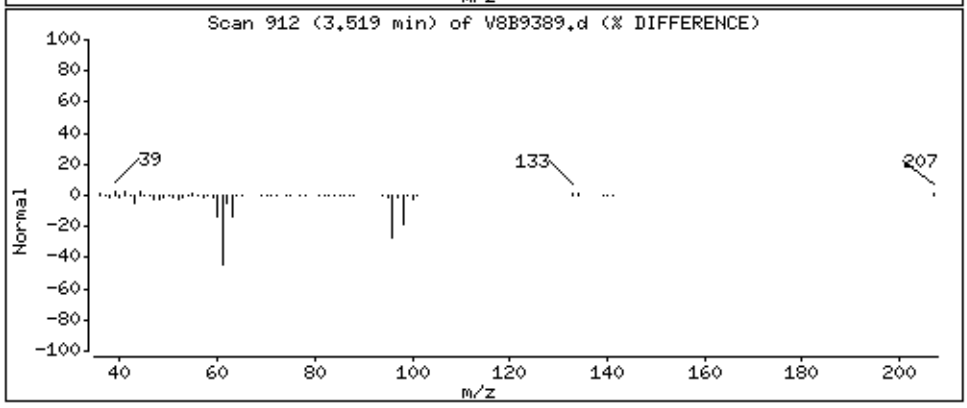












Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9389.d

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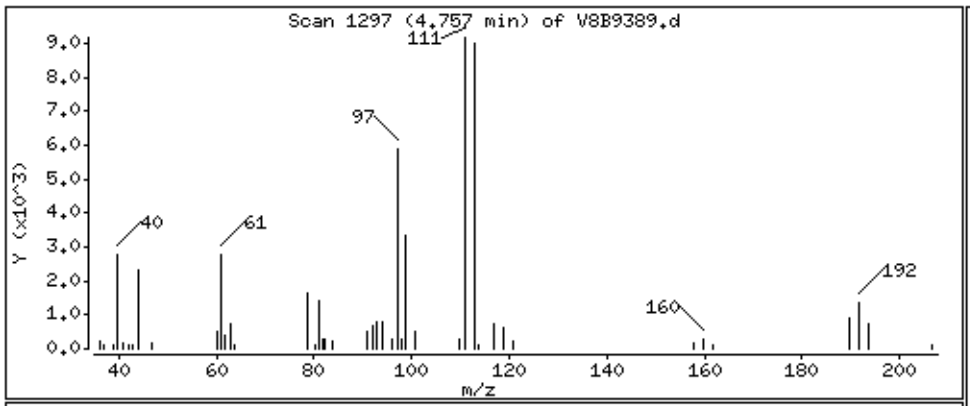
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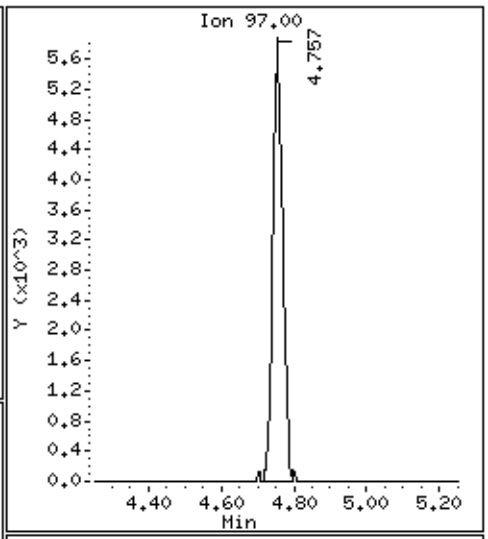
Sample Info: 5ML,M0592-03A,,71381

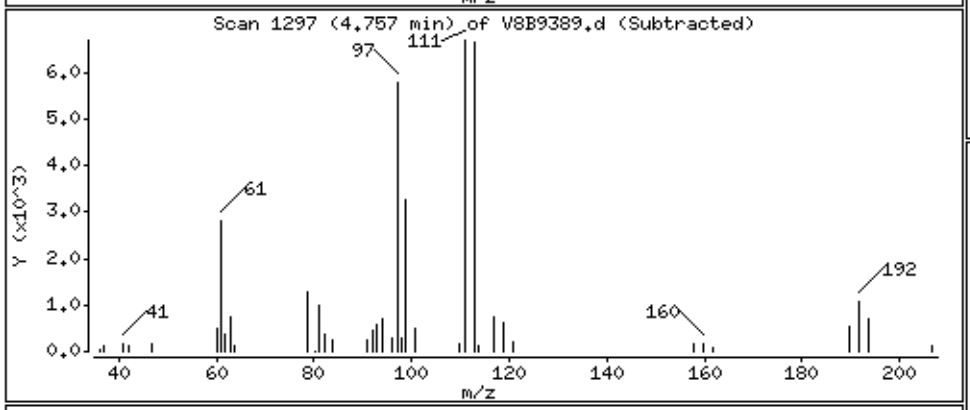
Purge Volume: 5.0 Operator: V10 SRC: LIMS

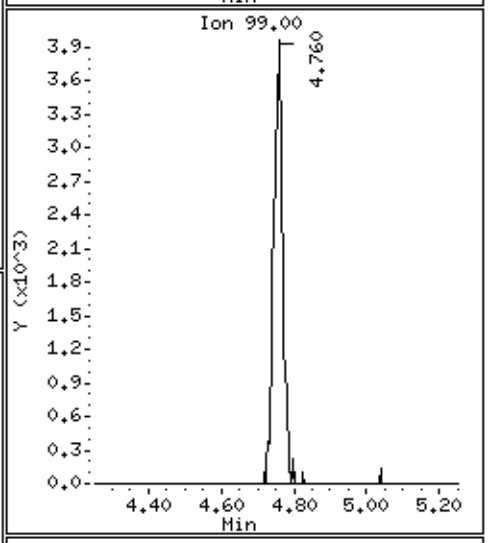
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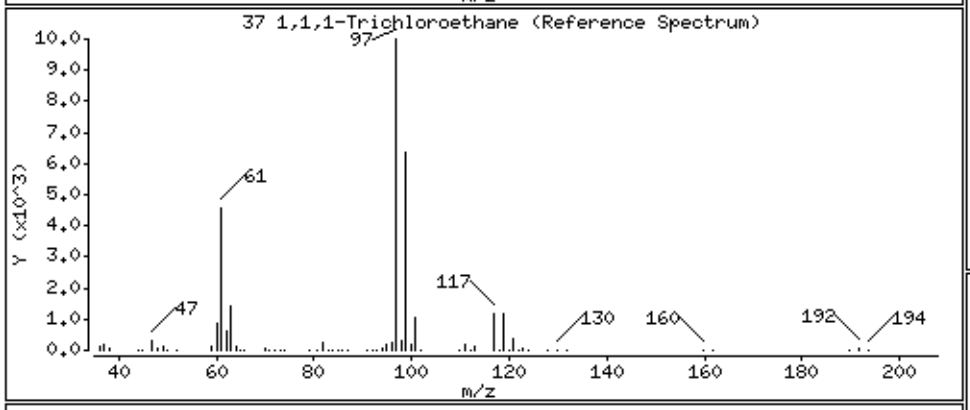
37 1,1,1-Trichloroethane Concentration: 0.66 ug/L

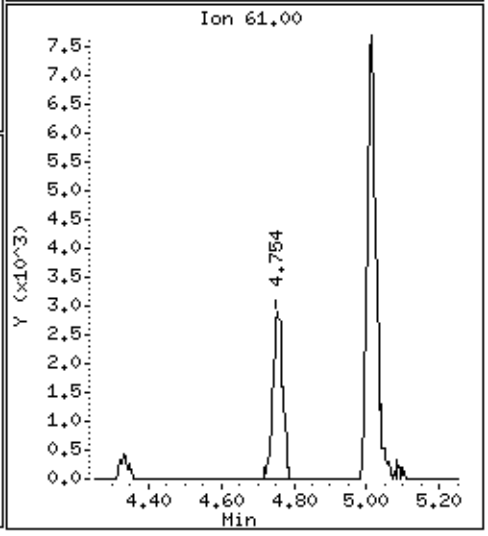


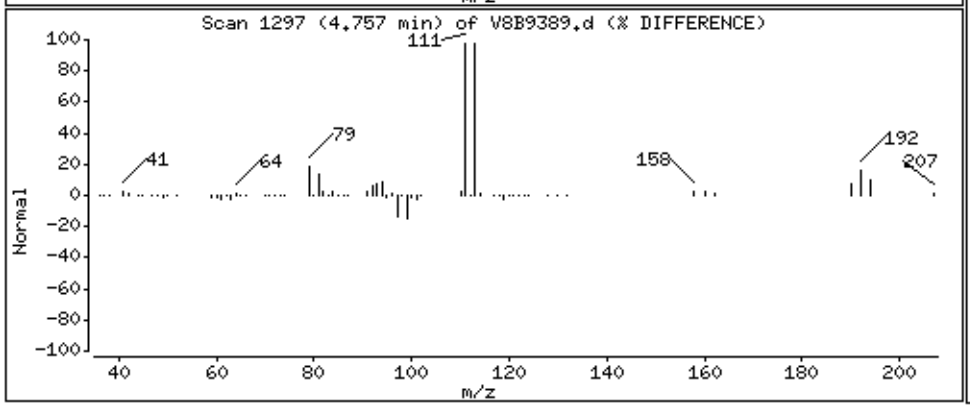












Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9389.d

Date : 26-APR-2013 12:51

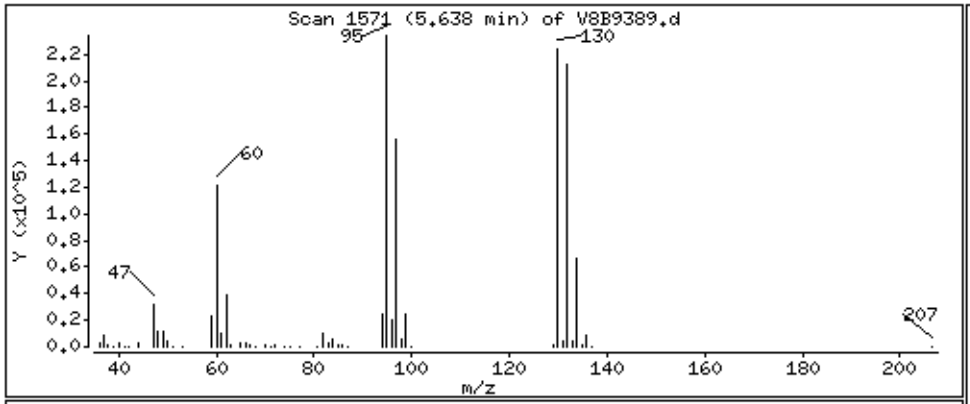
Client ID: MW-8-042413 Instrument: V8.i

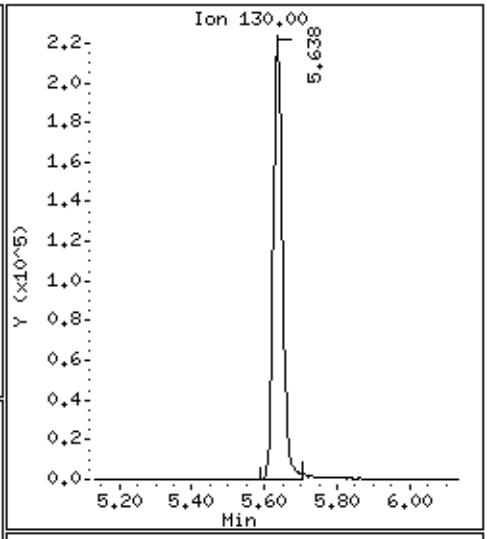
Sample Info: 5ML,M0592-03A,,71381

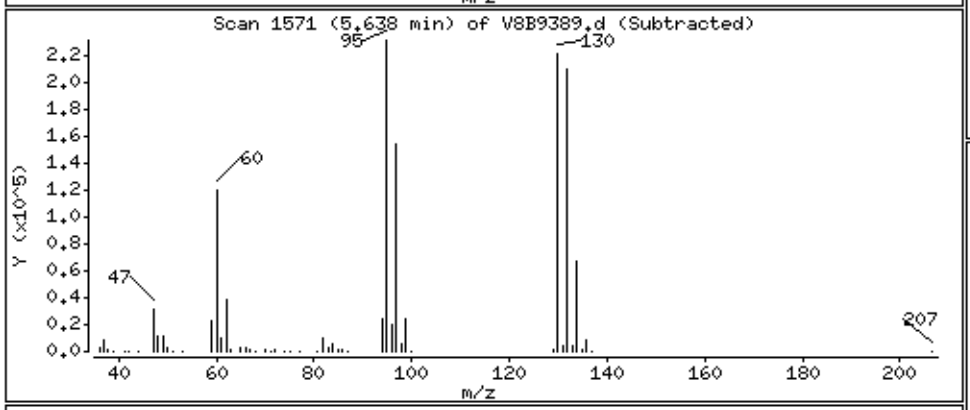
Purge Volume: 5.0 Operator: V10 SRC: LIMS

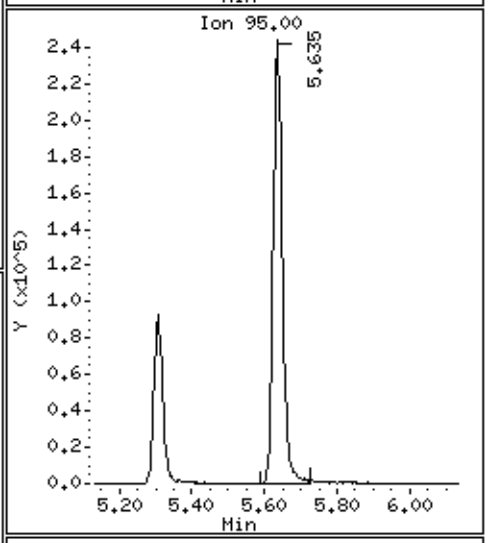
Column phase: DB-624 Column diameter: 0.25

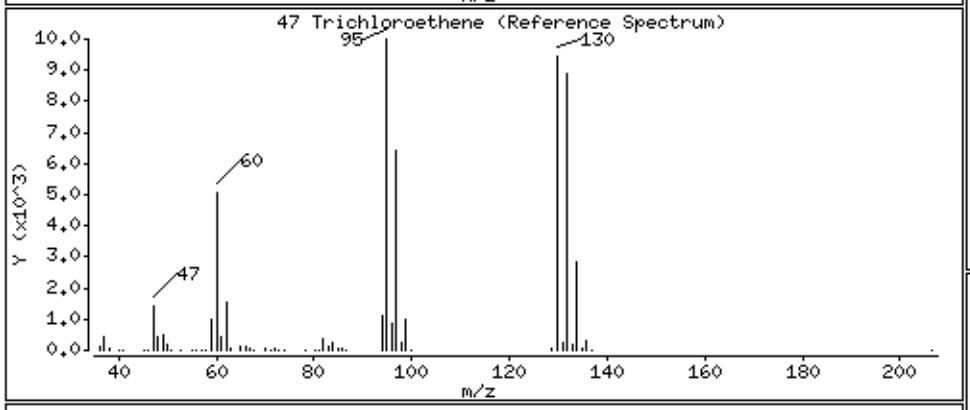
47 Trichloroethene Concentration: 37 ug/L

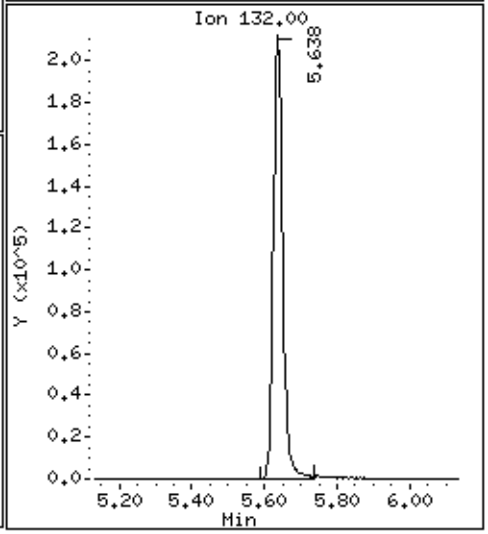


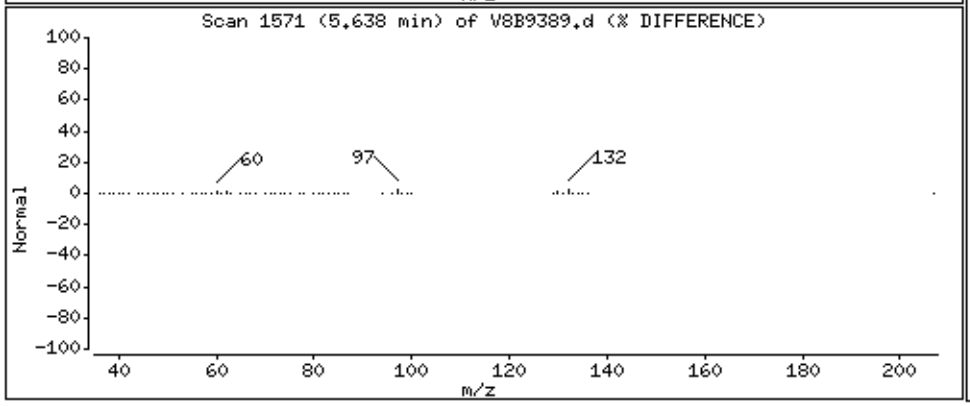












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9386.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9386.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9386.d
Report Date: 03-May-2013 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

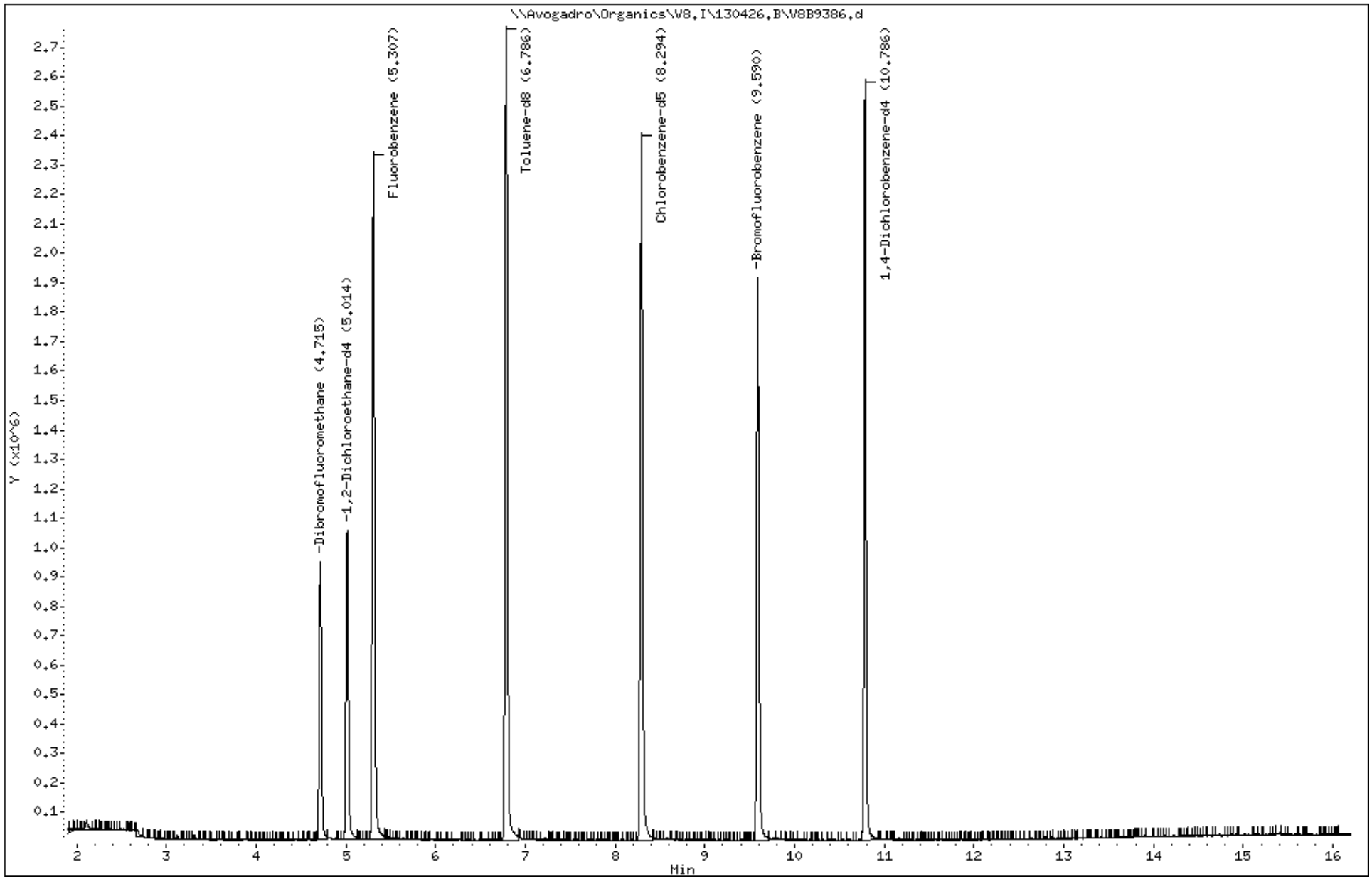
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Inj Date : 26-APR-2013 11:29
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,M0592-04A,,71381
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:27 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	4.715	4.712	(0.889)	528544	53.8224	54
$ 42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	115434	50.8237	51
* 46 Fluorobenzene	96	5.306	5.306	(1.000)	1938914	50.0000	
$ 58 Toluene-d8	98	6.786	6.785	(0.818)	1901346	50.1363	50
* 68 Chlorobenzene-d5	117	8.293	8.293	(1.000)	1427734	50.0000	
$ 79 Bromofluorobenzene	95	9.589	9.589	(1.156)	694801	49.3659	49
* 92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	631200	50.0000	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9386.d
Date : 26-APR-2013 11:29
Client ID: TRIP BLANK
Instrument: V8.i
Sample Info: 5ML,M0592-04A,,71381
Purge Volume: 5.0
Operator: V10 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.: M0592 SAS No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.213	0.213	0.213	0.212	0.213	0.181					0.208	6.3
Chloromethane	0.281	0.297	0.278	0.288	0.272	0.307					0.287	4.6
Vinyl chloride	0.287	0.303	0.288	0.285	0.275	0.262					0.283	4.8
Bromomethane	0.208	0.205	0.185	0.177	0.181	0.209					0.194	7.6
Chloroethane	0.164	0.169	0.160	0.148	0.147	0.139					0.155	7.4
Trichlorofluoromethane	0.355	0.366	0.363	0.348	0.350	0.316					0.350	5.1
1,1-Dichloroethene	0.260	0.274	0.269	0.271	0.270	0.251					0.266	3.2
Acetone	0.041	0.043	0.041	0.033	0.038						0.039	9.4
Iodomethane	0.224	0.291	0.287	0.321	0.337	0.181					0.274	21.7
Carbon disulfide	0.866	0.890	0.898	0.889	0.871	0.926					0.890	2.4
Methylene chloride	0.329	0.329	0.301	0.311	0.311	0.426					0.335	13.8
trans-1,2-Dichloroethene	0.287	0.298	0.288	0.290	0.290	0.270					0.287	3.2
Methyl tert-butyl ether	0.815	0.911	0.804	0.853	0.858	0.775					0.836	5.8
1,1-Dichloroethane	0.537	0.582	0.545	0.553	0.560	0.505					0.547	4.7
Vinyl acetate	0.792	0.942	0.855	0.896	0.892	0.716					0.849	9.7
2-Butanone	0.033	0.043	0.038	0.037	0.039						0.038	9.3
cis-1,2-Dichloroethene	0.311	0.336	0.313	0.321	0.321	0.305					0.318	3.4
2,2-Dichloropropane	0.417	0.462	0.456	0.449	0.460	0.372					0.436	8.2
Bromochloromethane	0.145	0.162	0.147	0.147	0.146	0.141					0.148	4.9
Chloroform	0.531	0.565	0.529	0.539	0.546	0.508					0.536	3.5
1,1,1-Trichloroethane	0.447	0.477	0.453	0.462	0.464	0.418					0.454	4.4
1,1-Dichloropropene	0.131	0.147	0.144	0.146	0.146	0.125					0.140	6.8
Carbon tetrachloride	0.363	0.395	0.385	0.394	0.399	0.336					0.378	6.5
1,2-Dichloroethane	0.427	0.464	0.425	0.441	0.444	0.430					0.439	3.3
Benzene	1.229	1.274	1.173	1.207	1.207	1.408					1.250	6.8
Trichloroethene	0.284	0.295	0.292	0.296	0.299	0.275					0.290	3.1
1,2-Dichloropropane	0.302	0.329	0.305	0.316	0.313	0.293					0.310	3.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M0592 SAS No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.185	0.205	0.184	0.195	0.197	0.177					0.190	5.4
Bromodichloromethane	0.378	0.436	0.406	0.425	0.434	0.359					0.406	7.8
cis-1,3-Dichloropropene	0.460	0.523	0.494	0.521	0.529	0.397					0.487	10.5
4-Methyl-2-pentanone	0.242	0.286	0.251	0.279	0.289						0.269	8.0
Toluene	1.438	1.352	1.239	1.255	1.263	2.301					1.475	27.9
trans-1,3-Dichloropropene	0.405	0.490	0.451	0.479	0.492	0.355					0.445	12.3
1,1,2-Trichloroethane	0.257	0.282	0.251	0.268	0.273	0.268					0.267	4.2
1,3-Dichloropropane	0.614	0.678	0.609	0.646	0.641	0.564					0.625	6.3
Tetrachloroethene	0.322	0.339	0.325	0.328	0.327	0.313					0.326	2.5
2-Hexanone	0.221	0.288	0.262	0.274	0.284						0.266	10.2
Dibromochloromethane	0.367	0.438	0.408	0.431	0.439	0.347					0.405	9.7
1,2-Dibromoethane	0.364	0.413	0.376	0.396	0.397	0.353					0.383	6.0
Chlorobenzene	1.050	1.142	1.066	1.082	1.082	1.021					1.074	3.8
1,1,1,2-Tetrachloroethane	0.357	0.408	0.379	0.390	0.392	0.338					0.377	6.8
Ethylbenzene	0.548	0.597	0.553	0.567	0.567	0.598					0.572	3.7
m,p-Xylene	0.704	0.734	0.693	0.701	0.701	0.833					0.728	7.4
o-Xylene	0.688	0.719	0.666	0.678	0.681	0.741					0.695	4.2
Xylene (Total)	0.698	0.729	0.684	0.693	0.694	0.803					0.717	6.3
Styrene	1.013	1.183	1.133	1.174	1.173	0.862					1.090	11.8
Bromoform	0.219	0.285	0.263	0.284	0.293	0.204					0.258	14.7
Isopropylbenzene	1.604	1.787	1.696	1.741	1.728	1.467					1.670	7.0
1,1,2,2-Tetrachloroethane	1.035	1.124	0.972	1.043	1.035	1.074					1.047	4.8
Bromobenzene	0.902	0.974	0.905	0.927	0.928	0.891					0.921	3.3
1,2,3-Trichloropropane	1.206	1.386	1.213	1.305	1.300	1.526					1.323	9.1
n-Propylbenzene	0.873	0.949	0.890	0.918	0.902	0.844					0.896	4.1
2-Chlorotoluene	0.845	0.902	0.836	0.846	0.838	0.818					0.848	3.4
1,3,5-Trimethylbenzene	2.780	3.025	2.807	2.874	2.840	2.755					2.847	3.4

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.: M0592 SAS No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.838	0.929	0.866	0.883	0.874	0.837					0.871	3.9
tert-Butylbenzene	2.729	3.052	2.832	2.882	2.870	2.591					2.826	5.5
1,2,4-Trimethylbenzene	2.858	3.052	2.833	2.897	2.842	3.008					2.915	3.2
sec-Butylbenzene	3.401	3.709	3.456	3.526	3.457	3.183					3.455	5.0
4-Isopropyltoluene	2.688	2.996	2.799	2.883	2.818	2.402					2.764	7.4
1,3-Dichlorobenzene	1.558	1.713	1.592	1.631	1.626	1.506					1.604	4.4
1,4-Dichlorobenzene	1.631	1.780	1.656	1.691	1.674	1.689					1.687	3.0
n-Butylbenzene	2.296	2.700	2.616	2.705	2.593	1.975					2.481	11.7
1,2-Dichlorobenzene	1.542	1.702	1.559	1.611	1.586	1.426					1.571	5.8
1,2-Dibromo-3-chloropropane	0.173	0.194	0.166	0.191	0.191	0.201					0.186	7.1
1,2,4-Trichlorobenzene	0.807	0.969	0.938	1.025	1.025	0.620					0.897	17.6
Hexachlorobutadiene	0.445	0.463	0.434	0.457	0.427	0.442					0.444	3.0
1,2,3-Trichlorobenzene	0.811	0.921	0.860	0.946	0.938	0.607					0.847	15.2
Naphthalene	1.742	2.051	1.906	2.296	2.294	1.506					1.966	15.9

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.: M0592 SAS No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date(s): 04/17/2013 04/17/2013

Heated Purge: (Y/N) N Calibration Times: 12:22 15:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8B9277.D RRF020 = V8B9276.D RRF050 = V8B9275.D RRF100 = V8B9281.D RRF200 = V8B9280.D
RRF001 = V8B9279.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.254	0.250	0.252	0.255	0.255						0.253	0.8
1,2-Dichloroethane-d4	0.059	0.058	0.058	0.059	0.059						0.059	0.5
Toluene-d8	1.345	1.332	1.329	1.323	1.310						1.328	1.0
Bromofluorobenzene	0.490	0.494	0.493	0.493	0.495						0.493	0.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9275.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9275.d
Lab Smp Id: VSTD05010K Client Smp ID: VSTD05010K
Inj Date : 17-APR-2013 12:22
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD05010K,VSTD05010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 15-APR-2013 13:17 Cal File: V8B9226.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	1.654	1.654	(0.312)	543822	50.0000		(aQ)
2	Freon114	85	1.773	1.773	(0.334)	701264	50.0000		(aQ)
3	Chloromethane	50	1.828	1.828	(0.344)	707656	50.0000		(aQ)
4	Vinyl Chloride	62	1.927	1.927	(0.363)	732993	50.0000		(aQ)
5	Bromomethane	94	2.213	2.213	(0.417)	471521	50.0000		(aQ)
6	Chloroethane	64	2.300	2.300	(0.434)	407070	50.0000		(aQ)
7	Trichlorofluoromethane	101	2.512	2.512	(0.474)	925483	50.0000		(aQ)
126	Ethanol	46	2.641	2.641	(0.498)	230022	5000.00		(aQ)
8	Ether	59	2.737	2.737	(0.516)	581730	50.0000		(aQ)
9	Acrolein	56	2.840	2.840	(0.535)	768104	250.000		(aQ)
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	684719	50.0000		(aQ)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	695529	50.0000		(aQ)
12	Acetone	58	2.959	2.959	(0.558)	105435	50.0000		(aQ)
13	Iodomethane	142	3.059	3.059	(0.577)	731846	50.0000		(aQ)
14	Carbon Disulfide	76	3.123	3.123	(0.589)	2289765	50.0000		(aQ)
15	Acetonitrile	41	3.210	3.210	(0.605)	1260761	500.000		(aQ)
16	Allyl Chloride	39	3.210	3.210	(0.605)	821356	50.0000		(aQ)
17	Methyl Acetate	43	3.217	3.217	(0.606)	611009	50.0000		(aQ)
18	Methylene Chloride	84	3.303	3.303	(0.623)	766074	50.0000		(aQ)
19	tert-Butanol	59	3.364	3.364	(0.634)	117394	100.000		(a)
20	Acrylonitrile	53	3.490	3.490	(0.658)	267753	50.0000		(aQ)
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	734305	50.0000		(aQ)
22	Methyl tert-butyl ether	73	3.516	3.516	(0.663)	2048375	50.0000		(aQ)

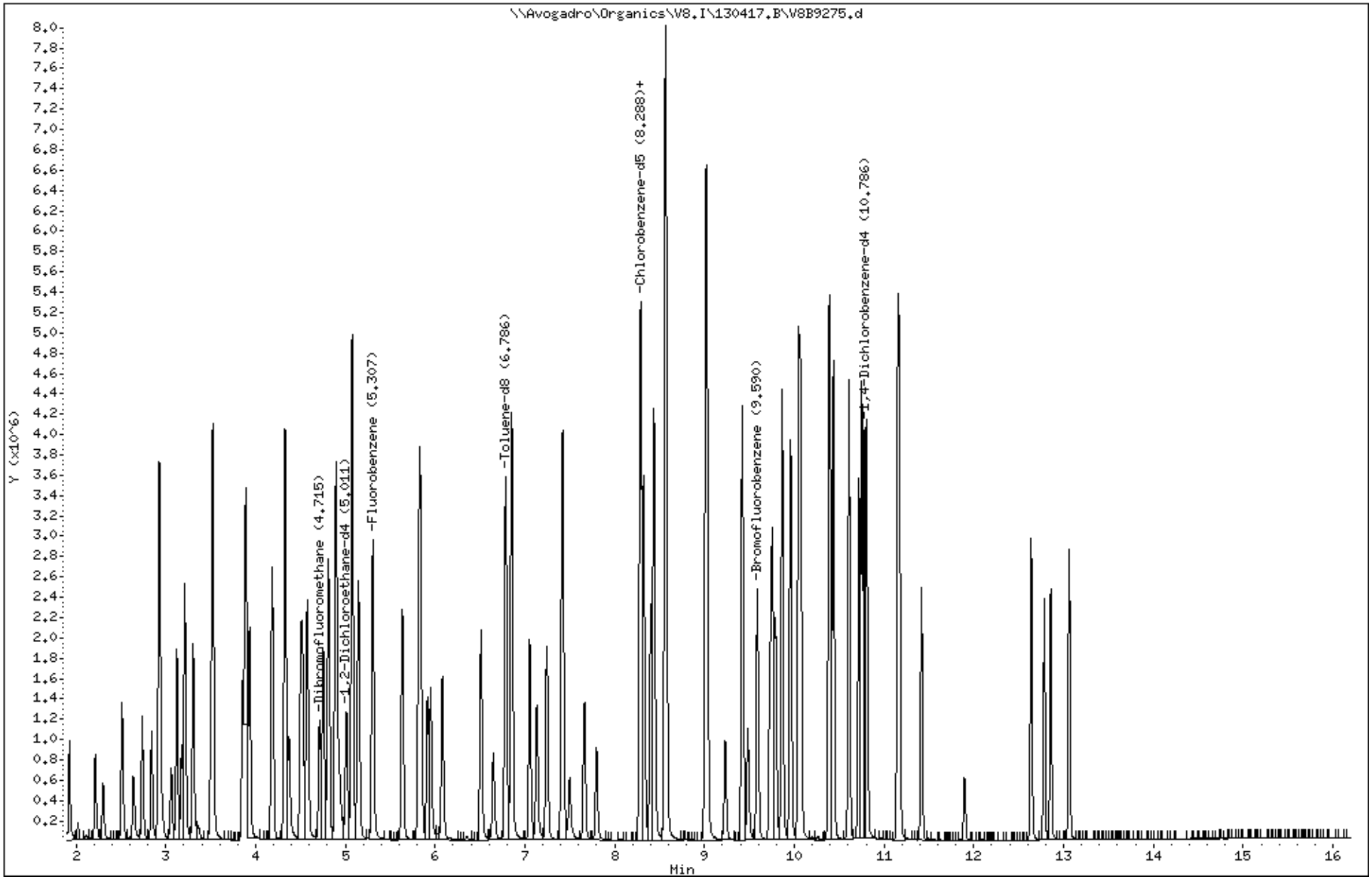
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	23 1,1-Dichloroethane	63	3.856	3.856	(0.727)	1388570	50.0000		(aQ)
	24 Vinyl acetate	43	3.885	3.885	(0.732)	2179826	50.0000		(aQ)
	25 Diisopropyl Ether	45	3.895	3.895	(0.734)	2403920	50.0000		(aQ)
	26 2-Chloro-1,3-Butadiene	53	3.934	3.934	(0.741)	1125043	50.0000		(aQ)
	27 Ethyl tert-butyl ether	59	4.188	4.188	(0.789)	2242090	50.0000		(aQ)
	29 2,2-Dichloropropane	77	4.329	4.329	(0.816)	1163236	50.0000		(aQ)
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	797669	50.0000		(aQ)
	30 2-Butanone	72	4.326	4.326	(0.815)	97232	50.0000		(aQ)
	32 Propionitrile	54	4.371	4.371	(0.824)	972869	500.000		(aQ)
	33 Methacrylonitrile	41	4.503	4.503	(0.849)	819522	100.000		(aQ)
	34 Bromochloromethane	128	4.525	4.525	(0.853)	374332	50.0000		(aQ)
	31 Tetrahydrofuran	72	4.567	4.567	(0.861)	173297	100.000		(aQ)
	35 Chloroform	83	4.577	4.577	(0.862)	1348642	50.0000		(aQ)
$	36 Dibromofluoromethane	113	4.712	4.712	(0.888)	643169	50.0000		(a)
	37 1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	1154467	50.0000		(aQ)
	38 Cyclohexane	56	4.811	4.811	(0.907)	1230641	50.0000		(aQ)
	39 1,1-Dichloropropene	110	4.892	4.892	(0.922)	366735	50.0000		(aQ)
	40 Carbon Tetrachloride	117	4.901	4.901	(0.924)	980581	50.0000		(aQ)
	41 Isobutyl Alcohol	43	4.930	4.930	(0.929)	532349	1000.00		(aQ)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	148417	50.0000		(a)
	43 Benzene	78	5.072	5.072	(0.956)	2989987	50.0000		(a)
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	1083157	50.0000		(aQ)
	45 tert-Amyl methyl ether	73	5.146	5.146	(0.970)	1968763	50.0000		(aQ)
M	50 1,2-Dichloroethene (Total)	96				1531974	100.000		(a)
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2549193	50.0000		(Q)
	47 Trichloroethene	130	5.634	5.634	(1.062)	744785	50.0000		(aQ)
	48 Methylcyclohexane	83	5.821	5.821	(1.097)	1178100	50.0000		(aQ)
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	778127	50.0000		(aQ)
	51 Methyl Methacrylate	69	5.914	5.914	(1.115)	557012	50.0000		(aQ)
	52 Dibromomethane	93	5.950	5.950	(1.121)	469996	50.0000		(aQ)
	53 1,4-Dioxane	88	5.953	5.953	(1.122)	154585	1000.00		(aQ)
	54 Bromodichloromethane	83	6.081	6.081	(1.146)	1034455	50.0000		(aQ)
	55 2-Chloroethyl vinyl ether	63	6.509	6.510	(1.227)	6623	50.0000		(TaQ)
	56 cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	1259538	50.0000		(aQ)
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	638881	50.0000		(aQ)
$	58 Toluene-d8	98	6.786	6.786	(0.819)	2471093	50.0000		(a)
	59 Toluene	91	6.853	6.853	(1.291)	3159672	50.0000		(aQ)
	60 trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	1149447	50.0000		(aQ)
	61 Ethyl Methacrylate	69	7.133	7.133	(1.344)	767196	50.0000		(aQ)
	62 1,1,2-Trichloroethane	97	7.242	7.242	(1.365)	639392	50.0000		(aQ)
	63 Tetrachloroethene	164	7.413	7.413	(0.894)	603236	50.0000		(aQ)
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	1132636	50.0000		(aQ)
	65 2-Hexanone	43	7.496	7.496	(0.904)	487956	50.0000		(aQ)
	66 Dibromochloromethane	129	7.660	7.660	(0.924)	758435	50.0000		(aQ)
	67 1,2-Dibromoethane	107	7.795	7.795	(0.940)	698262	50.0000		(aQ)
	69 1-Chlorohexane	91	8.281	8.281	(0.999)	1002645	50.0000		(aQ)
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	1858917	50.0000		(Q)
	70 Chlorobenzene	112	8.322	8.322	(1.004)	1982186	50.0000		(aQ)
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	703764	50.0000		(aQ)
	72 Ethylbenzene	106	8.438	8.438	(1.018)	1028336	50.0000		(aQ)
	73 m,p-Xylene	106	8.567	8.567	(1.033)	2575071	100.000		(aQ)
	74 o-Xylene	106	9.014	9.014	(1.087)	1237205	50.0000		(aQ)
	75 Styrene	104	9.027	9.027	(1.089)	2106544	50.0000		(aQ)
	76 Bromoform	173	9.232	9.232	(1.114)	489062	50.0000		(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	77 Isopropylbenzene	105	9.422	9.422	(1.137)	3153058	50.0000		(aQ)
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	274797	50.0000		(aQ)
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	915607	50.0000		(aQ)
	80 1,1,2,2-Tetrachloroethane	83	9.728	9.728	(0.902)	884660	50.0000		(aQ)
	81 Bromobenzene	156	9.753	9.753	(0.905)	823980	50.0000		(aQ)
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	1104670	50.0000		(aQ)
	83 n-Propylbenzene	120	9.866	9.866	(0.915)	809950	50.0000		(aQ)
	84 2-Chlorotoluene	126	9.959	9.959	(0.924)	760979	50.0000		(aQ)
	85 1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	2555503	50.0000		(aQ)
	86 4-Chlorotoluene	126	10.072	10.072	(0.934)	788622	50.0000		(aQ)
M	94 Xylene (Total)	106				3812276	150.000		(a)
	87 tert-Butylbenzene	119	10.387	10.387	(0.963)	2578503	50.0000		(aQ)
	88 1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	2579582	50.0000		(aQ)
	89 sec-Butylbenzene	105	10.609	10.609	(0.984)	3146957	50.0000		(aQ)
	90 1,3-Dichlorobenzene	146	10.718	10.718	(0.994)	1449724	50.0000		(aQ)
	91 4-Isopropyltoluene	119	10.753	10.753	(0.997)	2548545	50.0000		(aQ)
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	910478	50.0000		(Q)
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1507844	50.0000		(aQ)
	95 n-Butylbenzene	91	11.152	11.152	(1.034)	2381359	50.0000		(aQ)
	96 1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	1419080	50.0000		(aQ)
	97 Hexachloroethane	117	11.416	11.416	(1.059)	503607	50.0000		(aQ)
	98 1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	151441	50.0000		(aQ)
	141 1,3,5-Trichlorobenzene	182	12.637	12.637	(2.381)	819413	50.0000		(aQ)
	99 1,2,4-Trichlorobenzene	180	12.641	12.641	(1.172)	854043	50.0000		(aQ)
	100 Hexachlorobutadiene	225	12.785	12.785	(1.186)	394808	50.0000		(aQ)
	101 Naphthalene	128	12.856	12.856	(1.192)	1735774	50.0000		(a)
	102 1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	783434	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\V8.I\130417.B\V8B9275.d
Date : 17-APR-2013 12:22
Client ID: VSTD05010K
Instrument: V8.i
Sample Info: 5ML,VSTD05010K,VSTD05010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9276.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9276.d
Lab Smp Id: VSTD02010K Client Smp ID: VSTD02010K
Inj Date : 17-APR-2013 12:49
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD02010K,VSTD02010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 12:49 Cal File: V8B9276.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	1.654	1.654	(0.312)	216828	20.0000	20
2	Freon114	85	1.773	1.773	(0.334)	277710	20.0000	20
3	Chloromethane	50	1.828	1.828	(0.344)	301884	20.0000	21
4	Vinyl Chloride	62	1.927	1.927	(0.363)	307806	20.0000	20
5	Bromomethane	94	2.217	2.213	(0.418)	207747	20.0000	21
6	Chloroethane	64	2.300	2.300	(0.434)	172116	20.0000	20
7	Trichlorofluoromethane	101	2.516	2.512	(0.474)	372105	20.0000	20
126	Ethanol	46	2.641	2.641	(0.498)	110052	2000.00	2200(A)
8	Ether	59	2.741	2.737	(0.517)	262613	20.0000	21
9	Acrolein	56	2.844	2.840	(0.536)	358448	100.000	110
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	278062	20.0000	20
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	275008	20.0000	20
12	Acetone	58	2.959	2.959	(0.558)	43282	20.0000	20
13	Iodomethane	142	3.059	3.059	(0.577)	295794	20.0000	20
14	Carbon Disulfide	76	3.123	3.123	(0.589)	904312	20.0000	20
15	Acetonitrile	41	3.210	3.210	(0.605)	583290	200.000	210(A)
16	Allyl Chloride	39	3.213	3.210	(0.606)	362503	20.0000	21
17	Methyl Acetate	43	3.220	3.217	(0.607)	286966	20.0000	22
18	Methylene Chloride	84	3.307	3.303	(0.623)	334421	20.0000	21
19	tert-Butanol	59	3.364	3.364	(0.634)	60917	40.0000	45
20	Acrylonitrile	53	3.499	3.490	(0.660)	122258	20.0000	21
21	trans-1,2-Dichloroethene	96	3.528	3.525	(0.665)	302658	20.0000	20

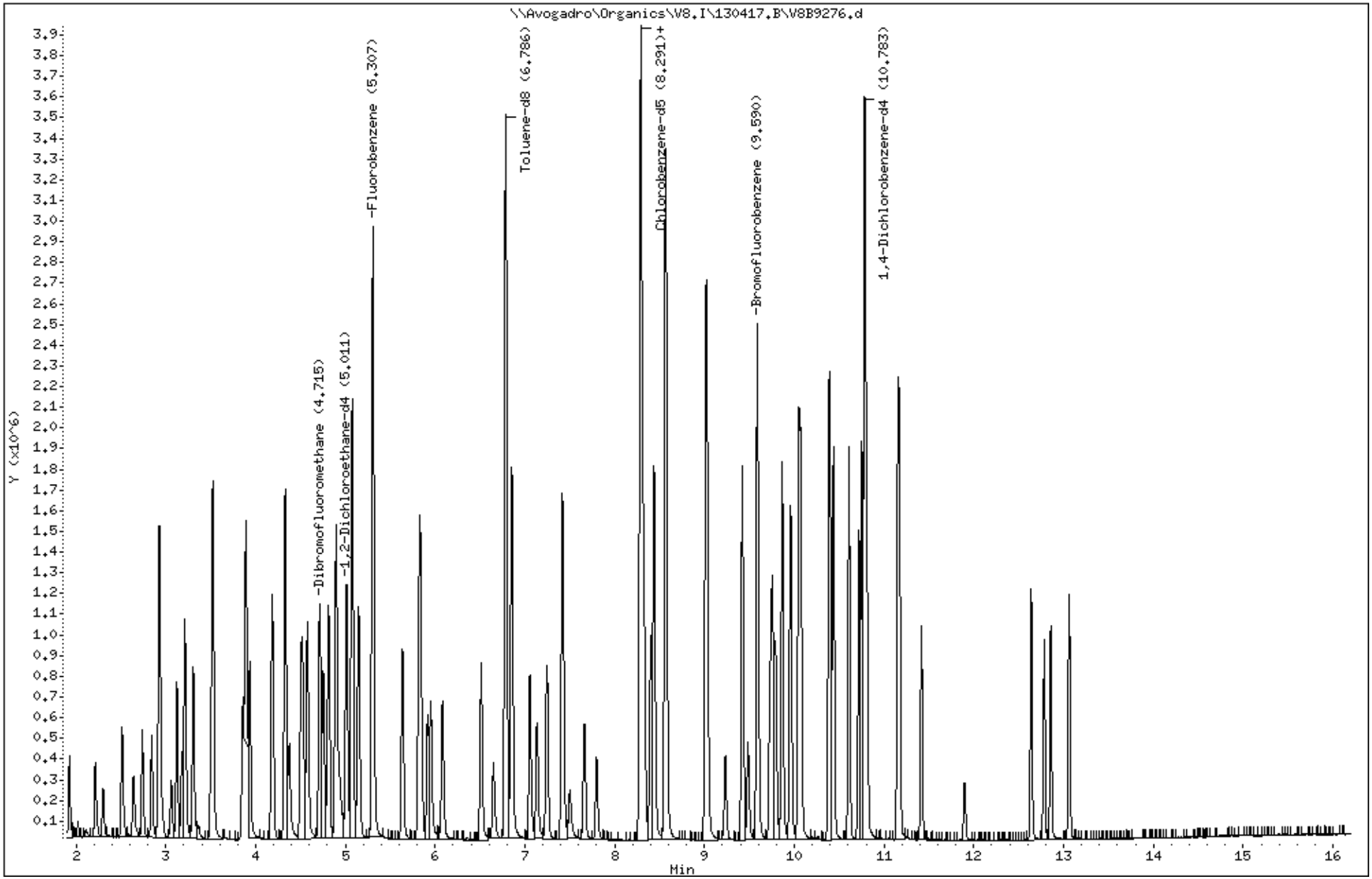
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.519	3.516	(0.663)	925207	20.0000	21
	23 1,1-Dichloroethane	63	3.860	3.856	(0.727)	590855	20.0000	21
	24 Vinyl acetate	43	3.889	3.885	(0.733)	957128	20.0000	21
	25 Diisopropyl Ether	45	3.895	3.895	(0.734)	1053429	20.0000	21
	26 2-Chloro-1,3-Butadiene	53	3.937	3.934	(0.742)	455796	20.0000	20
	27 Ethyl tert-butyl ether	59	4.188	4.188	(0.789)	986551	20.0000	21
	29 2,2-Dichloropropane	77	4.332	4.329	(0.816)	469602	20.0000	20
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	341728	20.0000	21
	30 2-Butanone	72	4.332	4.326	(0.816)	43299	20.0000	21
	32 Propionitrile	54	4.374	4.371	(0.824)	457706	200.000	220(A)
	33 Methacrylonitrile	41	4.506	4.503	(0.849)	373478	40.0000	43
	34 Bromochloromethane	128	4.525	4.525	(0.853)	164778	20.0000	21
	31 Tetrahydrofuran	72	4.570	4.567	(0.861)	79690	40.0000	43
	35 Chloroform	83	4.577	4.577	(0.862)	573551	20.0000	21
$	36 Dibromofluoromethane	113	4.715	4.712	(0.889)	634784	50.0000	50
	37 1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	484437	20.0000	20
	38 Cyclohexane	56	4.815	4.811	(0.907)	497773	20.0000	20
	39 1,1-Dichloropropene	110	4.895	4.892	(0.922)	149811	20.0000	20
	40 Carbon Tetrachloride	117	4.901	4.901	(0.924)	400991	20.0000	20
	41 Isobutyl Alcohol	43	4.933	4.930	(0.930)	245323	400.000	430(A)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	148068	50.0000	50
	43 Benzene	78	5.075	5.072	(0.956)	1294299	20.0000	21
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	471040	20.0000	21
	45 tert-Amyl methyl ether	73	5.146	5.146	(0.970)	870866	20.0000	21
M	50 1,2-Dichloroethene (Total)	96				644386	40.0000	41
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2539176	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	299444	20.0000	20
	48 Methylcyclohexane	83	5.824	5.821	(1.098)	473718	20.0000	20
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	333883	20.0000	21
	51 Methyl Methacrylate	69	5.917	5.914	(1.115)	254233	20.0000	21
	52 Dibromomethane	93	5.953	5.950	(1.122)	207730	20.0000	21
	53 1,4-Dioxane	88	5.956	5.953	(1.122)	71812	400.000	430(A)
	54 Bromodichloromethane	83	6.085	6.081	(1.147)	443070	20.0000	21
	55 2-Chloroethyl vinyl ether	63	6.512	6.510	(1.227)	3218	20.0000	22(T)
	56 cis-1,3-Dichloropropene	75	6.512	6.509	(1.227)	530951	20.0000	20
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	290574	20.0000	21
$	58 Toluene-d8	98	6.786	6.786	(0.819)	2454235	50.0000	50
	59 Toluene	91	6.853	6.853	(1.291)	1373683	20.0000	21
	60 trans-1,3-Dichloropropene	75	7.056	7.052	(1.330)	497269	20.0000	21
	61 Ethyl Methacrylate	69	7.133	7.133	(1.344)	332958	20.0000	21
	62 1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	286735	20.0000	21
	63 Tetrachloroethene	164	7.416	7.413	(0.895)	249679	20.0000	20
	64 1,3-Dichloropropane	76	7.425	7.422	(0.896)	499903	20.0000	21
	65 2-Hexanone	43	7.499	7.496	(0.905)	212412	20.0000	21
	66 Dibromochloromethane	129	7.663	7.660	(0.924)	322371	20.0000	21
	67 1,2-Dibromoethane	107	7.798	7.795	(0.941)	304292	20.0000	21
	69 1-Chlorohexane	91	8.284	8.281	(0.999)	412858	20.0000	20
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	1842094	50.0000	
	70 Chlorobenzene	112	8.322	8.322	(1.004)	841122	20.0000	21
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	300911	20.0000	21
	72 Ethylbenzene	106	8.438	8.438	(1.018)	439587	20.0000	21
	73 m,p-Xylene	106	8.567	8.567	(1.033)	1081595	40.0000	41
	74 o-Xylene	106	9.014	9.014	(1.087)	529887	20.0000	21
	75 Styrene	104	9.027	9.027	(1.089)	871347	20.0000	20

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.232	9.232	(1.114)	210200	20.0000	21
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	1316472	20.0000	20
	78	trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	118618	20.0000	21
$	79	Bromofluorobenzene	95	9.589	9.589	(1.157)	909891	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	400096	20.0000	21
	81	Bromobenzene	156	9.753	9.753	(0.905)	346790	20.0000	21
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	493360	20.0000	21
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	337809	20.0000	21
	84	2-Chlorotoluene	126	9.959	9.959	(0.924)	321017	20.0000	21
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	1076850	20.0000	21
	86	4-Chlorotoluene	126	10.072	10.072	(0.934)	330699	20.0000	21
M	94	Xylene (Total)	106				1611482	60.0000	62
	87	tert-Butylbenzene	119	10.387	10.387	(0.963)	1086318	20.0000	21
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	1086455	20.0000	21
	89	sec-Butylbenzene	105	10.609	10.609	(0.984)	1320153	20.0000	21
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	609601	20.0000	21
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	1066400	20.0000	21
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	889849	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	633711	20.0000	21
	95	n-Butylbenzene	91	11.155	11.152	(1.035)	961059	20.0000	20
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	605715	20.0000	21
	97	Hexachloroethane	117	11.419	11.416	(1.059)	207843	20.0000	20
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	69044	20.0000	22
	141	1,3,5-Trichlorobenzene	182	12.641	12.637	(2.382)	331272	20.0000	20(A)
	99	1,2,4-Trichlorobenzene	180	12.641	12.641	(1.172)	345031	20.0000	20
	100	Hexachlorobutadiene	225	12.785	12.785	(1.186)	164681	20.0000	21
	101	Naphthalene	128	12.856	12.856	(1.192)	729890	20.0000	21
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	327978	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\V8.I\130417.B\V8B9276.d
Date : 17-APR-2013 12:49
Client ID: VSTD02010K
Instrument: V8.i
Sample Info: 5ML,VSTD02010K,VSTD02010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9277.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9277.d
Lab Smp Id: VSTD00510K Client Smp ID: VSTD00510K
Inj Date : 17-APR-2013 13:17
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD00510K,VSTD00510K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 13:17 Cal File: V8B9277.d
Als bottle: 100 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 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	1.654	1.654	(0.312)	53906	5.00000	5.0
2	Freon114	85	1.773	1.773	(0.334)	68445	5.00000	5.0
3	Chloromethane	50	1.828	1.828	(0.344)	70895	5.00000	4.9
4	Vinyl Chloride	62	1.924	1.927	(0.363)	72601	5.00000	4.9
5	Bromomethane	94	2.213	2.213	(0.417)	52602	5.00000	5.2
6	Chloroethane	64	2.303	2.300	(0.434)	41343	5.00000	5.0
7	Trichlorofluoromethane	101	2.512	2.512	(0.474)	89795	5.00000	4.9
126	Ethanol	46	2.641	2.641	(0.498)	27151	500.000	530(A)
8	Ether	59	2.741	2.737	(0.517)	58826	5.00000	4.8
9	Acrolein	56	2.840	2.840	(0.535)	81101	25.0000	25
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	65712	5.00000	4.9
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.921	2.924	(0.550)	67755	5.00000	5.0
12	Acetone	58	2.959	2.959	(0.558)	10272	5.00000	4.9
13	Iodomethane	142	3.059	3.059	(0.577)	56639	5.00000	4.2
14	Carbon Disulfide	76	3.123	3.123	(0.589)	218863	5.00000	4.9
15	Acetonitrile	41	3.213	3.210	(0.606)	132804	50.0000	49
16	Allyl Chloride	39	3.210	3.210	(0.605)	89775	5.00000	5.2
17	Methyl Acetate	43	3.223	3.217	(0.607)	59903	5.00000	4.7
18	Methylene Chloride	84	3.307	3.303	(0.623)	83221	5.00000	5.2
19	tert-Butanol	59	3.371	3.364	(0.635)	13286	10.0000	9.9
20	Acrylonitrile	53	3.503	3.490	(0.660)	26587	5.00000	4.8
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	72592	5.00000	4.9

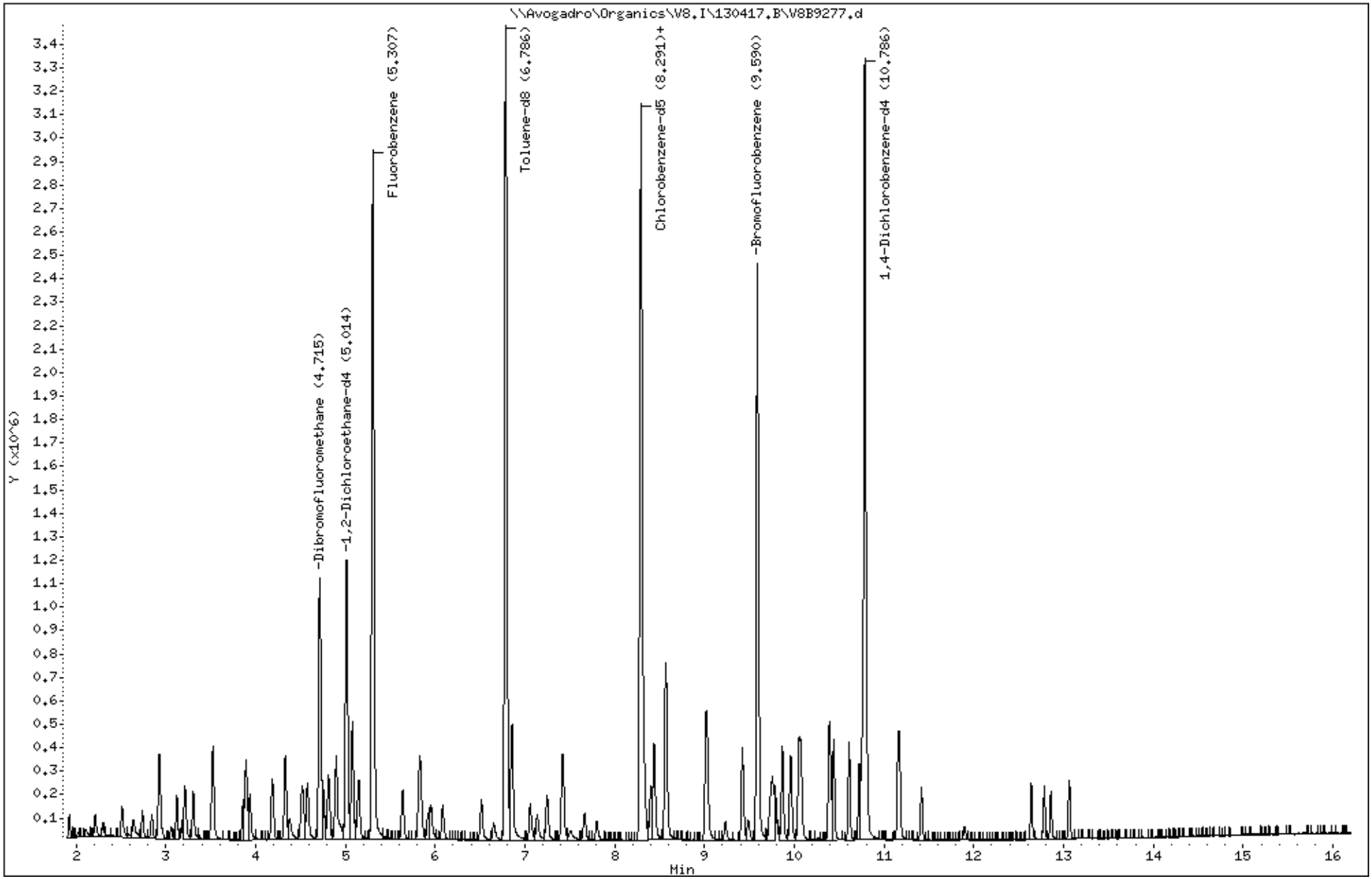
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
22	Methyl tert-butyl ether	73	3.519	3.516	(0.663)	205964	5.00000	4.8
23	1,1-Dichloroethane	63	3.860	3.856	(0.727)	135554	5.00000	4.8
24	Vinyl acetate	43	3.892	3.885	(0.733)	199992	5.00000	4.6
25	Diisopropyl Ether	45	3.898	3.895	(0.735)	239589	5.00000	4.8
26	2-Chloro-1,3-Butadiene	53	3.937	3.934	(0.742)	105742	5.00000	4.8
27	Ethyl tert-butyl ether	59	4.184	4.188	(0.789)	219875	5.00000	4.8
29	2,2-Dichloropropane	77	4.332	4.329	(0.816)	105282	5.00000	4.7
28	cis-1,2-Dichloroethene	96	4.329	4.326	(0.816)	78692	5.00000	4.9
30	2-Butanone	72	4.335	4.326	(0.817)	8322	5.00000	4.3
32	Propionitrile	54	4.380	4.371	(0.826)	95181	50.0000	47
33	Methacrylonitrile	41	4.509	4.503	(0.850)	74635	10.0000	9.0
34	Bromochloromethane	128	4.528	4.525	(0.853)	36681	5.00000	4.8
31	Tetrahydrofuran	72	4.573	4.567	(0.862)	16676	10.0000	9.3
35	Chloroform	83	4.580	4.577	(0.863)	134145	5.00000	4.9
$ 36	Dibromofluoromethane	113	4.715	4.712	(0.889)	641850	50.0000	50
37	1,1,1-Trichloroethane	97	4.757	4.753	(0.896)	113001	5.00000	4.9
38	Cyclohexane	56	4.815	4.811	(0.907)	119848	5.00000	4.9
39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	33093	5.00000	4.6
40	Carbon Tetrachloride	117	4.898	4.901	(0.923)	91636	5.00000	4.8
41	Isobutyl Alcohol	43	4.808	4.930	(0.906)	12524	100.000	30(T)
$ 42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	148736	50.0000	50
43	Benzene	78	5.078	5.072	(0.957)	310424	5.00000	5.0
44	1,2-Dichloroethane	62	5.081	5.078	(0.958)	107758	5.00000	4.9
45	tert-Amyl methyl ether	73	5.149	5.146	(0.970)	195627	5.00000	4.8
M 50	1,2-Dichloroethene (Total)	96				151284	10.0000	9.8
* 46	Fluorobenzene	96	5.307	5.306	(1.000)	2526263	50.0000	
47	Trichloroethene	130	5.638	5.634	(1.062)	71710	5.00000	4.9
48	Methylcyclohexane	83	5.824	5.821	(1.098)	110688	5.00000	4.8
49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	76397	5.00000	4.8
51	Methyl Methacrylate	69	5.924	5.914	(1.116)	50973	5.00000	4.5
52	Dibromomethane	93	5.953	5.950	(1.122)	46729	5.00000	4.8
53	1,4-Dioxane	88	5.956	5.953	(1.122)	15135	100.000	94
54	Bromodichloromethane	83	6.085	6.081	(1.147)	95514	5.00000	4.6
55	2-Chloroethyl vinyl ether	63	6.512	6.510	(1.227)	553	5.00000	4.1(T)
56	cis-1,3-Dichloropropene	75	6.515	6.509	(1.228)	116156	5.00000	4.7
57	4-Methyl-2-pentanone	43	6.651	6.647	(1.253)	61104	5.00000	4.6
$ 58	Toluene-d8	98	6.786	6.786	(0.819)	2445146	50.0000	50
59	Toluene	91	6.856	6.853	(1.292)	363185	5.00000	5.4
60	trans-1,3-Dichloropropene	75	7.059	7.052	(1.330)	102381	5.00000	4.5
61	Ethyl Methacrylate	69	7.139	7.133	(1.345)	65986	5.00000	4.4
62	1,1,2-Trichloroethane	97	7.249	7.242	(1.366)	65041	5.00000	4.9
63	Tetrachloroethene	164	7.416	7.413	(0.895)	58564	5.00000	4.9
64	1,3-Dichloropropane	76	7.425	7.422	(0.896)	111606	5.00000	4.8
65	2-Hexanone	43	7.509	7.496	(0.906)	40121	5.00000	4.3
66	Dibromochloromethane	129	7.667	7.660	(0.925)	66664	5.00000	4.5
67	1,2-Dibromoethane	107	7.805	7.795	(0.941)	66191	5.00000	4.7
69	1-Chlorohexane	91	8.287	8.281	(1.000)	95431	5.00000	4.8
* 68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	1817887	50.0000	
70	Chlorobenzene	112	8.326	8.322	(1.004)	190833	5.00000	4.8
71	1,1,1,2-Tetrachloroethane	131	8.400	8.403	(1.013)	64882	5.00000	4.7
72	Ethylbenzene	106	8.438	8.438	(1.018)	99650	5.00000	4.8
73	m,p-Xylene	106	8.570	8.567	(1.034)	255798	10.0000	9.9
74	o-Xylene	106	9.014	9.014	(1.087)	125007	5.00000	5.0
75	Styrene	104	9.030	9.027	(1.089)	184193	5.00000	4.6

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.236	9.232	(1.114)	39879	5.00000	4.3
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	291524	5.00000	4.7
	78	trans-1,4-Dichloro-2-butene	75	9.490	9.486	(1.145)	22313	5.00000	4.3
$	79	Bromofluorobenzene	95	9.589	9.589	(1.157)	890475	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.734	9.728	(0.903)	88318	5.00000	5.0
	81	Bromobenzene	156	9.756	9.753	(0.905)	76900	5.00000	4.9
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	102844	5.00000	4.8
	83	n-Propylbenzene	120	9.869	9.866	(0.915)	74478	5.00000	4.8
	84	2-Chlorotoluene	126	9.956	9.959	(0.923)	72106	5.00000	4.9
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	237123	5.00000	4.8
	86	4-Chlorotoluene	126	10.075	10.072	(0.934)	71441	5.00000	4.8
M	94	Xylene (Total)	106				380805	15.0000	15
	87	tert-Butylbenzene	119	10.390	10.387	(0.963)	232804	5.00000	4.8
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	243823	5.00000	4.9
	89	sec-Butylbenzene	105	10.609	10.609	(0.984)	290102	5.00000	4.8
	90	1,3-Dichlorobenzene	146	10.724	10.718	(0.994)	132907	5.00000	4.8
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	229281	5.00000	4.8
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	853016	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	139144	5.00000	4.8
	95	n-Butylbenzene	91	11.155	11.152	(1.034)	195821	5.00000	4.5
	96	1,2-Dichlorobenzene	146	11.174	11.171	(1.036)	131496	5.00000	4.8
	97	Hexachloroethane	117	11.416	11.416	(1.058)	42542	5.00000	4.6
	98	1,2-Dibromo-3-chloropropane	75	11.898	11.895	(1.103)	14764	5.00000	4.9
	141	1,3,5-Trichlorobenzene	182	12.641	12.637	(2.382)	65009	5.00000	4.3(A)
	99	1,2,4-Trichlorobenzene	180	12.641	12.641	(1.172)	68816	5.00000	4.4
	100	Hexachlorobutadiene	225	12.782	12.785	(1.185)	37959	5.00000	5.0
	101	Naphthalene	128	12.856	12.856	(1.192)	148593	5.00000	4.6
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	69211	5.00000	4.7

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9277.d
Date : 17-APR-2013 13:17
Client ID: VSTD00510K
Instrument: V8.i
Sample Info: 5ML,VSTD00510K,VSTD00510K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9279.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9279.d
Lab Smp Id: VSTD00110K Client Smp ID: VSTD00110K
Inj Date : 17-APR-2013 14:12
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD00110K,VSTD00110K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 14:12 Cal File: V8B9279.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	1.651	1.654	(0.311)	9293	1.00000	0.87
2	Freon114	85	1.773	1.773	(0.334)	11993	1.00000	0.86
3	Chloromethane	50	1.827	1.828	(0.344)	15779	1.00000	1.1
4	Vinyl Chloride	62	1.924	1.927	(0.363)	13479	1.00000	0.92
5	Bromomethane	94	2.216	2.213	(0.418)	10760	1.00000	1.1
6	Chloroethane	64	2.307	2.300	(0.435)	7167	1.00000	0.90
7	Trichlorofluoromethane	101	2.516	2.512	(0.474)	16259	1.00000	0.90
126	Ethanol	46	2.644	2.641	(0.498)	6099	500.000	120
8	Ether	59	2.741	2.737	(0.517)	11237	1.00000	0.92
9	Acrolein	56	2.843	2.840	(0.536)	16451	5.00000	4.9
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	12906	1.00000	0.94
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.930	2.924	(0.552)	12046	1.00000	0.89
12	Acetone	58	2.962	2.959	(0.558)	3005	1.00000	1.5
13	Iodomethane	142	3.059	3.059	(0.576)	9318	1.00000	0.66
14	Carbon Disulfide	76	3.123	3.123	(0.589)	47566	1.00000	1.0
15	Acetonitrile	41	3.213	3.210	(0.606)	22732	1.00000	8.5
16	Allyl Chloride	39	3.213	3.210	(0.606)	13901	1.00000	0.80
17	Methyl Acetate	43	3.226	3.217	(0.608)	14209	1.00000	1.1
18	Methylene Chloride	84	3.306	3.303	(0.623)	21885	1.00000	1.3
19	tert-Butanol	59	3.374	3.364	(0.636)	4125	1.00000	3.0
20	Acrylonitrile	53	3.506	3.490	(0.661)	4365	1.00000	0.78
21	trans-1,2-Dichloroethene	96	3.532	3.525	(0.666)	13870	1.00000	0.94
22	Methyl tert-butyl ether	73	3.519	3.516	(0.663)	39815	1.00000	0.93

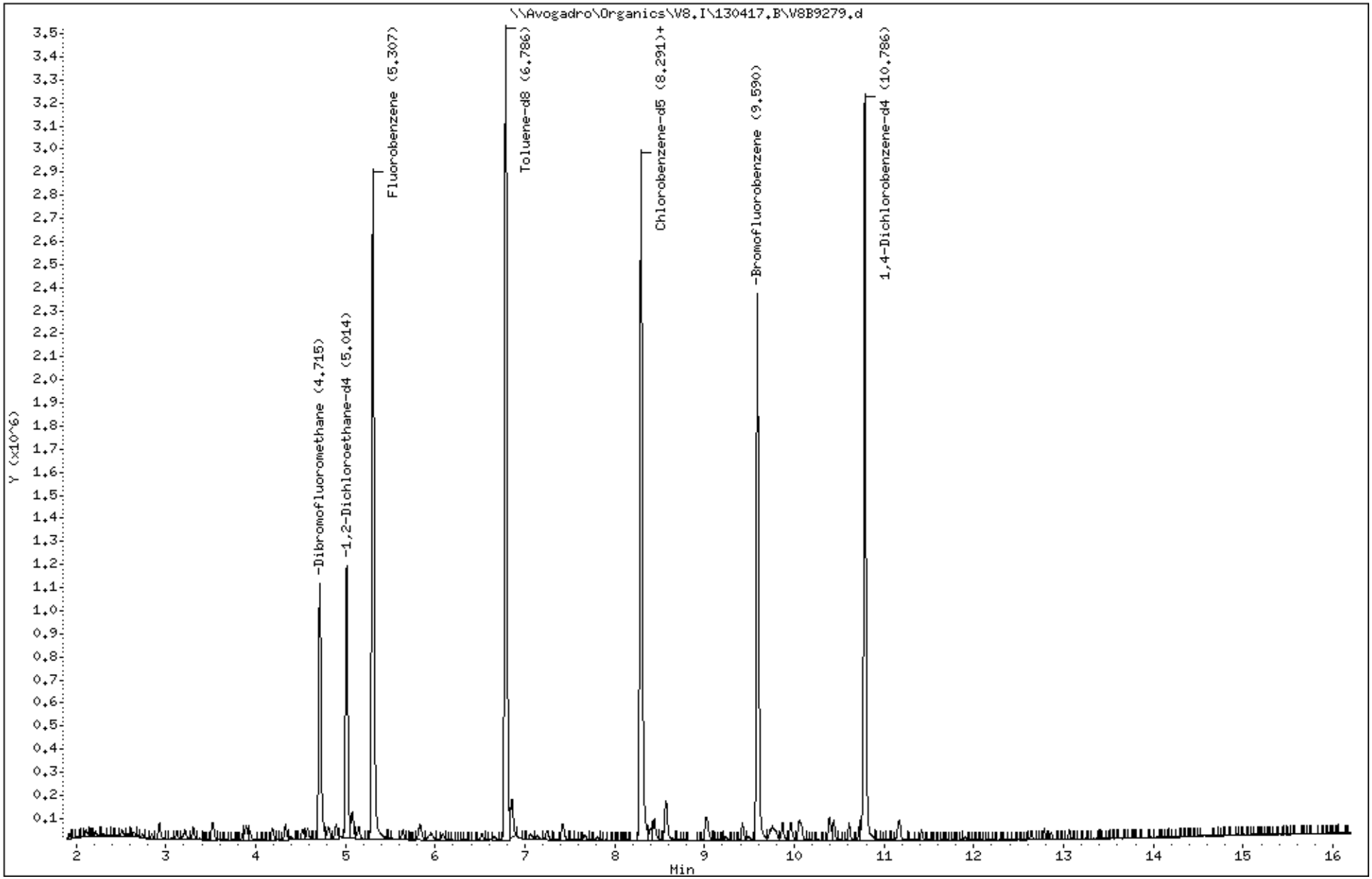
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.860	3.856	(0.727)	25957	1.00000	0.92
	24	Vinyl acetate	43	3.895	3.885	(0.734)	36801	1.00000	0.84
	25	Diisopropyl Ether	45	3.892	3.895	(0.733)	46606	1.00000	0.94
	26	2-Chloro-1,3-Butadiene	53	3.937	3.934	(0.742)	19667	1.00000	0.87
	27	Ethyl tert-butyl ether	59	4.191	4.188	(0.790)	42635	1.00000	0.92
	29	2,2-Dichloropropane	77	4.332	4.329	(0.816)	19097	1.00000	0.85
	28	cis-1,2-Dichloroethene	96	4.329	4.326	(0.816)	15688	1.00000	0.96
	30	2-Butanone	72	4.345	4.326	(0.819)	1039	1.00000	0.53
	32	Propionitrile	54	4.393	4.371	(0.828)	16950	1.00000	8.0
	33	Methacrylonitrile	41	4.515	4.503	(0.851)	14419	1.00000	1.6
	34	Bromochloromethane	128	4.528	4.525	(0.853)	7236	1.00000	0.95
	31	Tetrahydrofuran	72	4.577	4.567	(0.862)	3486	1.00000	1.8
	35	Chloroform	83	4.583	4.577	(0.864)	26111	1.00000	0.95
$	36	Dibromofluoromethane	113	4.715	4.712	(0.889)	637100	1.00000	49
	37	1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	21501	1.00000	0.92
	38	Cyclohexane	56	4.811	4.811	(0.907)	21985	1.00000	0.90
	39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	6428	1.00000	0.89
	40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	17250	1.00000	0.89
	41	Isobutyl Alcohol	43	4.930	4.930	(0.929)	286	1.00000	0.56
$	42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	150142	1.00000	50
	43	Benzene	78	5.075	5.072	(0.956)	72370	1.00000	1.1
	44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	22111	1.00000	0.98
	45	tert-Amyl methyl ether	73	5.149	5.146	(0.970)	38170	1.00000	0.92
M	50	1,2-Dichloroethene (Total)	96				29558	2.00000	(a)
*	46	Fluorobenzene	96	5.306	5.306	(1.000)	2569328	50.0000	
	47	Trichloroethene	130	5.644	5.634	(1.064)	14133	1.00000	0.95
	48	Methylcyclohexane	83	5.827	5.821	(1.098)	19260	1.00000	0.84
	49	1,2-Dichloropropane	63	5.843	5.840	(1.101)	15076	1.00000	0.94
	51	Methyl Methacrylate	69	5.924	5.914	(1.116)	8427	1.00000	0.70
	52	Dibromomethane	93	5.959	5.950	(1.123)	9077	1.00000	0.93
	53	1,4-Dioxane	88	5.972	5.953	(1.125)	3537	1.00000	21
	54	Bromodichloromethane	83	6.088	6.081	(1.147)	18439	1.00000	0.88
	55	2-Chloroethyl vinyl ether	63	6.506	6.510	(1.226)	140	1.00000	1.0(TM)M6 AM 04/22
	56	cis-1,3-Dichloropropene	75	6.519	6.509	(1.228)	20413	1.00000	0.82
	57	4-Methyl-2-pentanone	43	6.660	6.647	(1.255)	11517	1.00000	0.83
$	58	Toluene-d8	98	6.785	6.786	(0.819)	2469252	1.00000	51
	59	Toluene	91	6.856	6.853	(1.292)	118261	1.00000	1.6
	60	trans-1,3-Dichloropropene	75	7.068	7.052	(1.332)	18229	1.00000	0.80
	61	Ethyl Methacrylate	69	7.142	7.133	(1.346)	13270	1.00000	0.83
	62	1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	13761	1.00000	1.0
	63	Tetrachloroethene	164	7.416	7.413	(0.895)	11376	1.00000	0.96
	64	1,3-Dichloropropane	76	7.432	7.422	(0.896)	20454	1.00000	0.90
	65	2-Hexanone	43	7.525	7.496	(0.908)	7364	1.00000	0.76
	66	Dibromochloromethane	129	7.663	7.660	(0.924)	12582	1.00000	0.86
	67	1,2-Dibromoethane	107	7.805	7.795	(0.941)	12797	1.00000	0.92(T)
	69	1-Chlorohexane	91	8.287	8.281	(1.000)	21471	1.00000	1.1
*	68	Chlorobenzene-d5	117	8.290	8.290	(1.000)	1814739	50.0000	
	70	Chlorobenzene	112	8.322	8.322	(1.004)	37044	1.00000	0.95
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.403	(1.014)	12276	1.00000	0.90
	72	Ethylbenzene	106	8.441	8.438	(1.018)	21716	1.00000	1.0
	73	m,p-Xylene	106	8.570	8.567	(1.034)	60497	2.00000	2.3
	74	o-Xylene	106	9.014	9.014	(1.087)	26908	1.00000	1.1
	75	Styrene	104	9.033	9.027	(1.090)	31281	1.00000	0.76
	76	Bromoform	173	9.235	9.232	(1.114)	7388	1.00000	0.79

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	77 Isopropylbenzene	105	9.419	9.422	(1.136)	53254	1.00000	0.88	
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	4472	1.00000	0.80	
$	79 Bromofluorobenzene	95	9.589	9.589	(1.157)	875893	1.00000	49	
	80 1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	18059	1.00000	1.0	
	81 Bromobenzene	156	9.760	9.753	(0.905)	14978	1.00000	0.97	
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	25662	1.00000	1.2	
	83 n-Propylbenzene	120	9.869	9.866	(0.915)	14193	1.00000	0.94	
	84 2-Chlorotoluene	126	9.962	9.959	(0.924)	13754	1.00000	0.96	
	85 1,3,5-Trimethylbenzene	105	10.052	10.049	(0.932)	46319	1.00000	0.96	
	86 4-Chlorotoluene	126	10.078	10.072	(0.934)	14083	1.00000	0.96	
M	94 Xylene (Total)	106				87405	3.00000	(a)	
	87 tert-Butylbenzene	119	10.393	10.387	(0.964)	43570	1.00000	0.92	
	88 1,2,4-Trimethylbenzene	105	10.441	10.435	(0.968)	50589	1.00000	1.0	
	89 sec-Butylbenzene	105	10.612	10.609	(0.984)	53525	1.00000	0.92	
	90 1,3-Dichlorobenzene	146	10.724	10.718	(0.994)	25318	1.00000	0.94	
	91 4-Isopropyltoluene	119	10.756	10.753	(0.997)	40399	1.00000	0.87	
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	840787	50.0000		
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	28409	1.00000	1.0	
	95 n-Butylbenzene	91	11.155	11.152	(1.034)	33211	1.00000	0.80	
	96 1,2-Dichlorobenzene	146	11.174	11.171	(1.036)	23971	1.00000	0.91	
	97 Hexachloroethane	117	11.415	11.416	(1.058)	7623	1.00000	0.84	
	98 1,2-Dibromo-3-chloropropane	75	11.901	11.895	(1.103)	3372	1.00000	1.1	
	141 1,3,5-Trichlorobenzene	182	12.647	12.637	(2.383)	10662	1.00000	0.68(A)	
	99 1,2,4-Trichlorobenzene	180	12.644	12.641	(1.172)	10434	1.00000	0.69	
	100 Hexachlorobutadiene	225	12.785	12.785	(1.185)	7426	1.00000	0.99	
	101 Naphthalene	128	12.859	12.856	(1.192)	25325	1.00000	0.77	
	102 1,2,3-Trichlorobenzene	180	13.065	13.062	(1.211)	10206	1.00000	0.72	

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\V8.I\130417.B\V8B9279.d
Date : 17-APR-2013 14:12
Client ID: VSTD00110K
Instrument: V8.i
Sample Info: 5ML,VSTD00110K,VSTD00110K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9280.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9280.d
Lab Smp Id: VSTD20010K Client Smp ID: VSTD20010K
Inj Date : 17-APR-2013 14:39
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD20010K,VSTD20010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 14:39 Cal File: V8B9280.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	1.654	1.654	(0.312)	2217912	200.000	210(A)
2	Freon114	85	1.773	1.773	(0.334)	2793924	200.000	200
3	Chloromethane	50	1.824	1.828	(0.344)	2829113	200.000	190
4	Vinyl Chloride	62	1.924	1.927	(0.363)	2859181	200.000	190
5	Bromomethane	94	2.204	2.213	(0.415)	1878896	200.000	180
6	Chloroethane	64	2.297	2.300	(0.433)	1526985	200.000	190
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	3637482	200.000	200
126	Ethanol	46	2.647	2.641	(0.499)	962191	20000.0	18000(A)
8	Ether	59	2.737	2.737	(0.516)	2488341	200.000	200
9	Acrolein	56	2.840	2.840	(0.535)	3467446	1000.00	1000(A)
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	2807628	200.000	200
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.921	2.924	(0.550)	2779682	200.000	200
12	Acetone	58	2.959	2.959	(0.558)	392618	200.000	190
13	Iodomethane	142	3.059	3.059	(0.576)	3500238	200.000	250(A)
14	Carbon Disulfide	76	3.120	3.123	(0.588)	9057871	200.000	200
15	Acetonitrile	41	3.210	3.210	(0.605)	5142798	2000.00	1900(A)
16	Allyl Chloride	39	3.210	3.210	(0.605)	3379736	200.000	190
17	Methyl Acetate	43	3.216	3.217	(0.606)	2734864	200.000	200
18	Methylene Chloride	84	3.303	3.303	(0.623)	3231347	200.000	180
19	tert-Butanol	59	3.371	3.364	(0.635)	599405	400.000	430(A)
20	Acrylonitrile	53	3.490	3.490	(0.658)	1220373	200.000	220(A)
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	3015281	200.000	200

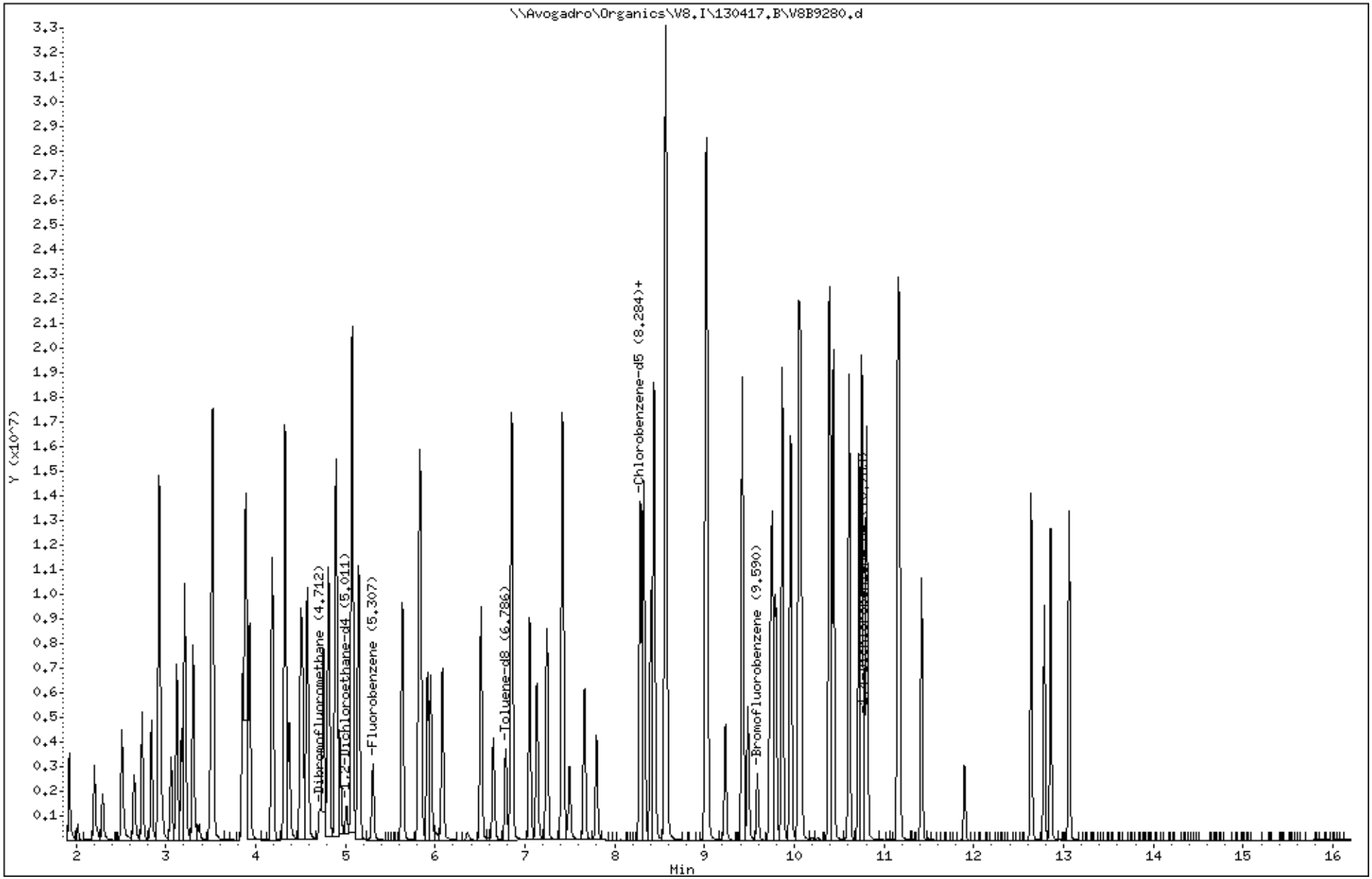
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.515	3.516	(0.663)	8923963	200.000	210(A)
	23 1,1-Dichloroethane	63	3.856	3.856	(0.727)	5819530	200.000	200(A)
	24 Vinyl acetate	43	3.882	3.885	(0.732)	9268020	200.000	210(A)
	25 Diisopropyl Ether	45	3.895	3.895	(0.734)	9971484	200.000	200
	26 2-Chloro-1,3-Butadiene	53	3.933	3.934	(0.741)	4660182	200.000	200
	27 Ethyl tert-butyl ether	59	4.184	4.188	(0.789)	9666090	200.000	210(A)
	29 2,2-Dichloropropane	77	4.332	4.329	(0.816)	4781333	200.000	210(A)
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	3338089	200.000	200
	30 2-Butanone	72	4.322	4.326	(0.815)	405090	200.000	200
	32 Propionitrile	54	4.374	4.371	(0.824)	4484183	2000.00	2100(A)
	33 Methacrylonitrile	41	4.503	4.503	(0.849)	3744454	400.000	430(A)
	34 Bromochloromethane	128	4.525	4.525	(0.853)	1520746	200.000	200
	31 Tetrahydrofuran	72	4.567	4.567	(0.861)	802162	400.000	430(A)
	35 Chloroform	83	4.577	4.577	(0.862)	5675991	200.000	200
$	36 Dibromofluoromethane	113	4.712	4.712	(0.888)	663031	50.0000	50
	37 1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	4828240	200.000	200(A)
	38 Cyclohexane	56	4.811	4.811	(0.907)	4965697	200.000	200
	39 1,1-Dichloropropene	110	4.892	4.892	(0.922)	1522702	200.000	210(A)
	40 Carbon Tetrachloride	117	4.898	4.901	(0.923)	4143873	200.000	210(A)
	41 Isobutyl Alcohol	43	4.937	4.930	(0.930)	2639061	4000.00	5400(A)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	153091	50.0000	50
	43 Benzene	78	5.075	5.072	(0.956)	12543492	200.000	190
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	4619709	200.000	200
	45 tert-Amyl methyl ether	73	5.149	5.146	(0.970)	8793167	200.000	210(A)
M	50 1,2-Dichloroethene (Total)	96				6353370	400.000	400
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	2598834	50.0000	(T)
	47 Trichloroethene	130	5.634	5.634	(1.062)	3111355	200.000	210(A)
	48 Methylcyclohexane	83	5.824	5.821	(1.098)	4724647	200.000	210(A)
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	3256633	200.000	200
	51 Methyl Methacrylate	69	5.914	5.914	(1.115)	2593831	200.000	220(A)
	52 Dibromomethane	93	5.949	5.950	(1.121)	2048001	200.000	210(A)
	53 1,4-Dioxane	88	5.953	5.953	(1.122)	711975	4000.00	4200(A)
	54 Bromodichloromethane	83	6.081	6.081	(1.146)	4507995	200.000	220(A)
	55 2-Chloroethyl vinyl ether	63	6.509	6.510	(1.227)	27316	200.000	200(T)
	56 cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	5499792	200.000	220(A)
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	3003713	200.000	220(A)
$	58 Toluene-d8	98	6.785	6.786	(0.819)	2562333	50.0000	49
	59 Toluene	91	6.853	6.853	(1.291)	13129101	200.000	170
	60 trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	5116798	200.000	220(A)
	61 Ethyl Methacrylate	69	7.133	7.133	(1.344)	3524505	200.000	220(A)
	62 1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	2833773	200.000	200(A)
	63 Tetrachloroethene	164	7.412	7.413	(0.894)	2558058	200.000	200
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	5016891	200.000	210(A)
	65 2-Hexanone	43	7.496	7.496	(0.904)	2225193	200.000	220(A)
	66 Dibromochloromethane	129	7.663	7.660	(0.924)	3429847	200.000	220(A)
	67 1,2-Dibromoethane	107	7.798	7.795	(0.941)	3106505	200.000	210(A)
	69 1-Chlorohexane	91	8.284	8.281	(0.999)	4190399	200.000	190
*	68 Chlorobenzene-d5	117	8.290	8.290	(1.000)	1955387	50.0000	
	70 Chlorobenzene	112	8.322	8.322	(1.004)	8464511	200.000	200
	71 1,1,1,2-Tetrachloroethane	131	8.406	8.403	(1.014)	3067467	200.000	210(A)
	72 Ethylbenzene	106	8.438	8.438	(1.018)	4431677	200.000	200
	73 m,p-Xylene	106	8.567	8.567	(1.033)	10969748	400.000	380(A)
	74 o-Xylene	106	9.014	9.014	(1.087)	5322829	200.000	190
	75 Styrene	104	9.026	9.027	(1.089)	9170887	200.000	210(A)

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76	Bromoform	173	9.232	9.232	(1.114)	2292771	200.000	230(A)
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	13518094	200.000	210(A)
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.486	(1.144)	1352192	200.000	230(A)
$	79	Bromofluorobenzene	95	9.589	9.589	(1.157)	968011	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	3995828	200.000	200
	81	Bromobenzene	156	9.756	9.753	(0.905)	3585389	200.000	200
	82	1,2,3-Trichloropropane	75	9.789	9.785	(0.908)	5019657	200.000	200
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	3484594	200.000	200
	84	2-Chlorotoluene	126	9.959	9.959	(0.924)	3235688	200.000	200
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	10968813	200.000	200
	86	4-Chlorotoluene	126	10.071	10.072	(0.934)	3374220	200.000	200
M	94	Xylene (Total)	106				16292577	600.000	580
	87	tert-Butylbenzene	119	10.390	10.387	(0.964)	11082936	200.000	200
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	10975898	200.000	190
	89	sec-Butylbenzene	105	10.608	10.609	(0.984)	13349681	200.000	200
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	6278463	200.000	200
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	10882927	200.000	200(A)
*	92	1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	965491	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	6463939	200.000	200
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	10015061	200.000	210(A)
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	6123268	200.000	200
	97	Hexachloroethane	117	11.419	11.416	(1.059)	2221340	200.000	220(A)
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.103)	736052	200.000	210(A)
	141	1,3,5-Trichlorobenzene	182	12.640	12.637	(2.382)	3791497	200.000	250(A)
	99	1,2,4-Trichlorobenzene	180	12.640	12.641	(1.172)	3958289	200.000	240(A)
	100	Hexachlorobutadiene	225	12.785	12.785	(1.186)	1649135	200.000	190
	101	Naphthalene	128	12.856	12.856	(1.192)	8860859	200.000	240(A)
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	3622103	200.000	230(A)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9280.d
Date : 17-APR-2013 14:39
Client ID: VSTD20010K
Instrument: V8.i
Sample Info: 5ML,VSTD20010K,VSTD20010K
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9281.d
Report Date: 22-Apr-2013 11:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9281.d
Lab Smp Id: VSTD10010K Client Smp ID: VSTD10010K
Inj Date : 17-APR-2013 15:07
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD10010K,VSTD10010K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130417.B\v108260Gadd-6lvl.m
Meth Date : 18-Apr-2013 09:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.d
Als bottle: 100 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 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	1.654	1.654	(0.312)	1098144	100.000	100
2	Freon114	85	1.773	1.773	(0.334)	1404288	100.000	100
3	Chloromethane	50	1.827	1.828	(0.344)	1494855	100.000	100
4	Vinyl Chloride	62	1.924	1.927	(0.363)	1478553	100.000	100
5	Bromomethane	94	2.210	2.213	(0.417)	919550	100.000	91
6	Chloroethane	64	2.300	2.300	(0.433)	766549	100.000	96
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	1801808	100.000	99
126	Ethanol	46	2.641	2.641	(0.498)	473211	10000.0	9300(A)
8	Ether	59	2.737	2.737	(0.516)	1241062	100.000	100
9	Acrolein	56	2.840	2.840	(0.535)	1720074	500.000	510
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	1402169	100.000	100
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	1382763	100.000	100
12	Acetone	58	2.959	2.959	(0.558)	173301	100.000	85
13	Iodomethane	142	3.059	3.059	(0.576)	1663266	100.000	120
14	Carbon Disulfide	76	3.123	3.123	(0.589)	4608083	100.000	100
15	Acetonitrile	41	3.210	3.210	(0.605)	2673585	1000.00	990(A)
16	Allyl Chloride	39	3.210	3.210	(0.605)	1671139	100.000	96
17	Methyl Acetate	43	3.216	3.217	(0.606)	1377194	100.000	100
18	Methylene Chloride	84	3.306	3.303	(0.623)	1613491	100.000	93
19	tert-Butanol	59	3.367	3.364	(0.635)	274738	200.000	200
20	Acrylonitrile	53	3.493	3.490	(0.658)	604255	100.000	110
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	1503523	100.000	100

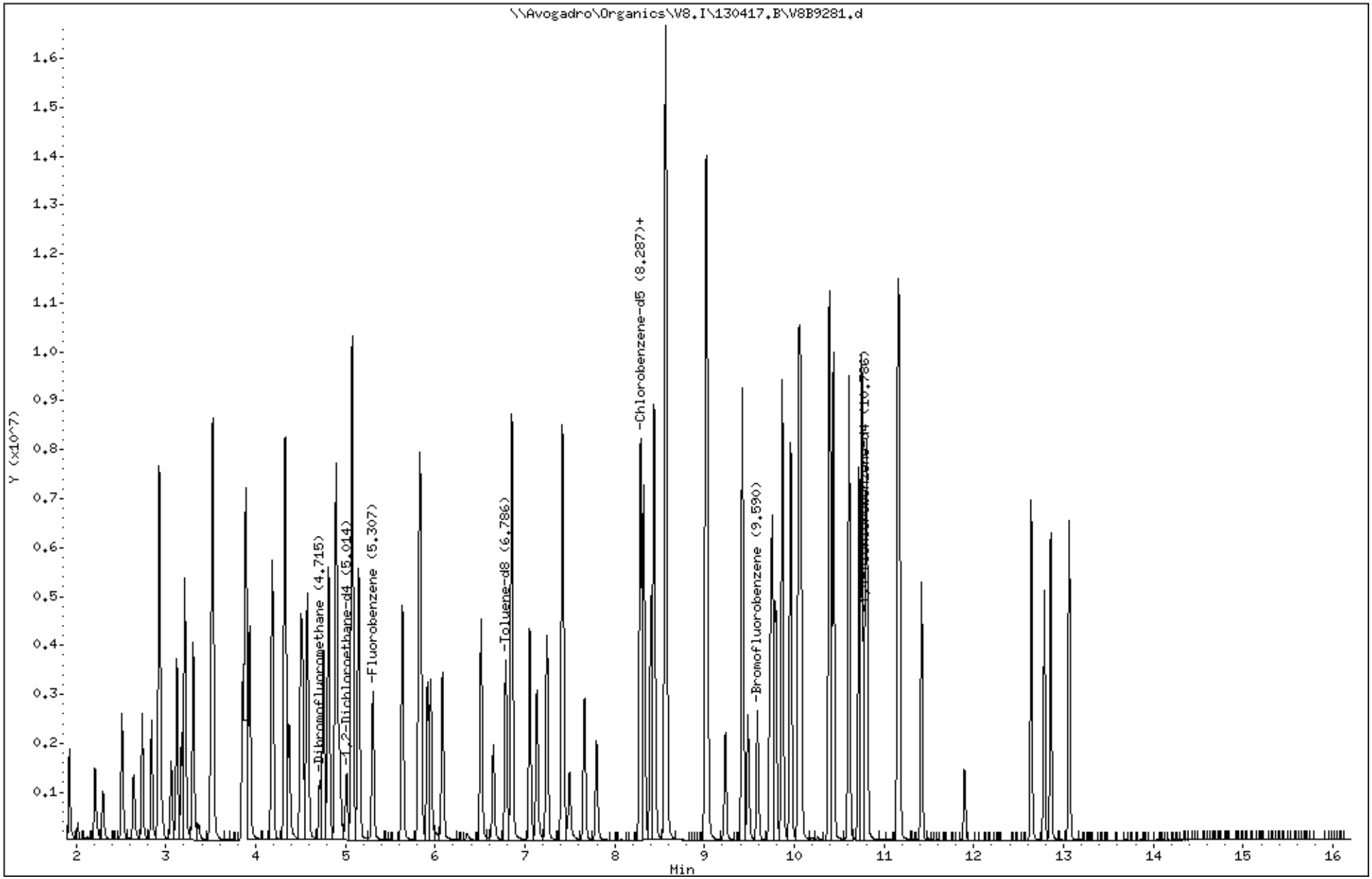
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
22	Methyl tert-butyl ether	73	3.515	3.516	(0.663)	4421618	100.000	100
23	1,1-Dichloroethane	63	3.856	3.856	(0.727)	2868226	100.000	100
24	Vinyl acetate	43	3.885	3.885	(0.732)	4641998	100.000	100
25	Diisopropyl Ether	45	3.895	3.895	(0.734)	5023045	100.000	100
26	2-Chloro-1,3-Butadiene	53	3.933	3.934	(0.741)	2321394	100.000	100
27	Ethyl tert-butyl ether	59	4.187	4.188	(0.789)	4856170	100.000	100
29	2,2-Dichloropropane	77	4.332	4.329	(0.816)	2329300	100.000	100
28	cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	1663628	100.000	100
30	2-Butanone	72	4.326	4.326	(0.815)	190260	100.000	97
32	Propionitrile	54	4.374	4.371	(0.824)	2212183	1000.00	1000(A)
33	Methacrylonitrile	41	4.502	4.503	(0.849)	1825100	200.000	210(A)
34	Bromochloromethane	128	4.525	4.525	(0.853)	763594	100.000	99
31	Tetrahydrofuran	72	4.570	4.567	(0.861)	398513	200.000	210(A)
35	Chloroform	83	4.580	4.577	(0.863)	2795457	100.000	100
$ 36	Dibromofluoromethane	113	4.715	4.712	(0.889)	660073	50.0000	50
37	1,1,1-Trichloroethane	97	4.756	4.753	(0.896)	2395459	100.000	100
38	Cyclohexane	56	4.814	4.811	(0.907)	2510241	100.000	100
39	1,1-Dichloropropene	110	4.895	4.892	(0.922)	754204	100.000	100
40	Carbon Tetrachloride	117	4.901	4.901	(0.924)	2043263	100.000	100
41	Isobutyl Alcohol	43	4.933	4.930	(0.930)	1280509	2000.00	2500(A)
$ 42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	151699	50.0000	50
43	Benzene	78	5.075	5.072	(0.956)	6258019	100.000	97
44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	2286468	100.000	100
45	tert-Amyl methyl ether	73	5.146	5.146	(0.970)	4325895	100.000	100
M 50	1,2-Dichloroethene (Total)	96				3167151	200.000	200
* 46	Fluorobenzene	96	5.306	5.306	(1.000)	2591614	50.0000	
47	Trichloroethene	130	5.634	5.634	(1.062)	1534484	100.000	100
48	Methylcyclohexane	83	5.824	5.821	(1.098)	2397094	100.000	100
49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	1635473	100.000	100
51	Methyl Methacrylate	69	5.914	5.914	(1.115)	1275918	100.000	100
52	Dibromomethane	93	5.949	5.950	(1.121)	1011517	100.000	100
53	1,4-Dioxane	88	5.953	5.953	(1.122)	354277	2000.00	2100(A)
54	Bromodichloromethane	83	6.081	6.081	(1.146)	2203571	100.000	100
55	2-Chloroethyl vinyl ether	63	6.512	6.510	(1.227)	13991	100.000	100(T)
56	cis-1,3-Dichloropropene	75	6.512	6.509	(1.227)	2701576	100.000	110
57	4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	1446482	100.000	100
$ 58	Toluene-d8	98	6.785	6.786	(0.818)	2526134	50.0000	50
59	Toluene	91	6.853	6.853	(1.291)	6505084	100.000	85
60	trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	2481234	100.000	110
61	Ethyl Methacrylate	69	7.133	7.133	(1.344)	1698250	100.000	100
62	1,1,2-Trichloroethane	97	7.245	7.242	(1.365)	1391326	100.000	100
63	Tetrachloroethene	164	7.416	7.413	(0.894)	1252379	100.000	100
64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	2467341	100.000	100
65	2-Hexanone	43	7.496	7.496	(0.904)	1045749	100.000	100
66	Dibromochloromethane	129	7.663	7.660	(0.924)	1646463	100.000	110
67	1,2-Dibromoethane	107	7.798	7.795	(0.940)	1513525	100.000	100
69	1-Chlorohexane	91	8.284	8.281	(0.999)	2082498	100.000	99
* 68	Chlorobenzene-d5	117	8.293	8.290	(1.000)	1908769	50.0000	
70	Chlorobenzene	112	8.322	8.322	(1.003)	4132014	100.000	100
71	1,1,1,2-Tetrachloroethane	131	8.406	8.403	(1.014)	1489685	100.000	100
72	Ethylbenzene	106	8.438	8.438	(1.017)	2163208	100.000	99
73	m,p-Xylene	106	8.567	8.567	(1.033)	5352594	200.000	190
74	o-Xylene	106	9.014	9.014	(1.087)	2586759	100.000	97
75	Styrene	104	9.026	9.027	(1.088)	4482563	100.000	100

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.232	9.232	(1.113)	1085678	100.000	110
	77	Isopropylbenzene	105	9.422	9.422	(1.136)	6645402	100.000	100
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.486	(1.143)	645519	100.000	110
$	79	Bromofluorobenzene	95	9.589	9.589	(1.156)	941223	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.728	(0.902)	1957822	100.000	100
	81	Bromobenzene	156	9.756	9.753	(0.905)	1740138	100.000	100
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	2448948	100.000	99
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	1722516	100.000	100
	84	2-Chlorotoluene	126	9.959	9.959	(0.923)	1588182	100.000	100
	85	1,3,5-Trimethylbenzene	105	10.049	10.049	(0.932)	5392837	100.000	100
	86	4-Chlorotoluene	126	10.071	10.072	(0.934)	1655993	100.000	100
M	94	Xylene (Total)	106				7939353	300.000	290
	87	tert-Butylbenzene	119	10.390	10.387	(0.963)	5408119	100.000	100
	88	1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	5435761	100.000	99
	89	sec-Butylbenzene	105	10.608	10.609	(0.984)	6615803	100.000	100
	90	1,3-Dichlorobenzene	146	10.721	10.718	(0.994)	3060716	100.000	100
	91	4-Isopropyltoluene	119	10.753	10.753	(0.997)	5409601	100.000	100
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	938191	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	3172263	100.000	100
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	5075540	100.000	110
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	3022829	100.000	100
	97	Hexachloroethane	117	11.419	11.416	(1.059)	1088645	100.000	110
	98	1,2-Dibromo-3-chloropropane	75	11.894	11.895	(1.103)	357694	100.000	100
	141	1,3,5-Trichlorobenzene	182	12.640	12.637	(2.382)	1830712	100.000	120(A)
	99	1,2,4-Trichlorobenzene	180	12.640	12.641	(1.172)	1923902	100.000	110
	100	Hexachlorobutadiene	225	12.785	12.785	(1.185)	857102	100.000	100
	101	Naphthalene	128	12.856	12.856	(1.192)	4309056	100.000	120
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	1775670	100.000	110

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9281.d
Date : 17-APR-2013 15:07
Client ID: VSTD10010K
Instrument: V8.i
Sample Info: 5ML,VSTD10010K,VSTD10010K
Purge Volume: 5.0
Operator: V10 SRC: V10
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.: M0592 Mod. Ref No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date: 04/26/2013 Time: 8:54

Lab File ID: V8B9381.D Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####) VSTD050100 Init. Calib. Time(s): 12:22 15:07

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	0.208	0.228	0.100	9.6	20.0
Chloromethane	0.287	0.287	0.100	-0.1	20.0
Vinyl chloride	0.283	0.315	0.100	11.1	20.0
Bromomethane	0.194	0.202	0.100	4.0	20.0
Chloroethane	0.155	0.192	0.100	24.0	20.0
Trichlorofluoromethane	0.350	0.467	0.100	33.6	20.0
1,1-Dichloroethene	0.266	0.263	0.100	-1.1	20.0
Acetone	0.039	0.044	0.100	12.5	20.0
Iodomethane	0.274	0.323	0.100	17.9	20.0
Carbon disulfide	0.890	0.887	0.100	-0.4	20.0
Methylene chloride	0.335	0.308	0.100	-8.0	20.0
trans-1,2-Dichloroethene	0.287	0.285	0.100	-0.6	20.0
Methyl tert-butyl ether	0.836	0.823	0.100	-1.5	20.0
1,1-Dichloroethane	0.547	0.563	0.200	3.0	20.0
Vinyl acetate	0.849	0.870	0.100	2.5	20.0
2-Butanone	0.038	0.038	0.100	0.6	20.0
cis-1,2-Dichloroethene	0.318	0.310	0.100	-2.4	20.0
2,2-Dichloropropane	0.436	0.503	0.100	15.3	20.0
Bromochloromethane	0.148	0.148	0.100	-0.1	20.0
Chloroform	0.536	0.578	0.200	7.8	20.0
1,1,1-Trichloroethane	0.454	0.502	0.100	10.5	20.0
1,1-Dichloropropene	0.140	0.137	0.100	-2.1	20.0
Carbon tetrachloride	0.378	0.432	0.100	14.1	20.0
1,2-Dichloroethane	0.439	0.484	0.100	10.4	20.0
Benzene	1.250	1.164	0.500	-6.9	20.0
Trichloroethene	0.290	0.284	0.200	-2.1	20.0
1,2-Dichloropropane	0.310	0.313	0.100	1.0	20.0
Dibromomethane	0.190	0.195	0.100	2.4	20.0
Bromodichloromethane	0.406	0.448	0.200	10.3	20.0
cis-1,3-Dichloropropene	0.487	0.503	0.200	3.2	20.0
4-Methyl-2-pentanone	0.269	0.243	0.100	-9.7	20.0
Toluene	1.475	1.201	0.400	-18.5	20.0
trans-1,3-Dichloropropene	0.445	0.468	0.100	5.1	20.0
1,1,2-Trichloroethane	0.267	0.256	0.100	-4.1	20.0
1,3-Dichloropropane	0.625	0.610	0.100	-2.6	20.0
Tetrachloroethene	0.326	0.301	0.200	-7.7	20.0
2-Hexanone	0.266	0.258	0.100	-3.0	20.0
Dibromochloromethane	0.405	0.408	0.100	0.7	20.0
1,2-Dibromoethane	0.383	0.357	0.100	-6.8	20.0
Chlorobenzene	1.074	1.015	0.500	-5.5	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date: 04/26/2013 Time: 8:54

Lab File ID: V8B9381.D Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####) VSTD050100 Init. Calib. Time(s): 12:22 15:07

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	0.377	0.378	0.100	0.1	20.0
Ethylbenzene	0.572	0.515	0.100	-9.9	20.0
m,p-Xylene	0.728	0.644	0.100	-11.6	20.0
o-Xylene	0.695	0.627	0.300	-9.8	20.0
Xylene (Total)	0.717	0.638	0.000	-11.0	20.0
Styrene	1.090	1.068	0.300	-2.0	20.0
Bromoform	0.258	0.251	0.100	-2.9	20.0
Isopropylbenzene	1.670	1.578	0.100	-5.5	20.0
1,1,2,2-Tetrachloroethane	1.047	0.893	0.300	-14.7	20.0
Bromobenzene	0.921	0.840	0.100	-8.8	20.0
1,2,3-Trichloropropane	1.323	1.120	0.100	-15.4	20.0
n-Propylbenzene	0.896	0.794	0.100	-11.4	20.0
2-Chlorotoluene	0.848	0.768	0.100	-9.4	20.0
1,3,5-Trimethylbenzene	2.847	2.612	0.100	-8.3	20.0
4-Chlorotoluene	0.871	0.794	0.100	-8.9	20.0
tert-Butylbenzene	2.826	2.610	0.100	-7.6	20.0
1,2,4-Trimethylbenzene	2.915	2.639	0.100	-9.5	20.0
sec-Butylbenzene	3.455	3.194	0.100	-7.6	20.0
4-Isopropyltoluene	2.764	2.587	0.100	-6.4	20.0
1,3-Dichlorobenzene	1.604	1.466	0.600	-8.6	20.0
1,4-Dichlorobenzene	1.687	1.542	0.500	-8.6	20.0
n-Butylbenzene	2.481	2.453	0.100	-1.1	20.0
1,2-Dichlorobenzene	1.571	1.459	0.400	-7.1	20.0
1,2-Dibromo-3-chloropropane	0.186	0.155	0.050	-16.7	20.0
1,2,4-Trichlorobenzene	0.897	0.810	0.200	-9.8	20.0
Hexachlorobutadiene	0.444	0.424	0.100	-4.6	20.0
1,2,3-Trichlorobenzene	0.847	0.735	0.100	-13.3	20.0
Naphthalene	1.966	1.510	0.100	-23.2	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Instrument ID: V10 Calibration Date: 04/26/2013 Time: 8:54

Lab File ID: V8B9381.D Init. Calib. Date(s): 04/17/2013 04/17/2013

EPA Sample No.(VSTD#####) VSTD050100 Init. Calib. Time(s): 12:22 15:07

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
Dibromofluoromethane	0.253	0.273	0.100	7.8	20.0
1,2-Dichloroethane-d4	0.059	0.058	0.100	-1.7	20.0
Toluene-d8	1.328	1.312	0.100	-1.2	20.0
Bromofluorobenzene	0.493	0.512	0.100	3.8	20.0

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9381.d
Report Date: 03-May-2013 11:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130426.B\V8B9381.d
Lab Smp Id: VSTD05010O Client Smp ID: VSTD05010O
Inj Date : 26-APR-2013 08:54
Operator : V10   SRC: V10 Inst ID: V8.i
Smp Info : 5ML,VSTD05010O,VSTD05010O
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	1.654	1.654	(0.312)	446688	50.0000	55
2	Freon114	85	1.773	1.773	(0.334)	547754	50.0000	51
3	Chloromethane	50	1.827	1.827	(0.344)	563069	50.0000	50
4	Vinyl Chloride	62	1.924	1.924	(0.363)	618231	50.0000	56
5	Bromomethane	94	2.213	2.213	(0.417)	396509	50.0000	52
6	Chloroethane	64	2.300	2.300	(0.434)	375883	50.0000	62
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	917037	50.0000	67
126	Ethanol	46	2.641	2.638	(0.498)	196908	5000.00	5100(A)
8	Ether	59	2.741	2.737	(0.517)	459456	50.0000	50
9	Acrolein	56	2.840	2.840	(0.535)	567886	250.000	220
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	515763	50.0000	49
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	541318	50.0000	52
12	Acetone	58	2.959	2.962	(0.558)	86477	50.0000	56
13	Iodomethane	142	3.059	3.059	(0.576)	632991	50.0000	59
14	Carbon Disulfide	76	3.123	3.120	(0.589)	1740185	50.0000	50
15	Acetonitrile	41	3.210	3.210	(0.605)	1020128	500.000	500(A)
16	Allyl Chloride	39	3.210	3.210	(0.605)	683114	50.0000	52
17	Methyl Acetate	43	3.216	3.216	(0.606)	462686	50.0000	45
18	Methylene Chloride	84	3.303	3.306	(0.623)	603758	50.0000	46
19	tert-Butanol	59	3.368	3.364	(0.635)	85416	100.000	81
20	Acrylonitrile	53	3.496	3.493	(0.659)	198856	50.0000	47
21	trans-1,2-Dichloroethene	96	3.528	3.525	(0.665)	560062	50.0000	50

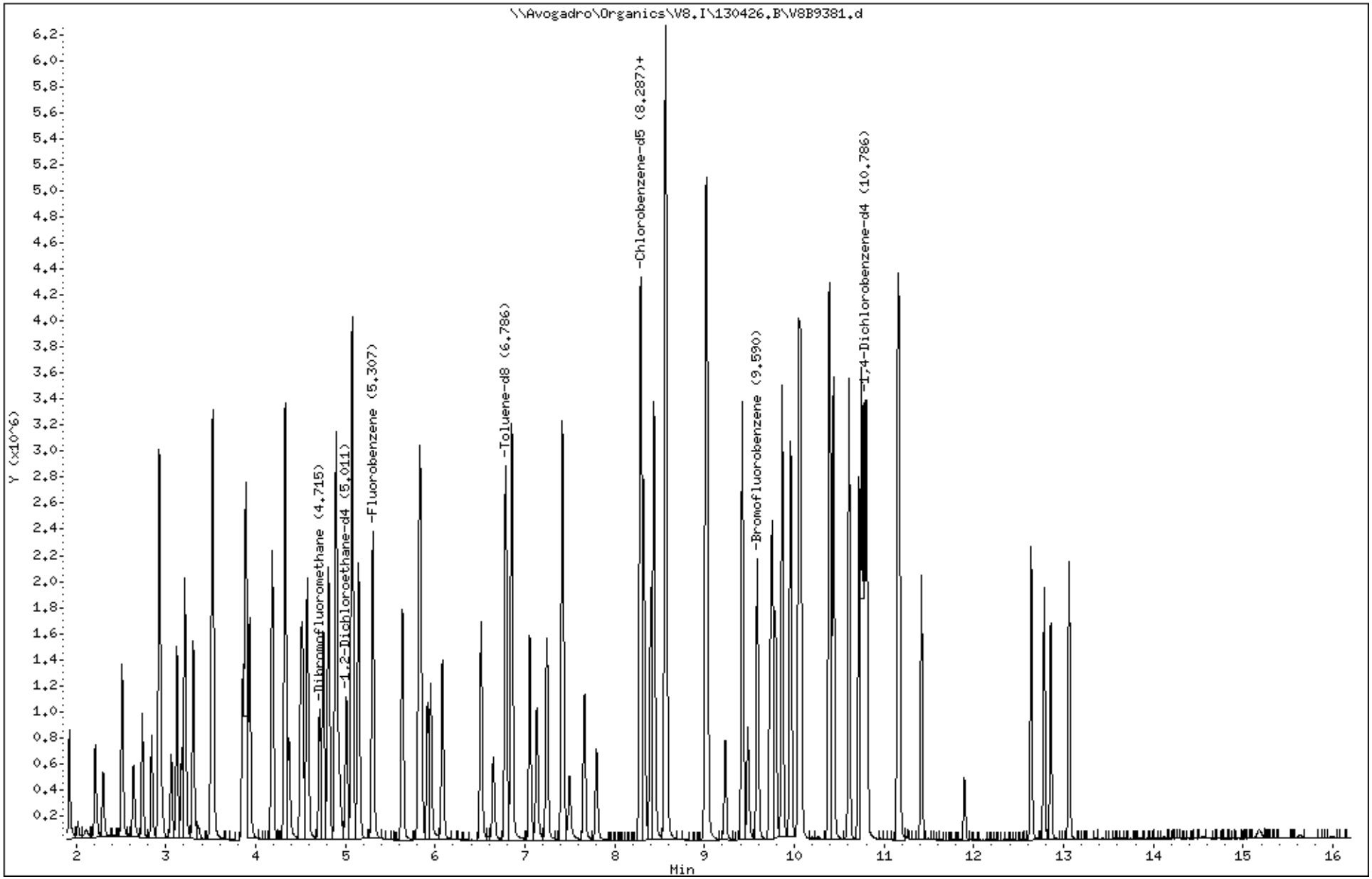
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.519	3.515	(0.663)	1615432	50.0000	49
	23 1,1-Dichloroethane	63	3.860	3.856	(0.727)	1105748	50.0000	52
	24 Vinyl acetate	43	3.888	3.885	(0.733)	1707742	50.0000	51
	25 Diisopropyl Ether	45	3.895	3.895	(0.734)	1916961	50.0000	51
	26 2-Chloro-1,3-Butadiene	53	3.933	3.933	(0.741)	912253	50.0000	53
	27 Ethyl tert-butyl ether	59	4.184	4.187	(0.789)	1807477	50.0000	51
	29 2,2-Dichloropropane	77	4.332	4.332	(0.816)	986364	50.0000	58
	28 cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	609242	50.0000	49
	30 2-Butanone	72	4.326	4.326	(0.815)	74785	50.0000	50
	32 Propionitrile	54	4.371	4.371	(0.824)	698344	500.000	430(A)
	33 Methacrylonitrile	41	4.503	4.503	(0.849)	610148	100.000	92
	34 Bromochloromethane	128	4.525	4.525	(0.853)	290280	50.0000	50
	31 Tetrahydrofuran	72	4.570	4.567	(0.861)	128919	100.000	90
	35 Chloroform	83	4.577	4.576	(0.862)	1134811	50.0000	54
$	36 Dibromofluoromethane	113	4.712	4.712	(0.888)	535826	50.0000	54
	37 1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	984277	50.0000	55
	38 Cyclohexane	56	4.811	4.811	(0.907)	901415	50.0000	48
	39 1,1-Dichloropropene	110	4.895	4.895	(0.922)	268887	50.0000	49
	40 Carbon Tetrachloride	117	4.901	4.898	(0.924)	847311	50.0000	57
	41 Isobutyl Alcohol	43	4.930	4.933	(0.929)	360813	1000.00	920(AH)
$	42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	112945	50.0000	49
	43 Benzene	78	5.075	5.075	(0.956)	2283624	50.0000	46
	44 1,2-Dichloroethane	62	5.078	5.078	(0.957)	950035	50.0000	55
	45 tert-Amyl methyl ether	73	5.146	5.149	(0.970)	1539382	50.0000	49
M	50 1,2-Dichloroethene (Total)	96				1169304	100.000	98
*	46 Fluorobenzene	96	5.306	5.306	(1.000)	1962499	50.0000	
	47 Trichloroethene	130	5.634	5.634	(1.062)	557655	50.0000	49
	48 Methylcyclohexane	83	5.824	5.824	(1.098)	848295	50.0000	49
	49 1,2-Dichloropropane	63	5.840	5.840	(1.101)	613929	50.0000	50
	51 Methyl Methacrylate	69	5.914	5.914	(1.115)	410211	50.0000	45
	52 Dibromomethane	93	5.949	5.949	(1.121)	382607	50.0000	51
	53 1,4-Dioxane	88	5.953	5.949	(1.122)	110768	1000.00	860(A)
	54 Bromodichloromethane	83	6.081	6.081	(1.146)	879413	50.0000	55
	55 2-Chloroethyl vinyl ether	63	6.506	6.512	(1.226)	6244	50.0000	60(TQ)
	56 cis-1,3-Dichloropropene	75	6.512	6.509	(1.227)	986908	50.0000	52
	57 4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	477287	50.0000	45
$	58 Toluene-d8	98	6.785	6.785	(0.818)	1954419	50.0000	49
	59 Toluene	91	6.853	6.853	(1.291)	2357790	50.0000	41
	60 trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	918536	50.0000	52
	61 Ethyl Methacrylate	69	7.133	7.133	(1.344)	547642	50.0000	45
	62 1,1,2-Trichloroethane	97	7.242	7.245	(1.365)	501526	50.0000	48
	63 Tetrachloroethene	164	7.412	7.416	(0.894)	447843	50.0000	46
	64 1,3-Dichloropropane	76	7.422	7.422	(0.895)	908018	50.0000	49
	65 2-Hexanone	43	7.496	7.496	(0.904)	384307	50.0000	48
	66 Dibromochloromethane	129	7.663	7.663	(0.924)	607141	50.0000	50
	67 1,2-Dibromoethane	107	7.798	7.798	(0.941)	531887	50.0000	46
	69 1-Chlorohexane	91	8.281	8.284	(0.999)	716042	50.0000	44
*	68 Chlorobenzene-d5	117	8.290	8.293	(1.000)	1489723	50.0000	
	70 Chlorobenzene	112	8.322	8.322	(1.004)	1511659	50.0000	47
	71 1,1,1,2-Tetrachloroethane	131	8.403	8.406	(1.014)	562607	50.0000	50
	72 Ethylbenzene	106	8.438	8.438	(1.018)	767619	50.0000	45
	73 m,p-Xylene	106	8.567	8.567	(1.033)	1917408	100.000	88
	74 o-Xylene	106	9.014	9.014	(1.087)	934564	50.0000	45
	75 Styrene	104	9.027	9.026	(1.089)	1590834	50.0000	47

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.232	9.232	(1.114)	373505	50.0000	48
	77	Isopropylbenzene	105	9.422	9.422	(1.137)	2351435	50.0000	47
	78	trans-1,4-Dichloro-2-butene	75	9.483	9.486	(1.144)	199544	50.0000	43
$	79	Bromofluorobenzene	95	9.586	9.589	(1.156)	762421	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	669206	50.0000	43
	81	Bromobenzene	156	9.756	9.756	(0.905)	629938	50.0000	46
	82	1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	839165	50.0000	42
	83	n-Propylbenzene	120	9.866	9.866	(0.915)	594913	50.0000	44
	84	2-Chlorotoluene	126	9.959	9.959	(0.923)	575347	50.0000	45
	85	1,3,5-Trimethylbenzene	105	10.049	10.052	(0.932)	1957614	50.0000	46
	86	4-Chlorotoluene	126	10.071	10.071	(0.934)	595105	50.0000	46
M	94	Xylene (Total)	106				2851972	150.000	130
	87	tert-Butylbenzene	119	10.387	10.390	(0.963)	1956628	50.0000	46
	88	1,2,4-Trimethylbenzene	105	10.438	10.435	(0.968)	1977965	50.0000	45
	89	sec-Butylbenzene	105	10.608	10.608	(0.984)	2394191	50.0000	46
	90	1,3-Dichlorobenzene	146	10.721	10.721	(0.994)	1098716	50.0000	46
	91	4-Isopropyltoluene	119	10.750	10.753	(0.997)	1939030	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	749565	50.0000	
	93	1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1155759	50.0000	46
	95	n-Butylbenzene	91	11.152	11.152	(1.034)	1838977	50.0000	49
	96	1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	1093721	50.0000	46
	97	Hexachloroethane	117	11.415	11.419	(1.058)	395666	50.0000	49
	98	1,2-Dibromo-3-chloropropane	75	11.895	11.894	(1.103)	116082	50.0000	42
	141	1,3,5-Trichlorobenzene	182	12.641	12.640	(2.382)	582398	50.0000	49(A)
	99	1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	607058	50.0000	45
	100	Hexachlorobutadiene	225	12.782	12.785	(1.185)	317887	50.0000	48
	101	Naphthalene	128	12.856	12.856	(1.192)	1132124	50.0000	38
	102	1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	550682	50.0000	43

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9381.d
Date : 26-APR-2013 08:54
Client ID: VSTD050100
Instrument: V8.i
Sample Info: 5ML,VSTD050100,VSTD050100
Purge Volume: 5.0
Operator: V10 SRC: V10
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\130417.B\V8B9274.d
Lab Smp Id: BFB10K Client Smp ID: BFB10K
Inj Date : 17-APR-2013 11:11
Operator : V10 SRC: V10 Inst ID: V8.i
Smp Info : 5ML,BFB10K,BFB10K
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\130417.B\BFBSOM_V10.m
Meth Date : 13-Mar-2013 07:47 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 100 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

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		
5.306	4.900	(0.000)	95	373795			0.00- 100.00	100.00
5.306	4.900	(0.000)	50	71011			15.00- 40.00	19.00
5.306	4.900	(0.000)	75	182951			30.00- 80.00	48.94
5.306	4.900	(0.000)	96	24553			5.00- 9.00	6.57
5.306	4.900	(0.000)	173	1868			0.00- 2.00	0.60
5.306	4.900	(0.000)	174	309532			50.00- 120.00	82.81
5.306	4.900	(0.000)	175	20973			5.00- 9.00	6.78
5.306	4.900	(0.000)	176	299527			95.00- 101.00	96.77
5.306	4.900	(0.000)	177	19216			5.00- 9.00	6.42

Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9274.d

Date : 17-APR-2013 11:11

Client ID: BFB10K

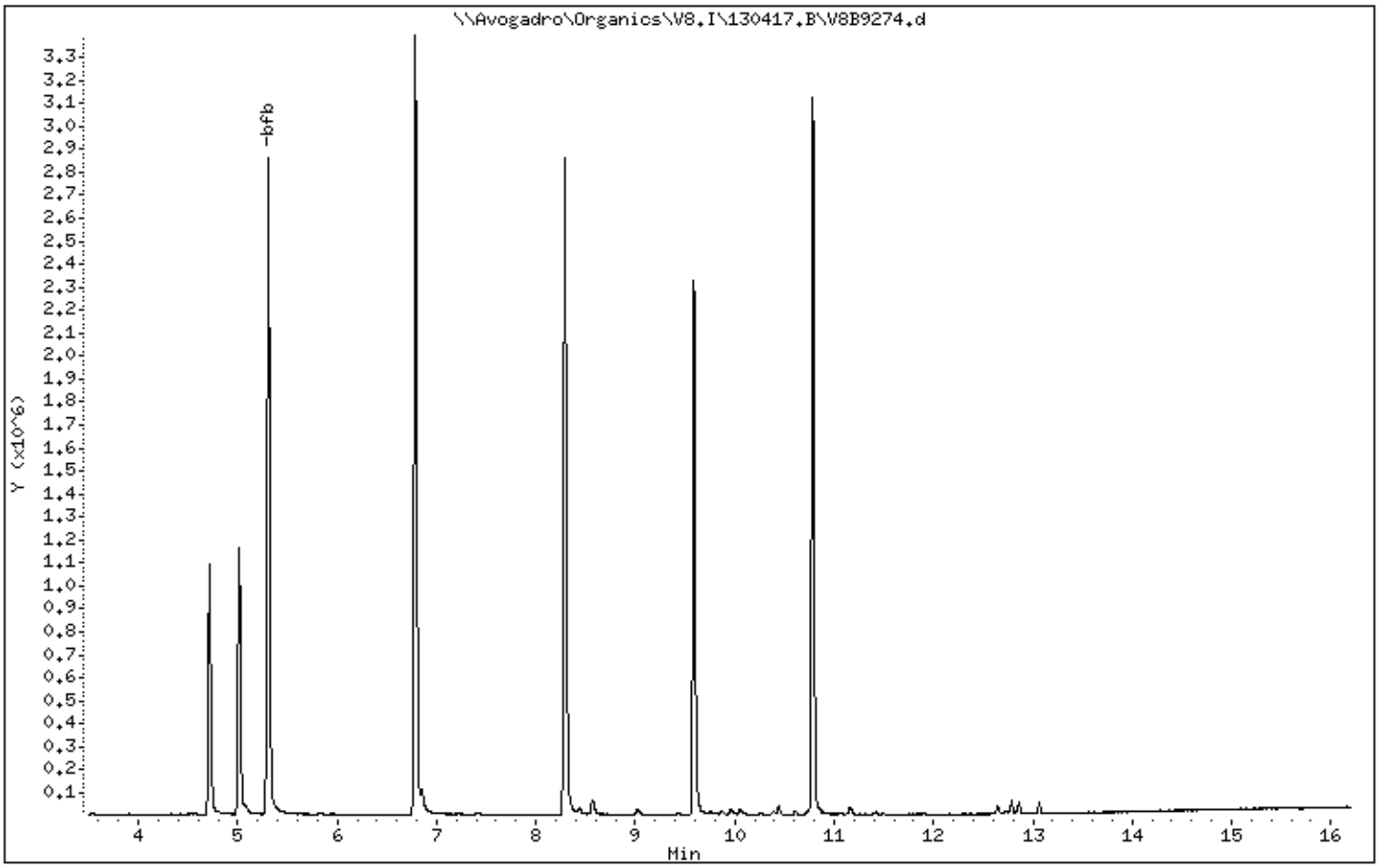
Instrument: V8.i

Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130417.B\V8B9274.d

Date : 17-APR-2013 11:11

Client ID: BFB10K

Instrument: V8.i

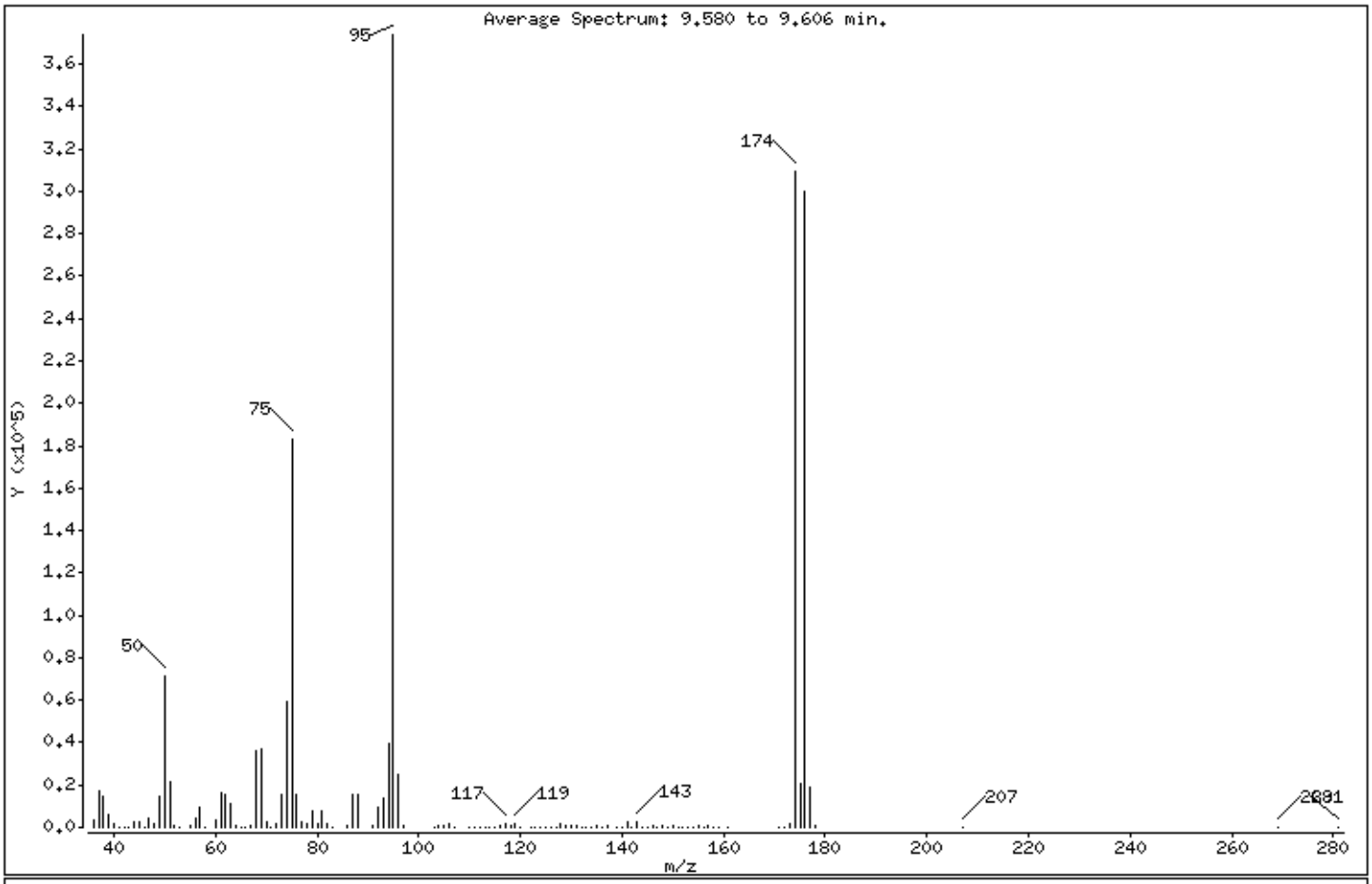
Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

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	19.00
75	30.00 - 80.00% of mass 95	48.94
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.50 (0.60)
174	50.00 - 120.00% of mass 95	82.81
175	5.00 - 9.00% of mass 174	5.61 (6.78)
176	95.00 - 101.00% of mass 174	80.13 (96.77)
177	5.00 - 9.00% of mass 176	5.14 (6.42)

Date : 17-APR-2013 11:11

Client ID: BFB10K Instrument: V8.i

Sample Info: 5ML,BFB10K,BFB10K

Operator: V10 SRC: V10

Column phase: DB-624 Column diameter: 0.25

Data File: V8B9274.d
Spectrum: Average Spectrum: 9.580 to 9.606 min.
Location of Maximum: 95.00
Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3032	69.00	37296	111.00	214	144.00	200
37.00	16800	70.00	2756	112.00	121	145.00	304
38.00	14568	71.00	55	113.00	183	146.00	537
39.00	5643	72.00	1728	114.00	26	147.00	196
40.00	2109	73.00	15149	115.00	422	148.00	893
41.00	76	74.00	59128	116.00	1215	149.00	253
42.00	66	75.00	182912	117.00	1883	150.00	470
43.00	212	76.00	15214	118.00	1180	151.00	27
44.00	2921	77.00	2186	119.00	1547	152.00	153
45.00	2908	78.00	1611	120.00	54	153.00	244
46.00	213	79.00	8028	122.00	46	154.00	204
47.00	4485	80.00	2096	123.00	87	155.00	834
48.00	1985	81.00	7818	124.00	216	156.00	91
49.00	14366	82.00	1687	125.00	69	157.00	582
50.00	71008	83.00	169	126.00	53	158.00	25
51.00	21304	86.00	447	127.00	113	159.00	380
52.00	940	87.00	15820	128.00	1299	161.00	338
53.00	11	88.00	15386	129.00	593	171.00	29
55.00	821	91.00	1097	130.00	1120	172.00	293
56.00	4715	92.00	9477	131.00	508	173.00	1868
57.00	9096	93.00	14041	132.00	28	174.00	309504
58.00	421	94.00	39704	133.00	21	175.00	20968
60.00	3068	95.00	373760	134.00	62	176.00	299520
61.00	16225	96.00	24552	135.00	559	177.00	19216
62.00	15859	97.00	640	136.00	32	178.00	523
63.00	11572	103.00	136	137.00	576	207.00	191
64.00	1166	104.00	1261	139.00	93	269.00	14
65.00	186	105.00	480	140.00	233	281.00	12
66.00	33	106.00	1296	141.00	2709		
67.00	905	107.00	344	142.00	388		
68.00	36304	110.00	133	143.00	2868		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\130426.B\V8B9380.d
Lab Smp Id: BFB10O Client Smp ID: BFB10O
Inj Date : 26-APR-2013 08:35
Operator : V10 SRC: V10 Inst ID: V8.i
Smp Info : 5ML,BFB10O,BFB10O
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\130426.B\BFBSOM_V10.m
Meth Date : 13-Mar-2013 07:47 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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
4.877	4.900	(0.000)	95	2676736			0.00- 100.00	100.00
4.877	4.900	(0.000)	50	525056			15.00- 40.00	19.62
4.877	4.900	(0.000)	75	1357312			30.00- 80.00	50.71
4.877	4.900	(0.000)	96	172288			5.00- 9.00	6.44
4.877	4.900	(0.000)	173	11299			0.00- 2.00	0.52
4.877	4.900	(0.000)	174	2174976			50.00- 120.00	81.25
4.877	4.900	(0.000)	175	150144			5.00- 9.00	6.90
4.877	4.900	(0.000)	176	2091520			95.00- 101.00	96.16
4.877	4.900	(0.000)	177	134848			5.00- 9.00	6.45

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9380.d

Date : 26-APR-2013 08:35

Client ID: BFB100

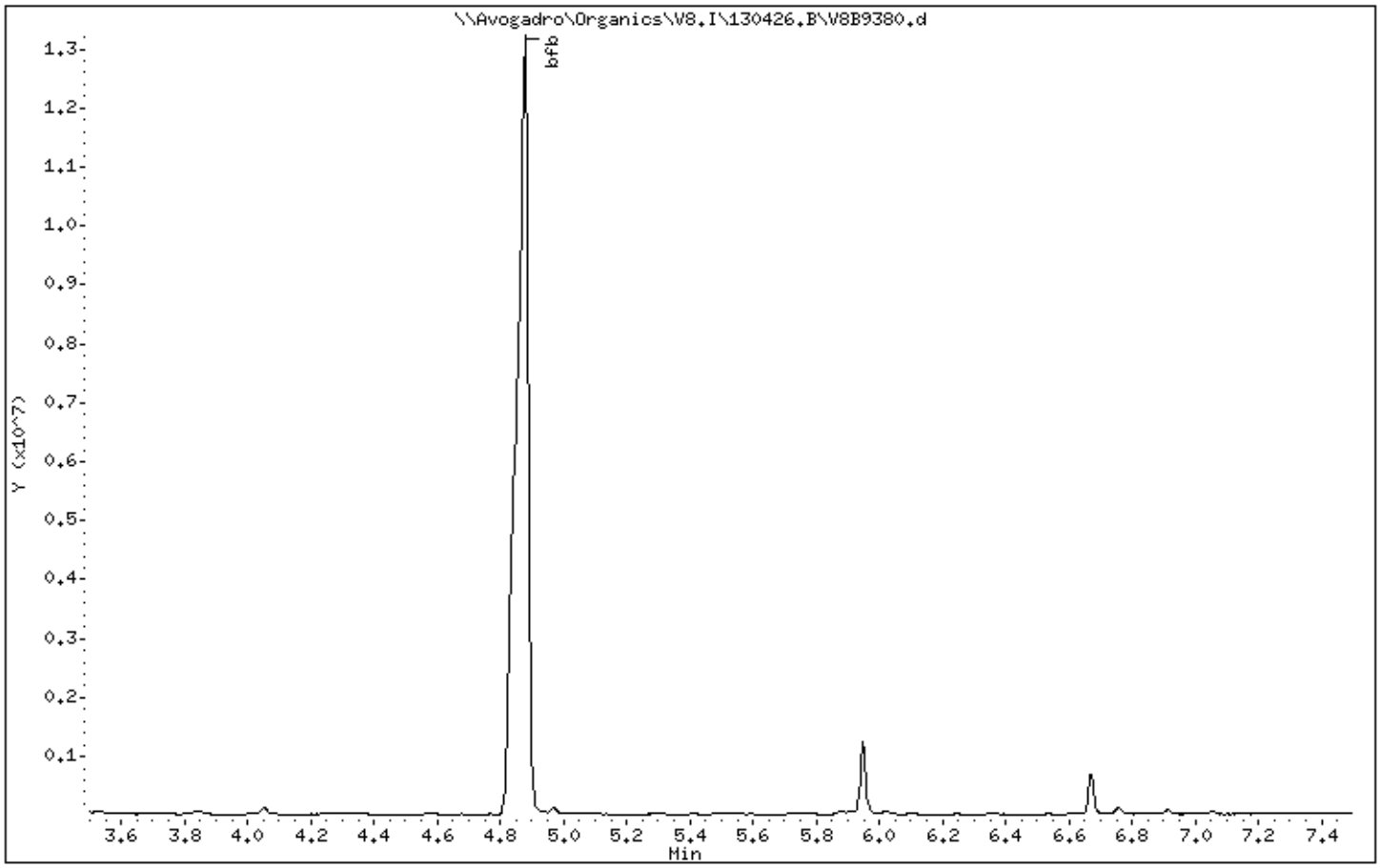
Instrument: V8.i

Sample Info: 5ML,BFB100,BFB100

Operator: V10 SRC: V10

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9380.d

Date : 26-APR-2013 08:35

Client ID: BFB100

Instrument: V8.i

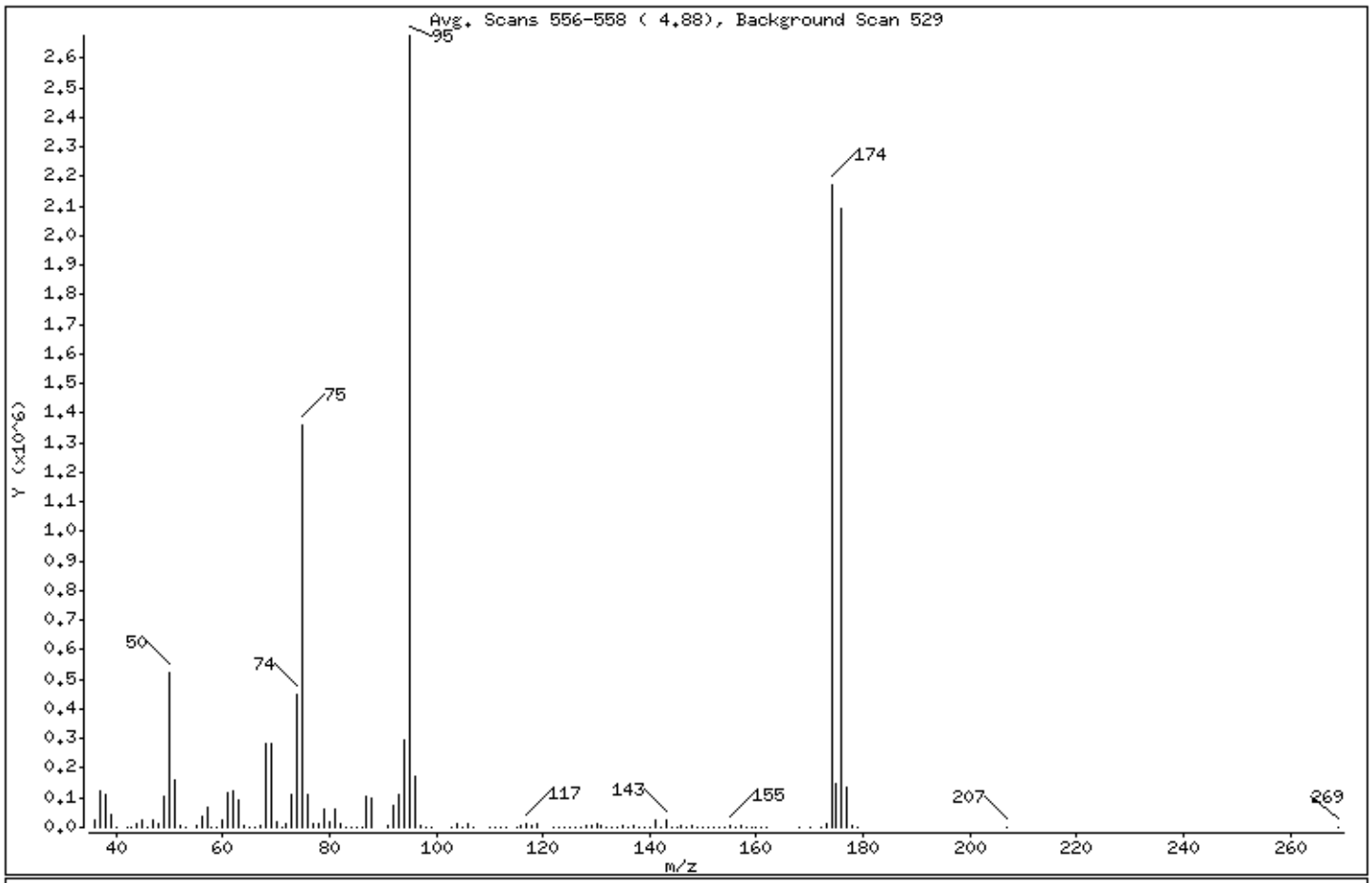
Sample Info: 5ML,BFB100,BFB100

Operator: V10 SRC: V10

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	19.62
75	30.00 - 80.00% of mass 95	50.71
96	5.00 - 9.00% of mass 95	6.44
173	Less than 2.00% of mass 174	0.42 (0.52)
174	50.00 - 120.00% of mass 95	81.25
175	5.00 - 9.00% of mass 174	5.61 (6.90)
176	95.00 - 101.00% of mass 174	78.14 (96.16)
177	5.00 - 9.00% of mass 176	5.04 (6.45)

Date : 26-APR-2013 08:35

Client ID: BFB100 Instrument: V8.i

Sample Info: 5ML,BFB100,BFB100

Operator: V10 SRC: V10

Column phase: DB-624 Column diameter: 0.25

Data File: V8B9380.d
Spectrum: Avg. Scans 556-558 (4.88), Background Scan 529
Location of Maximum: 95.00
Number of points: 127

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	22712	70.00	19928	107.00	2427	144.00	1546
37.00	121224	71.00	698	110.00	1126	145.00	1840
38.00	108784	72.00	12757	111.00	1593	146.00	3276
39.00	41008	73.00	110608	112.00	1028	147.00	1728
40.00	650	74.00	451776	113.00	1651	148.00	6183
42.00	22	75.00	1357312	115.00	2596	149.00	1824
43.00	836	76.00	113224	116.00	8601	150.00	2432
44.00	11835	77.00	14215	117.00	14993	151.00	146
45.00	22200	78.00	9411	118.00	8517	152.00	1199
46.00	1377	79.00	62784	119.00	11330	153.00	1838
47.00	27328	80.00	18168	122.00	505	154.00	1465
48.00	14863	81.00	63936	123.00	868	155.00	5614
49.00	105728	82.00	12777	124.00	1640	156.00	919
50.00	525056	83.00	1998	125.00	703	157.00	4785
51.00	157184	84.00	624	126.00	889	158.00	504
52.00	6790	85.00	569	127.00	598	159.00	3059
53.00	190	86.00	2649	128.00	8757	160.00	154
55.00	6307	87.00	102184	129.00	4152	161.00	3054
56.00	35856	88.00	97968	130.00	9514	162.00	112
57.00	69976	91.00	8237	131.00	3441	168.00	100
58.00	2524	92.00	72000	132.00	458	170.00	158
59.00	456	93.00	108112	133.00	50	172.00	1044
60.00	22600	94.00	294656	134.00	511	173.00	11299
61.00	119696	95.00	2676736	135.00	3666	174.00	2174976
62.00	122552	96.00	172288	136.00	834	175.00	150144
63.00	89864	97.00	5046	137.00	3739	176.00	2091520
64.00	7698	98.00	341	138.00	151	177.00	134848
65.00	1268	99.00	55	139.00	754	178.00	3407
66.00	24	103.00	651	140.00	1365	179.00	51
67.00	6493	104.00	9972	141.00	21920	207.00	331
68.00	280192	105.00	1408	142.00	2836	269.00	99
69.00	280256	106.00	9893	143.00	21952		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71381

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9385.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-71381

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9385.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9385.d
Report Date: 03-May-2013 11:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130426.B\V8B9385.d
Lab Smp Id: MB-71381 Client Smp ID: MB-71381
Inj Date : 26-APR-2013 11:02
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-71381,MB-71381,71381
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	4.715	4.712	(0.889)	532142	52.9936	53
$ 42 1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	117724	50.6887	51
* 46 Fluorobenzene	96	5.307	5.306	(1.000)	1982644	50.0000	
$ 58 Toluene-d8	98	6.786	6.785	(0.818)	1915282	50.4564	50
* 68 Chlorobenzene-d5	117	8.294	8.293	(1.000)	1429077	50.0000	
$ 79 Bromofluorobenzene	95	9.589	9.589	(1.156)	700574	49.7293	50
* 92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	645539	50.0000	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9385.d
Report Date: 03-May-2013 11:23

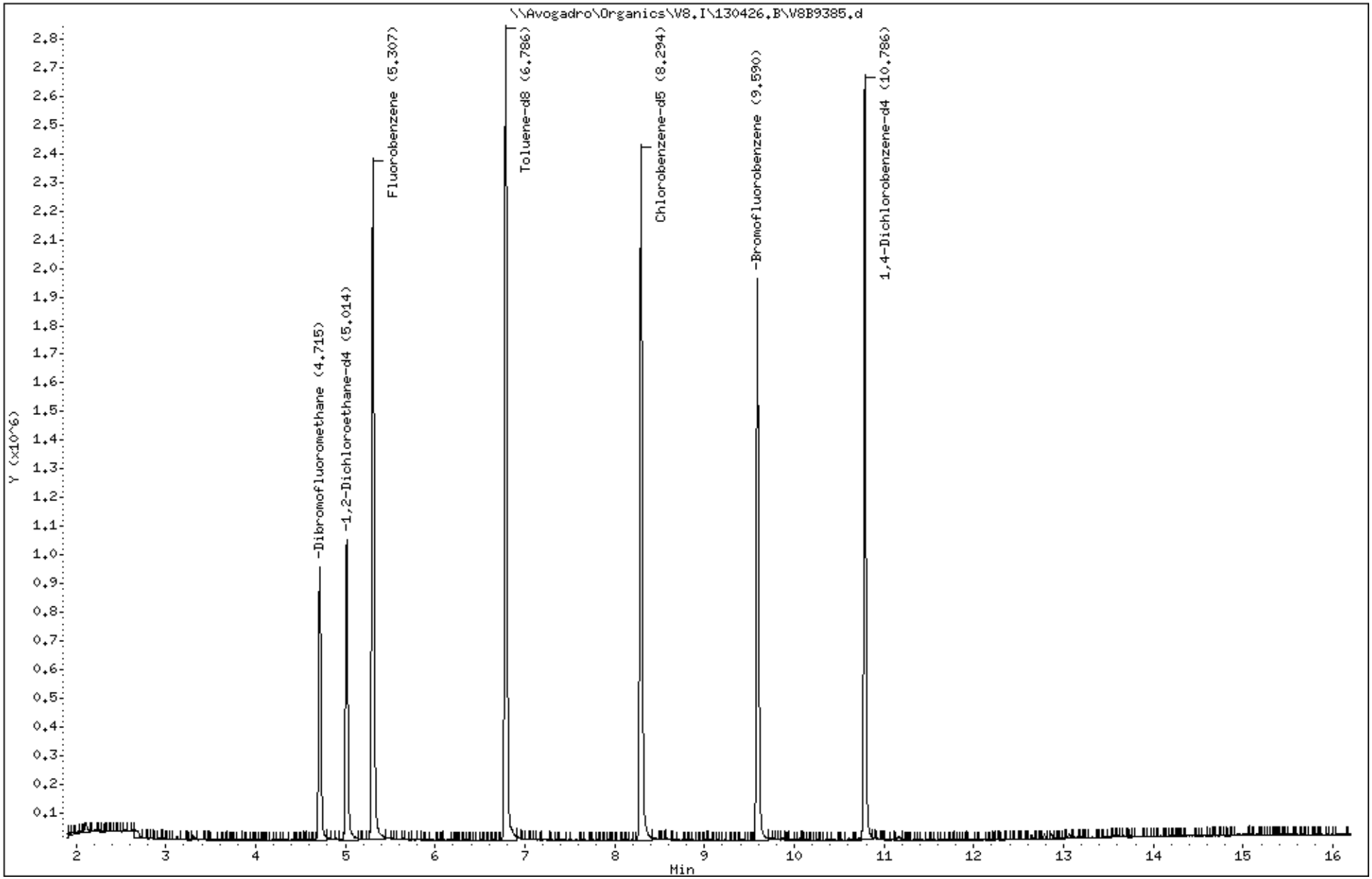
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130426.B\V8B9385.d
Lab Smp Id: MB-71381 Client Smp ID: MB-71381
Inj Date : 26-APR-2013 11:02
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-71381,MB-71381,71381
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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\130426.B\V8B9385.d
Date : 26-APR-2013 11:02
Client ID: MB-71381
Instrument: V8.i
Sample Info: 5ML,MB-71381,MB-71381,71381
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71381

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9382.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/26/2013

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	48	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	57	
75-69-4	Trichlorofluoromethane	59	
75-35-4	1,1-Dichloroethene	45	
67-64-1	Acetone	52	
74-88-4	Iodomethane	57	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	44	
156-60-5	trans-1,2-Dichloroethene	46	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	52	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	47	
594-20-7	2,2-Dichloropropane	53	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	45	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	44	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	49	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	54	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	39	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	48	
142-28-9	1,3-Dichloropropane	49	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-71381

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9382.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/26/2013

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	49	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	44	
179601-23-1	m,p-Xylene	86	
95-47-6	o-Xylene	45	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	46	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-86-1	Bromobenzene	46	
96-18-4	1,2,3-Trichloropropane	46	
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	48	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	47	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	48	
91-20-3	Naphthalene	44	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9382.d
Report Date: 03-May-2013 11:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130426.B\V8B9382.d
Lab Smp Id: LCS-71381 Client Smp ID: LCS-71381
Inj Date : 26-APR-2013 09:39
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCS-71381,LCS-71381,71381
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	1.654	1.654	(0.312)	407332	50.0000	48
2	Freon114	85	1.773	1.773	(0.334)	510848	50.0000	46
3	Chloromethane	50	1.827	1.827	(0.344)	553477	50.0000	48
4	Vinyl Chloride	62	1.924	1.924	(0.363)	584488	50.0000	51
5	Bromomethane	94	2.213	2.213	(0.417)	402021	50.0000	51
6	Chloroethane	64	2.300	2.300	(0.434)	356199	50.0000	57
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	834256	50.0000	59
126	Ethanol	46	2.641	2.638	(0.498)	213602	5000.00	5400(A)
8	Ether	59	2.737	2.737	(0.516)	495904	50.0000	52
9	Acrolein	56	2.840	2.840	(0.535)	628371	250.000	240
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	480290	50.0000	44
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	504186	50.0000	47
12	Acetone	58	2.956	2.962	(0.557)	83366	50.0000	52
13	Iodomethane	142	3.059	3.059	(0.576)	635239	50.0000	57
14	Carbon Disulfide	76	3.120	3.120	(0.588)	1626017	50.0000	45
15	Acetonitrile	41	3.210	3.210	(0.605)	1001113	500.000	470(A)
16	Allyl Chloride	39	3.210	3.210	(0.605)	666799	50.0000	49
17	Methyl Acetate	43	3.216	3.216	(0.606)	516305	50.0000	49
18	Methylene Chloride	84	3.303	3.306	(0.623)	601859	50.0000	44
19	tert-Butanol	59	3.368	3.364	(0.635)	97146	100.000	89
20	Acrylonitrile	53	3.496	3.493	(0.659)	217114	50.0000	49
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	536662	50.0000	46
22	Methyl tert-butyl ether	73	3.515	3.515	(0.663)	1705132	50.0000	50

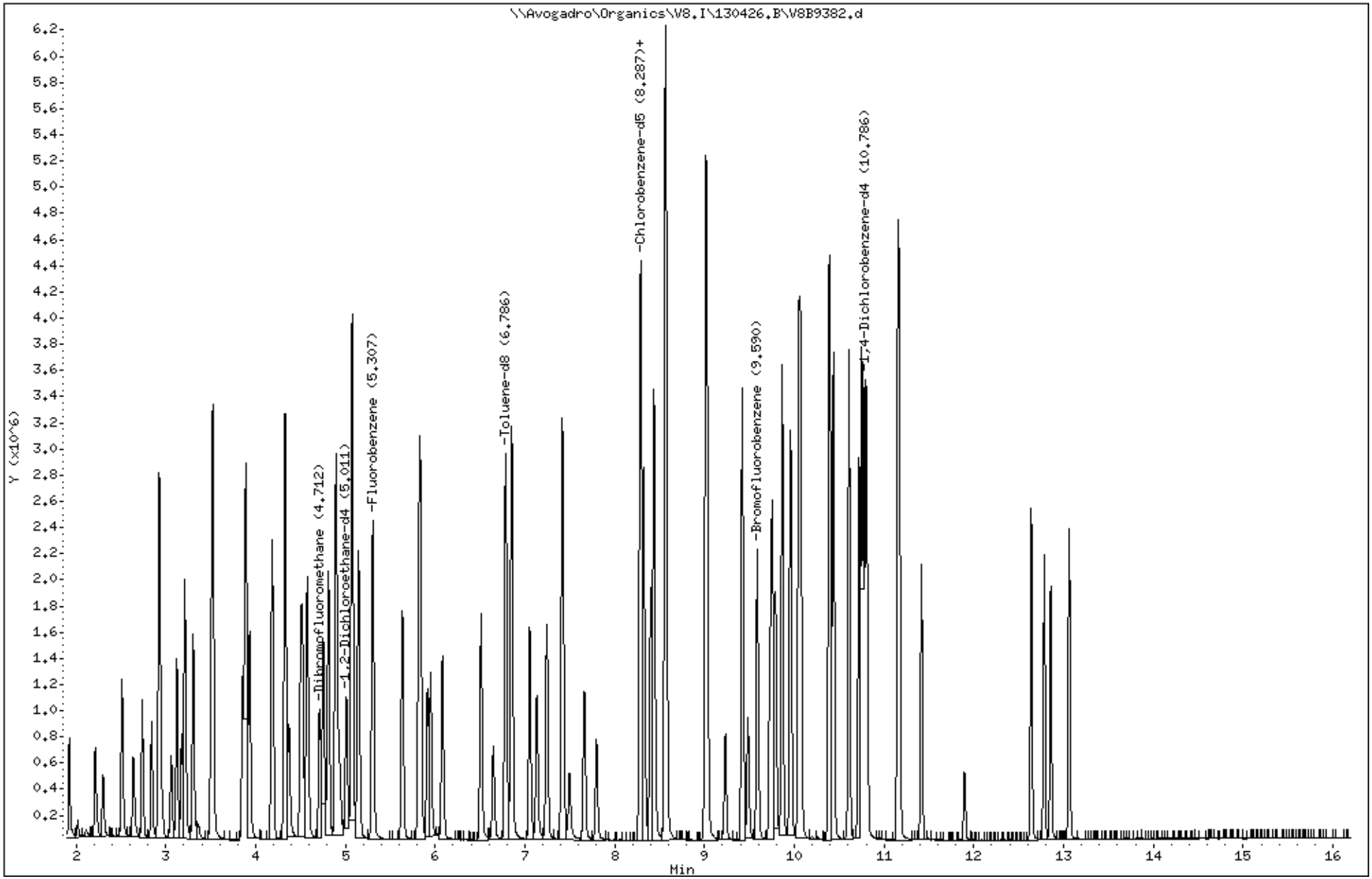
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.856	3.856	(0.727)	1087314	50.0000	49
	24	Vinyl acetate	43	3.888	3.885	(0.733)	1801068	50.0000	52
	25	Diisopropyl Ether	45	3.895	3.895	(0.734)	1971279	50.0000	51
	26	2-Chloro-1,3-Butadiene	53	3.933	3.933	(0.741)	858382	50.0000	48
	27	Ethyl tert-butyl ether	59	4.184	4.187	(0.789)	1882677	50.0000	51
	29	2,2-Dichloropropane	77	4.332	4.332	(0.816)	934971	50.0000	53
	28	cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	603796	50.0000	47
	30	2-Butanone	72	4.326	4.326	(0.815)	78155	50.0000	51
	32	Propionitrile	54	4.371	4.371	(0.824)	786813	500.000	470(A)
	33	Methacrylonitrile	41	4.503	4.503	(0.849)	676312	100.000	98
	34	Bromochloromethane	128	4.525	4.525	(0.853)	299433	50.0000	50
	31	Tetrahydrofuran	72	4.567	4.567	(0.861)	138660	100.000	93
	35	Chloroform	83	4.576	4.576	(0.862)	1116210	50.0000	51
$	36	Dibromofluoromethane	113	4.712	4.712	(0.888)	547800	50.0000	53
	37	1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	930077	50.0000	50
	38	Cyclohexane	56	4.811	4.811	(0.907)	886394	50.0000	46
	39	1,1-Dichloropropene	110	4.892	4.895	(0.922)	255954	50.0000	45
	40	Carbon Tetrachloride	117	4.898	4.898	(0.923)	790779	50.0000	52
	41	Isobutyl Alcohol	43	4.930	4.933	(0.929)	419394	1000.00	1000(AH)
$	42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	116342	50.0000	49
	43	Benzene	78	5.075	5.075	(0.956)	2241578	50.0000	44
	44	1,2-Dichloroethane	62	5.075	5.078	(0.956)	971909	50.0000	55
	45	tert-Amyl methyl ether	73	5.146	5.149	(0.970)	1624258	50.0000	50
M	50	1,2-Dichloroethene (Total)	96				1140458	100.000	93
*	46	Fluorobenzene	96	5.306	5.306	(1.000)	2027610	50.0000	
	47	Trichloroethene	130	5.634	5.634	(1.062)	537687	50.0000	46
	48	Methylcyclohexane	83	5.824	5.824	(1.098)	872125	50.0000	48
	49	1,2-Dichloropropane	63	5.837	5.840	(1.100)	618735	50.0000	49
	51	Methyl Methacrylate	69	5.914	5.914	(1.115)	457376	50.0000	48
	52	Dibromomethane	93	5.946	5.949	(1.121)	399842	50.0000	52
	53	1,4-Dioxane	88	5.953	5.949	(1.122)	117126	1000.00	880(A)
	54	Bromodichloromethane	83	6.081	6.081	(1.146)	890942	50.0000	54
	55	2-Chloroethyl vinyl ether	63	6.512	6.512	(1.227)	5323	50.0000	49(Q)
	56	cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	1004671	50.0000	51
	57	4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	529132	50.0000	48
$	58	Toluene-d8	98	6.785	6.785	(0.818)	2004908	50.0000	49
	59	Toluene	91	6.853	6.853	(1.291)	2331688	50.0000	39
	60	trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	951424	50.0000	53
	61	Ethyl Methacrylate	69	7.133	7.133	(1.344)	600332	50.0000	48
	62	1,1,2-Trichloroethane	97	7.245	7.245	(1.365)	523746	50.0000	48
	63	Tetrachloroethene	164	7.412	7.416	(0.894)	438827	50.0000	44
	64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	946441	50.0000	49
	65	2-Hexanone	43	7.496	7.496	(0.904)	397174	50.0000	49
	66	Dibromochloromethane	129	7.660	7.663	(0.924)	631507	50.0000	51
	67	1,2-Dibromoethane	107	7.798	7.798	(0.941)	566372	50.0000	48
	69	1-Chlorohexane	91	8.280	8.284	(0.999)	738023	50.0000	44
*	68	Chlorobenzene-d5	117	8.290	8.293	(1.000)	1529212	50.0000	
	70	Chlorobenzene	112	8.322	8.322	(1.004)	1514776	50.0000	46
	71	1,1,1,2-Tetrachloroethane	131	8.403	8.406	(1.014)	571899	50.0000	50
	72	Ethylbenzene	106	8.438	8.438	(1.018)	771058	50.0000	44
	73	m,p-Xylene	106	8.567	8.567	(1.033)	1908257	100.000	86
	74	o-Xylene	106	9.014	9.014	(1.087)	946996	50.0000	44
	75	Styrene	104	9.026	9.026	(1.089)	1606894	50.0000	46
	76	Bromoform	173	9.232	9.232	(1.114)	394915	50.0000	50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Isopropylbenzene	105	9.422	9.422	(1.137)	2407551	50.0000	47
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	225181	50.0000	48
$	79 Bromofluorobenzene	95	9.586	9.589	(1.156)	779409	50.0000	52
	80 1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	731079	50.0000	46
	81 Bromobenzene	156	9.753	9.756	(0.904)	644900	50.0000	46
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.907)	913268	50.0000	46
	83 n-Propylbenzene	120	9.866	9.866	(0.915)	620017	50.0000	46
	84 2-Chlorotoluene	126	9.959	9.959	(0.923)	590149	50.0000	46
	85 1,3,5-Trimethylbenzene	105	10.049	10.052	(0.932)	2046267	50.0000	47
	86 4-Chlorotoluene	126	10.071	10.071	(0.934)	617937	50.0000	47
M	94 Xylene (Total)	106				2855253	150.000	130
	87 tert-Butylbenzene	119	10.387	10.390	(0.963)	2077312	50.0000	48
	88 1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	2075422	50.0000	47
	89 sec-Butylbenzene	105	10.608	10.608	(0.984)	2538934	50.0000	48
	90 1,3-Dichlorobenzene	146	10.721	10.721	(0.994)	1146124	50.0000	47
	91 4-Isopropyltoluene	119	10.753	10.753	(0.997)	2085023	50.0000	50
*	92 1,4-Dichlorobenzene-d4	152	10.785	10.782	(1.000)	758610	50.0000	
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1207279	50.0000	47
	95 n-Butylbenzene	91	11.155	11.152	(1.034)	1989700	50.0000	53
	96 1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	1135889	50.0000	48
	97 Hexachloroethane	117	11.415	11.419	(1.058)	418665	50.0000	51
	98 1,2-Dibromo-3-chloropropane	75	11.894	11.894	(1.103)	131267	50.0000	46
	141 1,3,5-Trichlorobenzene	182	12.640	12.640	(2.382)	638104	50.0000	52(A)
	99 1,2,4-Trichlorobenzene	180	12.640	12.637	(1.172)	670478	50.0000	49
	100 Hexachlorobutadiene	225	12.785	12.785	(1.185)	351184	50.0000	52
	101 Naphthalene	128	12.856	12.856	(1.192)	1310674	50.0000	44
	102 1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	620249	50.0000	48

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\V8.I\130426.B\V8B9382.d
Date : 26-APR-2013 09:39
Client ID: LCS-71381
Instrument: V8.i
Sample Info: 5ML,LCS-71381,LCS-71381,71381
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71381

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9383.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/26/2013

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	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	56	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	44	
67-64-1	Acetone	48	
74-88-4	Iodomethane	59	
75-15-0	Carbon disulfide	43	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	46	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	56	
78-93-3	2-Butanone	50	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	53	
74-97-5	Bromochloromethane	52	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	44	
56-23-5	Carbon tetrachloride	50	
107-06-2	1,2-Dichloroethane	58	
71-43-2	Benzene	46	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	56	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	54	
108-88-3	Toluene	40	
10061-02-6	trans-1,3-Dichloropropene	55	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-71381

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-71381

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9383.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/26/2013

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	54	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	45	
179601-23-1	m,p-Xylene	88	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	48	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	48	
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	49	
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	50	
120-82-1	1,2,4-Trichlorobenzene	51	
87-68-3	Hexachlorobutadiene	48	
87-61-6	1,2,3-Trichlorobenzene	51	
91-20-3	Naphthalene	49	

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9383.d
Report Date: 03-May-2013 11:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\130426.B\V8B9383.d
Lab Smp Id: LCSD-71381 Client Smp ID: LCSD-71381
Inj Date : 26-APR-2013 10:06
Operator : V10   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCSD-71381,LCSD-71381,71381
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\130426.B\v108260Gadd-6lvl.m
Meth Date : 03-May-2013 11:22 amarquis Quant Type: ISTD
Cal Date : 17-APR-2013 15:07 Cal File: V8B9281.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	1.654	1.654	(0.312)	383921	50.0000	45
2	Freon114	85	1.773	1.773	(0.334)	484379	50.0000	43
3	Chloromethane	50	1.827	1.827	(0.344)	569734	50.0000	48
4	Vinyl Chloride	62	1.924	1.924	(0.363)	571032	50.0000	49
5	Bromomethane	94	2.213	2.213	(0.417)	407668	50.0000	51
6	Chloroethane	64	2.300	2.300	(0.434)	353231	50.0000	56
7	Trichlorofluoromethane	101	2.512	2.512	(0.473)	789957	50.0000	55
126	Ethanol	46	2.638	2.638	(0.497)	239813	5000.00	5900(A)
8	Ether	59	2.737	2.737	(0.516)	530706	50.0000	55
9	Acrolein	56	2.840	2.840	(0.535)	714762	250.000	260
10	1,1-Dichloroethene	96	2.930	2.930	(0.552)	479029	50.0000	44
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.924	2.924	(0.551)	488466	50.0000	45
12	Acetone	58	2.962	2.962	(0.558)	76907	50.0000	48
13	Iodomethane	142	3.059	3.059	(0.576)	660314	50.0000	59
14	Carbon Disulfide	76	3.120	3.120	(0.588)	1563674	50.0000	43
15	Acetonitrile	41	3.210	3.210	(0.605)	1066989	500.000	500(AQ)
16	Allyl Chloride	39	3.210	3.210	(0.605)	702243	50.0000	51
17	Methyl Acetate	43	3.216	3.216	(0.606)	588520	50.0000	55
18	Methylene Chloride	84	3.306	3.306	(0.623)	638035	50.0000	46
19	tert-Butanol	59	3.364	3.364	(0.634)	108638	100.000	98
20	Acrylonitrile	53	3.493	3.493	(0.658)	242347	50.0000	54
21	trans-1,2-Dichloroethene	96	3.525	3.525	(0.664)	549186	50.0000	46
22	Methyl tert-butyl ether	73	3.515	3.515	(0.663)	1879431	50.0000	55

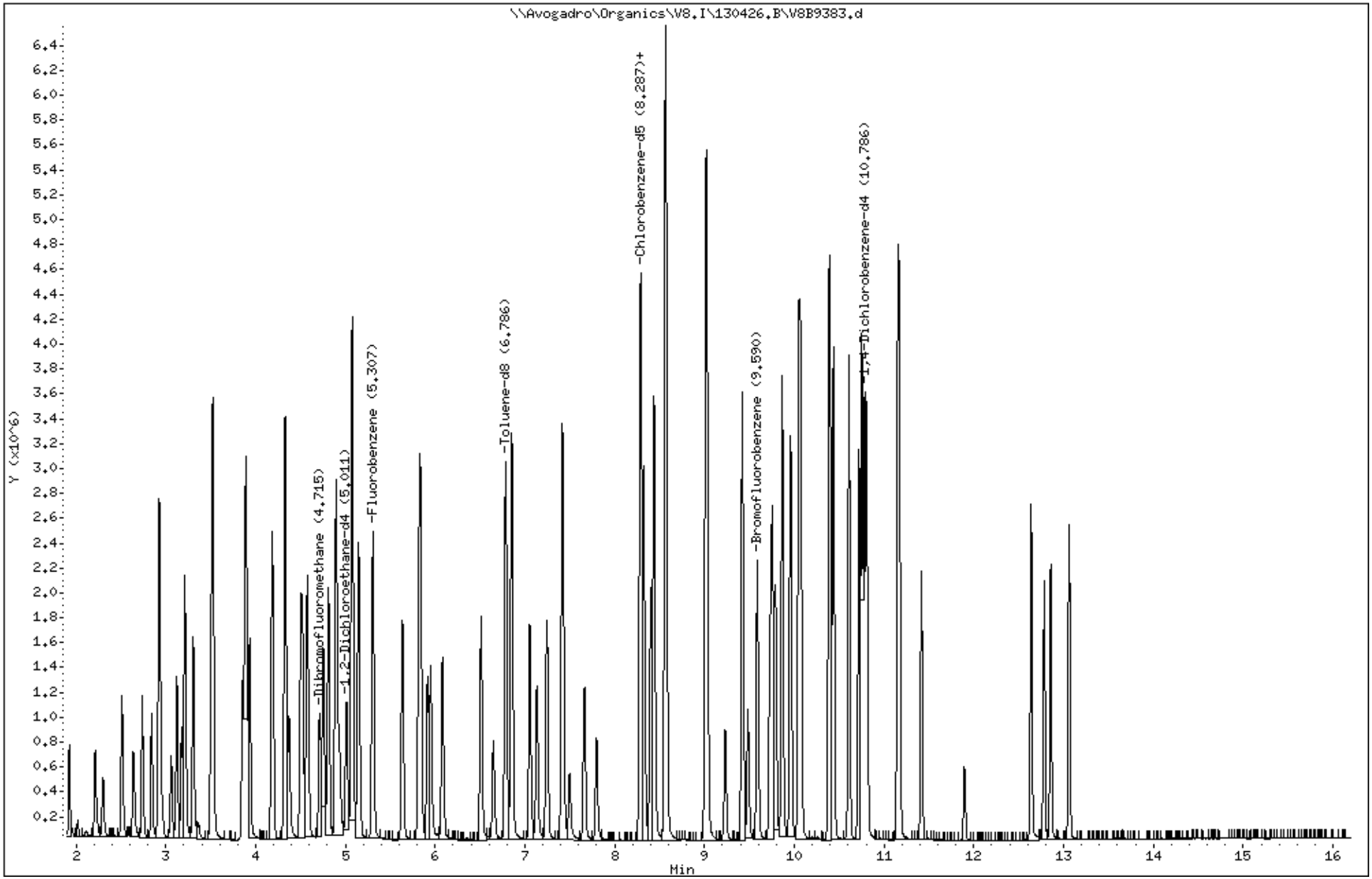
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.856	3.856	(0.727)	1145419	50.0000	51
	24	Vinyl acetate	43	3.885	3.885	(0.732)	1962880	50.0000	56
	25	Diisopropyl Ether	45	3.895	3.895	(0.734)	2122681	50.0000	54
	26	2-Chloro-1,3-Butadiene	53	3.933	3.933	(0.741)	850313	50.0000	47
	27	Ethyl tert-butyl ether	59	4.187	4.187	(0.789)	2035623	50.0000	55
	29	2,2-Dichloropropane	77	4.332	4.332	(0.816)	945160	50.0000	53
	28	cis-1,2-Dichloroethene	96	4.326	4.326	(0.815)	638588	50.0000	49
	30	2-Butanone	72	4.326	4.326	(0.815)	77501	50.0000	50
	32	Propionitrile	54	4.371	4.371	(0.824)	901290	500.000	530(A)
	33	Methacrylonitrile	41	4.503	4.503	(0.849)	782141	100.000	110
	34	Bromochloromethane	128	4.525	4.525	(0.853)	315843	50.0000	52
	31	Tetrahydrofuran	72	4.567	4.567	(0.861)	153957	100.000	100
	35	Chloroform	83	4.576	4.576	(0.862)	1168648	50.0000	53
$	36	Dibromofluoromethane	113	4.712	4.712	(0.888)	559941	50.0000	54
	37	1,1,1-Trichloroethane	97	4.753	4.753	(0.896)	936892	50.0000	50
	38	Cyclohexane	56	4.811	4.811	(0.907)	880855	50.0000	45
	39	1,1-Dichloropropene	110	4.895	4.895	(0.922)	254505	50.0000	44
	40	Carbon Tetrachloride	117	4.898	4.898	(0.923)	773639	50.0000	50
	41	Isobutyl Alcohol	43	4.933	4.933	(0.930)	486415	1000.00	1200(AH)
$	42	1,2-Dichloroethane-d4	102	5.014	5.014	(0.945)	120486	50.0000	50
	43	Benzene	78	5.075	5.075	(0.956)	2369777	50.0000	46
	44	1,2-Dichloroethane	62	5.078	5.078	(0.957)	1046129	50.0000	58
	45	tert-Amyl methyl ether	73	5.149	5.149	(0.970)	1764873	50.0000	53
M	50	1,2-Dichloroethene (Total)	96				1187774	100.000	95
*	46	Fluorobenzene	96	5.306	5.306	(1.000)	2057084	50.0000	
	47	Trichloroethene	130	5.634	5.634	(1.062)	545701	50.0000	46
	48	Methylcyclohexane	83	5.824	5.824	(1.098)	876333	50.0000	48
	49	1,2-Dichloropropane	63	5.840	5.840	(1.101)	652415	50.0000	51
	51	Methyl Methacrylate	69	5.914	5.914	(1.115)	508768	50.0000	53
	52	Dibromomethane	93	5.949	5.949	(1.121)	434192	50.0000	55
	53	1,4-Dioxane	88	5.949	5.949	(1.121)	136439	1000.00	1000(A)
	54	Bromodichloromethane	83	6.081	6.081	(1.146)	941647	50.0000	56
	55	2-Chloroethyl vinyl ether	63	6.512	6.512	(1.227)	6395	50.0000	58(T)
	56	cis-1,3-Dichloropropene	75	6.509	6.509	(1.227)	1068374	50.0000	53
	57	4-Methyl-2-pentanone	43	6.647	6.647	(1.253)	595199	50.0000	54
$	58	Toluene-d8	98	6.785	6.785	(0.818)	2043927	50.0000	49
	59	Toluene	91	6.853	6.853	(1.291)	2410784	50.0000	40
	60	trans-1,3-Dichloropropene	75	7.052	7.052	(1.329)	1015945	50.0000	55
	61	Ethyl Methacrylate	69	7.133	7.133	(1.344)	666152	50.0000	52
	62	1,1,2-Trichloroethane	97	7.245	7.245	(1.365)	567728	50.0000	52
	63	Tetrachloroethene	164	7.416	7.416	(0.894)	443249	50.0000	44
	64	1,3-Dichloropropane	76	7.422	7.422	(0.895)	1023621	50.0000	52
	65	2-Hexanone	43	7.496	7.496	(0.904)	417735	50.0000	50
	66	Dibromochloromethane	129	7.663	7.663	(0.924)	679001	50.0000	54
	67	1,2-Dibromoethane	107	7.798	7.798	(0.940)	613311	50.0000	51
	69	1-Chlorohexane	91	8.284	8.284	(0.999)	752778	50.0000	44
*	68	Chlorobenzene-d5	117	8.293	8.293	(1.000)	1563734	50.0000	
	70	Chlorobenzene	112	8.322	8.322	(1.003)	1598452	50.0000	48
	71	1,1,1,2-Tetrachloroethane	131	8.406	8.406	(1.014)	595074	50.0000	50
	72	Ethylbenzene	106	8.438	8.438	(1.017)	804454	50.0000	45
	73	m,p-Xylene	106	8.567	8.567	(1.033)	2007140	100.000	88
	74	o-Xylene	106	9.014	9.014	(1.087)	994278	50.0000	46
	75	Styrene	104	9.026	9.026	(1.088)	1696907	50.0000	48
	76	Bromoform	173	9.232	9.232	(1.113)	430495	50.0000	53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Isopropylbenzene	105	9.422	9.422	(1.136)	2527822	50.0000	48
	78 trans-1,4-Dichloro-2-butene	75	9.486	9.486	(1.144)	245178	50.0000	51
$	79 Bromofluorobenzene	95	9.589	9.589	(1.156)	796084	50.0000	52
	80 1,1,2,2-Tetrachloroethane	83	9.731	9.731	(0.902)	815778	50.0000	50
	81 Bromobenzene	156	9.756	9.756	(0.905)	679101	50.0000	48
	82 1,2,3-Trichloropropane	75	9.785	9.785	(0.908)	1008847	50.0000	49
	83 n-Propylbenzene	120	9.866	9.866	(0.915)	644001	50.0000	46
	84 2-Chlorotoluene	126	9.959	9.959	(0.924)	619694	50.0000	47
	85 1,3,5-Trimethylbenzene	105	10.052	10.052	(0.932)	2139701	50.0000	48
	86 4-Chlorotoluene	126	10.071	10.071	(0.934)	641891	50.0000	48
M	94 Xylene (Total)	106				3001418	150.000	130
	87 tert-Butylbenzene	119	10.390	10.390	(0.964)	2157366	50.0000	49
	88 1,2,4-Trimethylbenzene	105	10.435	10.435	(0.968)	2168266	50.0000	48
	89 sec-Butylbenzene	105	10.608	10.608	(0.984)	2631317	50.0000	49
	90 1,3-Dichlorobenzene	146	10.721	10.721	(0.994)	1208182	50.0000	49
	91 4-Isopropyltoluene	119	10.753	10.753	(0.997)	2155644	50.0000	50
*	92 1,4-Dichlorobenzene-d4	152	10.782	10.782	(1.000)	774409	50.0000	
	93 1,4-Dichlorobenzene	146	10.808	10.808	(1.002)	1263026	50.0000	48
	95 n-Butylbenzene	91	11.152	11.152	(1.034)	2032751	50.0000	53
	96 1,2-Dichlorobenzene	146	11.171	11.171	(1.036)	1217801	50.0000	50
	97 Hexachloroethane	117	11.419	11.419	(1.059)	428984	50.0000	51
	98 1,2-Dibromo-3-chloropropane	75	11.894	11.894	(1.103)	143663	50.0000	50
	141 1,3,5-Trichlorobenzene	182	12.640	12.640	(2.382)	681353	50.0000	54(A)
	99 1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	708413	50.0000	51
	100 Hexachlorobutadiene	225	12.785	12.785	(1.186)	333285	50.0000	48
	101 Naphthalene	128	12.856	12.856	(1.192)	1488477	50.0000	49
	102 1,2,3-Trichlorobenzene	180	13.062	13.062	(1.211)	666825	50.0000	51

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V8.I\130426.B\V8B9383.d
Date : 26-APR-2013 10:06
Client ID: LCSD-71381
Instrument: V8.i
Sample Info: 5ML,LCSD-71381,LCSD-71381,71381
Purge Volume: 5.0
Operator: V10 SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



[redacted]NSTI[redacted]ENT[redacted] [redacted]ctrun[redacted]lytic[redacted]. RI [redacted]ion

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W|624 ANALYST: [redacted]
ICAL DATE: 4-17-13

BATCH: 130417.B

Start: 17-APR-13 11:11
End: 17-APR-13 21:53

Comments:

Standards: STD VW130417A 2 uL
ISTD VW130417A [redacted] uL
SURR VW130417A [redacted] uL
_____ ___ uL

Reviewed By: [redacted] 4/22/13 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
V8B9274	11:11	BFB10K	BFB10K		AQ									1		OK	
V8B9275	12:22	VSTD05010K	VSTD05010K		AQ		100	100	100					1		OK	
V8B9276	12:49	VSTD02010K	VSTD02010K		AQ		100	99	98					1		OK	
V8B9277	13:17	VSTD00510K	VSTD00510K		AQ		99	98	94					1		OK	
V8B9279	14:12	VSTD00110K	VSTD00110K		AQ		101	98	92					1		OK	
V8B9280	14:39	VSTD20010K	VSTD20010K		AQ		102	105	106					1		OK	
V8B9281	15:07	VSTD10010K	VSTD10010K		AQ		102	103	103					1		OK	
V8B9282	15:35	VICV05010K	VICV05010K		AQ		101	101	100	100	100	101	101	1	ER	RR NEXT DAY	
V8B9283	16:02	LCS-71259	LCS-71259	71259	AQ		102	101	101	100	101	102	101	1	E	OK	
V8B9284	16:30	LCSD-71259	LCSD-71259	71259	AQ		101	100	100	100	97	100	101	1	E	OK	
V8B9285	16:57	MB-71259	MB-71259	71259	AQ		101	99	91	99	96	100	96	1	E	INT ITEM	
V8B9286	17:25	MB-71259	MB-71259	71259	AQ		98	97	89	99	100	101	97	1		OK	2
V8B9287	17:52	M0537-02A	TRIP BLANK	71259	AQ	1	98	97	88	100	101	102	97	1		OK	
V8B9288	18:19	M0498-02A	TRIP BLANKS	71259	AQ	1	97	95	88	99	99	102	99	1		OK	
V8B9289	18:46	M0498-01A	ET01 GRAB	71259	AQ	1	96	94	86	100	100	100	98	1		OK	
V8B9290	19:13	M0537-01A	WW #1	71259	AQ	1	94	93	84	100	100	102	97	1		OK	
V8B9291	19:40	M0529-01B	SB67585-01	71259	AQ	1	94	91	86	100	102	102	98	1		OK	
V8B9292	20:06	M0530-01B	SB67594-01	71259	AQ	1	94	93	87	101	100	101	98	1		OK	
V8B9293	20:33	M0477-01C	PTMT	71259	AQ	1	93	91	85	101	98	102	98	10		OK	
V8B9294	21:00	M0477-02C	BET	71259	AQ	1	90	88	81	101	98	102	97	10		OK	
V8B9295	21:27	M0477-03C	POS-T	71259	AQ	1	92	90	82	101	99	102	97	10		OK	2
V8B9296	21:53	VBLK	VBLK		AQ		89	88	80	103	99	103	98	1		INT ITEM	

* - 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

4-18-13

[redacted] INJECTION LOG [redacted] VOLATILES LABORATORY

M0592

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 4-15-13

ANALYST: [redacted]

BATCH: 130426.B

Start: 26-APR-13 08:35
End: 26-APR-13 20:58

Comments:

Standards: [redacted] 2 uL
[redacted] 10 uL
[redacted] 50 uL
[redacted] uL

Reviewed By: 04/29/13 Manual Integration: NA MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8B9380	08:35	BFB100	BFB100		AQ									1		OK	
V8B9381	08:54	VSTD050100	VSTD050100		AQ		100	100	100					1		OK	
V8B9382	09:39	LCS-71381	LCS-71381	71381	AQ		103	103	101	107	98	99	103	1	ER	OK	
V8B9383	10:06	LCSD-71381	LCSD-71381	71381	AQ		105	105	103	107	100	98	103	1	ER	OK	
V8B9384	10:34	MB-71381	MB-71381	71381	AQ		104	101	89	106	102	101	99	1	E	NOT USED	
V8B9385	11:02	MB-71381	MB-71381	71381	AQ		101	96	86	106	101	101	99	1		OK	2
V8B9386	11:29	M0592-04A	TRIP BLANK	71381	AQ	1	99	96	84	108	102	100	99	1		OK	
V8B9387	11:57	M0592-01A	MW-3R-042413	71381	AQ	1	98	93	83	107	102	101	99	1		OK	
V8B9388	12:24	M0592-02A	MW-7-042413	71381	AQ	1	95	92	82	108	102	100	99	1		OK	
V8B9389	12:51	M0592-03A	MW-8-042413	71381	AQ	1	95	91	80	108	100	100	99	1		OK	
V8B9390	13:19	M0603-01A	EFFLUENT 12	71391	AQ	1	92	88	77	108	104	102	100	1		OK	
V8B9391	13:48	M0591-04A	GW42413MY005	71381	AQ	2	90	87	75	109	102	101	98	1		OK	
V8B9392	14:16	M0591-02ADL	GW42413MY003DL	71381	AQ	2	91	87	76	109	102	100	98	4		DCE=69 OK	
V8B9393	14:43	M0591-03ADL	GW42413MY004DL	71381	AQ	2	90	86	76	109	100	101	100	4		DCE=69 OK	
V8B9394	15:10	M0591-14A	TB042513	71381	AQ	1	89	86	75	111	103	101	98	1		OK	
V8B9395	15:37	M0602-01A	OU6-042413TB	71381	AQ	1	87	85	74	111	101	101	99	1		OK	
V8B9396	16:04	M0591-09A	GW42513MY009	71381	AQ	1	87	85	77	111	103	100	101	1		OK	
V8B9397	16:31	M0591-10A	GW42513MY010	71381	AQ	1	87	84	74	111	102	101	99	1		OK	
V8B9398	16:58	M0591-11A	GW42513MY011	71381	AQ	1	85	84	73	112	104	99	100	1	E	VINYL CHLORIDE=100 TOO HIGH	
V8B9399	17:25	M0591-12A	GW42513MY012	71381	AQ	1	84	83	72	111	102	98	98	1		OK CO. UNDER T.L.	
V8B9400	17:52	M0591-13A	GW42513MY013	71381	AQ	1	84	81	70	110	99	101	99	1		OK	
V8B9401	18:19	M0602-02A	OU6-042413FB	71381	AQ	1	81	79	69	113	102	101	99	1		OK	
V8B9402	18:46	M0602-04A	SS30-MW-17S	71381	AQ	1	80	78	72	113	103	100	102	1		OK	
V8B9403	19:13	M0602-06A	SS30-MW17D	71381	AQ	1	85	84	73	112	99	100	97	1		OK	
V8B9404	19:39	M0602-08A	SS30-MW06D	71381	AQ	1	85	83	71	112	100	100	99	1		OK	
V8B9405	20:06	M0602-12A	SS40-MW02D	71381	AQ	1	83	81	72	113	103	100	100	1		OK	2
V8B9406	20:32	VBLK	VBLK		AQ		82	79	69	112	100	101	99	1		NOT USED	
V8B9407	20:58	VBLK	VBLK		AQ		81	79	68	112	101	102	99	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

4-29-13

Page 102 of 116

Logbook ID 90.0210-03/13

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
4/24/13	5016240	RIRRC	01	MC	JH	H	R10	
	M0580	Land Remediation	01			H	R10	
	M0581	EARTH_NY	01-10			H	R10	
	M0582	GZA	01-08	MC		H	R10	
4/24/13	M0586	EARTHNY	01-04	AED		H	R8	
	M0587	Labella	01			H	R8	
	M0588	LaBella	01-03			US	R3	
4/24/13	M0569	GZA	01-05	AED	JH	H	R8	
4/25/13	M0592	GZA	01-04	JH	CG	H	R3	
	M0591	CMA	01-08	JH	CG	H	R3	
	5016242	RIRRC	01	JH	CG	H	R3	
4/25/13	M0590	Stantec	01-05	AED	JH	US	R3	
4/26/13	M0603	Land Remediation	01	AED	JH	H	R8	
4-26-13	M0589	EPA	01-04,07	JH	CG	T	R3	

Logbook ID 90.0191-01/13

Reviewed By: JH 4-30-13

"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

* Wet Chemistry *

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: M0592

SM 3500D

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: SM 3500D

IV. PREPARATION

Samples were prepared following procedures in laboratory test code: SM 3500D

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: SPEC2
Instrument Type: SP

Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on samples: MW-3R-042413 (M0592-01BMS) and MW-3R-042413 (M0592-01BMSD).

Percent recoveries were within the QC limits.

Replicate RPDs were within the advisory QC limits.

D. Duplicate sample:

Duplicate analyses were performed on sample: MW-3R-042413 (M0592-01BDUP).

Relative percent differences were within the QC limits.

E. Dilutions:

No sample required dilution in this SDG.

F. Samples:

No other unusual occurrences were noted during sample analysis.

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

Signed: 

Date: 05/08/2013

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-042413 **Project:** Maple Street
Lab ID: M0592-01 **Collection Date:** 04/24/13 11:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/25/2013 10:22	71386

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-042413 **Project:** Maple Street
Lab ID: M0592-02 **Collection Date:** 04/24/13 11:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.054		0.030	mg/L	1	04/25/2013 10:29	71386

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-042413 **Project:** Maple Street
Lab ID: M0592-03 **Collection Date:** 04/24/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.17		0.030	mg/L	1	04/25/2013 10:31	71386

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

M0592

CLIENT: GZA GeoEnvironmental of NY Buffalo
Work Order: M0592
Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+

SM 3500D -- CR VI by Colorimetric Method

Sample ID: **MB-71386** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **04/25/13 10:15** Run ID: **SPEC2_130425E**
Client ID: **MB-71386** Batch ID: **71386** Units: **mg/L** Analysis Date: **04/25/13 10:18** SeqNo: **1892248**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030	0	0	0	0	0	0			

Sample ID: **LCS-71386** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **04/25/13 10:15** Run ID: **SPEC2_130425E**
Client ID: **LCS-71386** Batch ID: **71386** Units: **mg/L** Analysis Date: **04/25/13 10:20** SeqNo: **1892249**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3990	0.030	0.030	0.4000	0	99.8	80	120	0			

Sample ID: **M0592-01BDUP** SampType: **DUP** TestCode: **SM3500_CR+** Prep Date: **04/25/13 10:15** Run ID: **SPEC2_130425E**
Client ID: **MW-3R-042413** Batch ID: **71386** Units: **mg/L** Analysis Date: **04/25/13 10:24** SeqNo: **1892251**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030	0	0	0	0	0	0	0	20	

Sample ID: **M0592-01BMS** SampType: **MS** TestCode: **SM3500_CR+** Prep Date: **04/25/13 10:15** Run ID: **SPEC2_130425E**
Client ID: **MW-3R-042413** Batch ID: **71386** Units: **mg/L** Analysis Date: **04/25/13 10:25** SeqNo: **1892252**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3933	0.030	0.030	0.4000	0	98.3	75	125	0			

Sample ID: **M0592-01BMSD** SampType: **MSD** TestCode: **SM3500_CR+** Prep Date: **04/25/13 10:15** Run ID: **SPEC2_130425E**
Client ID: **MW-3R-042413** Batch ID: **71386** Units: **mg/L** Analysis Date: **04/25/13 10:27** SeqNo: **1892253**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3846	0.030	0.030	0.4000	0	96.2	75	125	0.3933	2.22	20	

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

m13.05.07.A

SPEC2-130425E

MO592

Spectrum Analytical, Inc. RI Div. **Hexavalent Chromium Colorimetric Analysis Logbook**

Analysis Date: 4/25/13 10:15 > 10:35 **Analyst:** RJ

Sample ID	pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
S0	1	25 ml	0.000	-0.018	-	0		
S0.2	1	0.4/25	0.151	0.2	-	0.2	100%	
MB-71386	1	25	0.000	-0.018	-	0		
LCS-71386	1	0.01/25	0.289	0.399	-	0.399	99.8%	
MO592-01B	1	25	0.011	-0.002	-	0		
-01BDup	1	25	0.012	-0.0004	-	0		
-01BMS	1	0.01/25	0.285	0.393	-	0.393	98.3%	
-01BMSD	1	0.01/25	0.279	~~0.279~~ 0.385	-	0.385	96.3%	
-02B	1	25	0.025	0.018	-	0.018		
-03B	1	25	0.129	0.168	-	0.168		
S0.4	1	0.8/25	0.295	0.408	-	0.408	102%	

RS 4/25/13

Wavelength= 540 cm

Pathlength= 1.0 cm

MRL= 0.03 mg/l

ChromaVer 3 Lot #: A2258

Diphenylcarbizide Solution ID: -

Method# : SM3500 Cr B / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

m= 0.609335

b= 0.01233

r= 0.999830

CCV Iwp12x07A

LCS, MS > Iwp10122713 10ml PV=0.4mg/L

Logbook ID: 100.0056-10/12

LIMS entry: Jmm 4/29/13

Reviewed By: HZA 4/26/13

Page 14 of 116

Internal Chain of Custody

Client: GZA_BUFFALO

Work Order: M0592 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
01A	002	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
01B	001	SM3500_CR+	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
01B	001	SM3500_CR+	Out	Huiyan Zhao Anderson	4/25/2013 12:13:32 PM
01B	001	SM3500_CR+	In	Huiyan Zhao Anderson	4/25/2013 12:13:41 PM
02A	001	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
02A	002	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
02B	001	SM3500_CR+	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
02B	001	SM3500_CR+	Out	Huiyan Zhao Anderson	4/25/2013 12:13:32 PM
02B	001	SM3500_CR+	In	Huiyan Zhao Anderson	4/25/2013 12:13:41 PM
03A	001	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
03A	002	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
03B	001	SM3500_CR+	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM
03B	001	SM3500_CR+	Out	Huiyan Zhao Anderson	4/25/2013 12:13:32 PM
03B	001	SM3500_CR+	In	Huiyan Zhao Anderson	4/25/2013 12:13:41 PM
04A	001	SW8260_W	In	LOGIN: rdorsey	4/25/2013 10:21:00 AM

Last Page of Data Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

July 13, 2013

Daniel Troy
GZA GeoEnvironmental of New York
535 Washington St. 11th Floor
Buffalo, NY 14203

RE: DUSR Validation of Data Packages for the 312 Maple Street Site
Spectrum Analytical, Inc SDG Nos. M0582 and M0592

Dear Mr. Troy:

Review has been completed for the data package generated by Spectrum Analytical, Inc that pertain to samples collected between 04/23/13 and 04/24/13 at the 312 Maple Street site. Nine aqueous samples and a field duplicate were processed for a full list of volatile analytes, and hexavalent chromium. The analytical methodologies utilized are those of the USEPA SW846 method 8260B and the Standard Methods SM3200B.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with full eview of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Case Narratives
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Preparation/Calibration Blanks
* Laboratory Control Samples
* Instrumental Tunes and IDLs
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR review level.

In summary, sample results are usable either as reported or with minor edit/qualification.

Copies of the NYSDEC Sample Identification and Analytical Requirement Summary Forms are attached to this text. Included with this report are qualified laboratory results forms.

The following text discusses quality issues of concern.

Field Duplicates

The blind field duplicate evaluation was performed on MW-9-042313. Correlations are within validation guidelines.

Volatiles by EPA 8260B

The detection of iodomethane in MW-2-042313 is qualified as tentative in identification and estimated in value due to poor mass spectral quality.

Matrix spikes of MW-4-042313 show acceptable recoveries and duplicate correlations, with the exception of the low recoveries for toluene (73% and 72%). Results for that compound have been qualified as estimated in the parent sample.

Surrogate and internal standard recoveries are within required ranges. Blanks show no contamination.

Calibrations standards showed responses within analytical protocol and validation guidelines, with the exception of the following, results for which are qualified as estimated in the indicated samples:

- iodomethane and 1,2,4-trichlorobenzene (22%RSD and 18%RSD) in all samples
- dichlorodifluoromethane, chloroethane, methylene chloride, toluene, and naphthalene (24%D to 32%D) in samples reported in SDG M0582
- chloroethane, naphthalene, and trichlorofluoromethane (23%D to 34%D) in samples reported in SDG M0592

Hexavalent Chromium by SM3200B

Matrix spike/laboratory duplicate evaluations were performed on MW-4-042313 and MW-3R-042413, and show recoveries and correlations within recommended ranges.

Blanks show no contamination above the reporting limits, and calibration standards show compliant responses.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

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

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

Project Name : Maple Street **SDG :** M0582

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-1-042313	M0582-01	SW8260_W				SEE DATA
MW-2-042313	M0582-02	SW8260_W				SEE DATA
MW-9-042313	M0582-03	SW8260_W				SEE DATA
MW-6-042313	M0582-04	SW8260_W				SEE DATA
DUP-1-042313	M0582-05	SW8260_W				SEE DATA
MW-4-042313	M0582-06	SW8260_W				SEE DATA
MW-5-042313	M0582-07	SW8260_W				SEE DATA
TRIP BLANK	M0582-08	SW8260_W				

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

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

Project Name : Maple Street

SDG : M0592

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-3R-042413	M0592-01	SW8260_W				SEE DATA
MW-7-042413	M0592-02	SW8260_W				SEE DATA
MW-8-042413	M0592-03	SW8260_W				SEE DATA
TRIP BLANK	M0592-04	SW8260_W				

QUALIFIED RESULTS FORMS

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	0.86	J
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U UJ
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	17	
74-88-4	Iodomethane	5.0	U UJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
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	87	
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	1.1	J
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	8.9	J
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.

MW-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9359.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	0.81	J
75-00-3	Chloroethane	5.0	U UJ
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	0.78	J NJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.67	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	J
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	35	
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 UJ
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.

MW-2-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9359.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9360.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
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	0.93	J
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	1.8	J
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 UJ
10061-02-6	trans-1,3-Dichloropropene	5.0	U UJ
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.

MW-9-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9360.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9361.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
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 UJ
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.

MW-6-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9361.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9362.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U UJ
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	0.95	J
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	1.8	J
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 UJ
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.

DUP-1-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9362.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9363.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
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	9.7	
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 UJ
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.

MW-4-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9363.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9364.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	0.96	J
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U UJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
156-60-5	trans-1,2-Dichloroethene	0.78	J
1634-04-4	Methyl tert-butyl ether	4.1	J
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	130	
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	20	
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 UJ
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.

MW-5-042313

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9364.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

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.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U UJ
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 UJ
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 UJ
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U UJ
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 UJ
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.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0582 Mod. Ref No.: SDG No.: SM0582

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0582-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/24/2013

% Moisture: not dec. Date Analyzed: 04/25/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-042313
Lab ID: M0582-01
Project: Maple Street
Collection Date: 04/23/13 11:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:14	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-042313
Lab ID: M0582-02
Project: Maple Street
Collection Date: 04/23/13 11:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:16	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-042313
Lab ID: M0582-03
Project: Maple Street
Collection Date: 04/23/13 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:19	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-042313
Lab ID: M0582-04
Project: Maple Street
Collection Date: 04/23/13 13:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:22	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-042313
Lab ID: M0582-05
Project: Maple Street
Collection Date: 04/23/13 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:25	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-042313
Lab ID: M0582-06
Project: Maple Street
Collection Date: 04/23/13 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/24/2013 12:28	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-042313
Lab ID: M0582-07
Project: Maple Street
Collection Date: 04/23/13 15:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.92		0.030	mg/L	1	04/24/2013 12:39	71353

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9387.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U UJ
75-69-4	Trichlorofluoromethane	5.0	U UJ
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U UJ
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	1.2	J
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

EPA SAMPLE NO.

MW-3R-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9387.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9388.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U UJ
75-00-3	Chloroethane	5.0	U UJ
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U UJ
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	1.7	J
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

EPA SAMPLE NO.

MW-7-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9388.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9389.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U UJ
75-69-4	Trichlorofluoromethane	5.0	U UJ
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U UJ
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	0.60	J
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	0.66	J
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	37	
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

EPA SAMPLE NO.

MW-8-042413

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9389.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

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.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9386.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U UJ
75-69-4	Trichlorofluoromethane	5.0	U UJ
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U UJ
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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0592 Mod. Ref No.: SDG No.: SM0592

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M0592-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B9386.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/25/2013

% Moisture: not dec. Date Analyzed: 04/26/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-042413
Lab ID: M0592-01
Project: Maple Street
Collection Date: 04/24/13 11:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/25/2013 10:22	71386

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-042413
Lab ID: M0592-02
Project: Maple Street
Collection Date: 04/24/13 11:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.054		0.030	mg/L	1	04/25/2013 10:29	71386

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-042413
Lab ID: M0592-03
Project: Maple Street
Collection Date: 04/24/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.17		0.030	mg/L	1	04/25/2013 10:31	71388

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

2014 POST-BIOREMEDIATION APPLICATION GROUNDWATER SAMPLING AND DATA REPORT 312 MAPLE STREET SITE ENDICOTT, NEW YORK NYSDEC SITE # B-00168-7

PREPARED FOR:
Broome County Department of Planning
and Economic Development
Binghamton, New York

PREPARED BY:
GZA GeoEnvironmental of New York
Buffalo, New York

July 2014
GZA File No. 21.0056127.10

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GZA
GeoEnvironmental
of New York

*Engineers and
Scientists*

July 11, 2014
File No. 21.0056127.10

Mr. Frank Evangelisti
Chief Planner
Broome Co. Dept. of Planning and Economic Development
44 Hawley Street, 5th Floor
Binghamton, New York 13902

Re: Post-Bioremediation Application Groundwater Monitoring
ERP#B00168-7
312 Maple St., Endicott, NY

Dear Mr. Evangelisti:

GZA GeoEnvironmental of New York (GZA) submits this report summarizing the analytical results of the groundwater sampling event conducted in April and May 2014 at the above referenced Site. The objective of the sampling event was to collect and analyze groundwater samples from the on-site and off-site monitoring wells associated with the 312 Maple Street Site in Endicott, NY (Site) about two years after the enhanced anaerobic bioremediation application was done at the Site. Post-application sampling is required to compare groundwater conditions to pre-application conditions at the Site in accordance with the New York State Department of Environmental Conservation (NYSDEC), Record of Decision (ROD) dated January 2011.

The Post-Bioremediation Application sampling event identified only two (2) volatile organic compounds (VOCs), specifically trichloroethene (TCE) and cis-1,2-dichloroethene (DCE) detected at concentrations above respective NYSDEC Class GA criteria[1]. Hexavalent chromium (Cr^{+6}) was not detected at concentrations above its method detection limit during this groundwater monitoring event. The most prominently detected VOC was TCE although at concentrations significantly less than those identified from the pre-application sampling done in April 2012 and after the first year of application in 2013. Additionally, this sampling round identified the presence of DCE, a daughter compound of TCE, at lesser concentrations than previous 2013 sampling event, which implies the bioremediation application is working as designed.

A third and final post application groundwater sampling event will be completed in spring 2015 in an effort to monitor the Site groundwater. Should you have any questions or require additional information following your review, please contact Daniel Troy at 716-844-7034.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

John Beninati
Project Manager

Daniel J. Troy, P.E.
Senior Project Manager

Bart A. Klettke, P.E.
Principal

[1] Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

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TABLE OF CONTENTS

1.00 INTRODUCTION 1
1.10 BACKGROUND AND SITE HISTORY 1
2.00 PURPOSE AND SCOPE OF WORK 1
3.00 FIELD STUDIES 2
3.10 GROUNDWATER SAMPLING PROCEDURES 2
3.20 GROUNDWATER COLLECTION 3
4.00 ANALYTICAL LABORATORY TESTING 4
5.00 ANALYTICAL TEST RESULTS 4
6.00 SUMMARY 6

TABLES

TABLE 1 — SUMMARY OF PRE- AND POST-BIOREMEDIATION APPLICATION GROUNDWATER ANALYTICAL TEST RESULTS (2014)

TABLE 2 — GRAPHICAL SUMMARY OF TCE AND DCE CONCENTRATION TRENDS

FIGURES

FIGURE 1 — SITE PLAN/GROUNDWATER CONTOUR MAP

APPENDICES

APPENDIX A — LIMITATIONS

APPENDIX B — 2014 WATER QUALITY DATA FORMS

APPENDIX C — 2014 ANALYTICAL TEST RESULTS AND DATA USABILITY SUMMARY REPORT

1.00 INTRODUCTION

In accordance with the January 2011 Record of Decision (ROD) established by the New York State Department of Environmental Conservation (NYSDEC) for the 312 Maple Street site in Endicott, New York (Site), GZA GeoEnvironmental of New York (GZA) collected groundwater samples at nine (9) monitoring wells associated with the Site. The sampling was done on April 30th and May 1st, 2014 and was completed about two years after implementation of remedial activities (i.e., enhanced anaerobic bioremediation applications) were completed at the Site. A Site Plan is attached as Figure 1.

1.10 BACKGROUND AND SITE HISTORY

As part of the January 2011 ROD issued by NYSDEC for the Site, the chosen remedial option included enhanced anaerobic bioremediation applications to remediate groundwater impacted with volatile organic compounds (VOCs) (specifically trichloroethene (TCE)) and hexavalent chromium (Cr^{+6}). As part of the remedial remedy, nine (9) groundwater monitoring wells were to be sampled and analyzed for VOCs and Cr^{+6} to assess the effectiveness of the bioremediation efforts on the Site groundwater. The assessment included a pre-remedial round of sampling done in 2012 for baseline conditions and annual sampling afterwards for a period of three years (years 2013, 2014 and 2015).

2.00 PURPOSE AND SCOPE OF WORK

The purpose of the post remediation sampling event was to collect groundwater samples from the nine (9) groundwater monitoring wells associated with the Site to assess conditions two years after completion of the enhanced anaerobic bioremediation application injections were completed at the Site. To accomplish this, the following activities were done.

- Coordinated with Spectrum Analytical Inc. located in Warwick, Rhode Island prior to the commencement of field activities to obtain the analytical sample containers.

- Collected one (1) groundwater sample from each of the nine (9) monitoring well locations for chemical analysis of VOCs via EPA Method 8260 Target Compound List and Cr^{+6} via Method SM3200D.

- Prepared this report, which summarizes the data collected during this sampling event. This data will be used in the remaining annual groundwater sampling event for comparative purposes to evaluate the effectiveness of the remedial activities at the Site.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or any other party.

3.00 FIELD STUDIES

This section describes the field activities of GZA's groundwater sampling event.

3.10 GROUNDWATER SAMPLING PROCEDURES

Equipment Cleaning

Prior to GZA's arrival to the Site, the sampling equipment (water level indicator, water quality meter and flow-through cell) was cleaned by rinsing with potable water, washing with a solution of laboratory detergent (alconox) and potable water, and rinsing with de-ionized water.

New, disposable polyethylene tubing (for placement down into the well and connecting to the water quality meter) and silicone tubing (for the peristaltic pump head) was used for groundwater sampling at each location. A variable speed peristaltic pump was used to purge groundwater from each monitoring well location. Groundwater remained within the polyethylene and silicone tubing and did not come in contact with the pump. Therefore, the tubing and pump did not require decontamination between sample locations.

Equipment Calibration

A water quality meter and turbidity meter were used during groundwater monitoring. Prior to use each day, the calibration of the water quality meter and turbidity meter were checked to verify that the equipment was in working order in accordance with manufacturer's specifications.

Monitoring & Purging Methodologies

Well purging and water quality measurements were done at each monitoring well location as discussed below. The nine (9) monitoring wells had measured water level depths generally less than 20 feet below top of each respective well riser.

Prior to the start of each monitoring and purge event, a static water level was measured from the top of the monitoring well riser and recorded on the monitoring well sampling log. A complete round of water level data was collected from the nine (9) monitoring wells on May 1st, 2014 prior to groundwater purging and sampling activities. At each monitoring well location, new polyethylene tubing (0.25-inch O.D. by 0.17-inch I.D) was lowered into the monitoring well and positioned at the approximate center of the well screen. Information about the wells was taken from the monitoring well logs previously generated.

The peristaltic pump was started and operated at a flow rate that minimized draw-down of the water column within the well. The first set of water quality readings were collected when the flow-through cell was full and water began to flow out. Once a constant head

was established, the pumping flow rate was not altered. Sampling flow rates were kept consistent with purging/monitoring flow rates. Readings were recorded on well development forms in the field, once a constant head had been established. Readings were continuously recorded every four to five minutes, until water quality readings stabilized for three successive readings, which generally consisted of ± 0.1 for pH, ±3% for conductivity, ± 10 mV for oxidation reduction potential (ORP) and ± 10% for turbidity, temperature and dissolved oxygen (DO). Copies of the water quality data forms are included in Appendix B.

Groundwater analytical samples were collected once a constant head was established, the water quality readings had stabilized and/or at least one well volume was removed. Disposable silicon tubing from the peristaltic pump was disconnected from the polyethylene tubing attached to the water quality meter, and used to fill the appropriate groundwater sample containers provided by the laboratory. Groundwater collected for analysis did not enter the flow-through cell.

After the appropriate sample containers were filled, the pump was shut off and the tubing was removed from the monitoring well and pump head, and disposed of as a solid waste. The flow-through cell and water quality meter were then rinsed with de-ionized water. Water generated during the purging/monitoring and equipment decontamination was placed on the ground in the vicinity of the monitoring well from which it was generated.

3.20 GROUNDWATER DATA COLLECTION

GZA collected groundwater samples from the nine (9) monitoring wells (designated as MW-1 through MW-9). In addition, a duplicate sample (from MW-3R), and matrix spike/matrix spike duplicate (MS/MSD) sample (from MW-5) were collected.

Static groundwater level measurements, referencing the top of well riser were made from the nine (9) monitoring wells listed in the table below prior to sampling. Monitoring point elevation data was available from previous reports completed at the Site. From this data, a groundwater contour map was generated as shown on Figure 2. Based on the available information, groundwater elevations within the Site area are similar to many well locations and is indicative of a flat or level groundwater table with slightly lower elevations observed at the eastern and western most measured wells. Based on previous data collected in April 2012 and April 2013, it appears that the Site groundwater flow direction has a slight northwesterly flow direction towards Nanticoke Creek. However, it should be noted that the monitoring well MW-9 located southeast of the Site appears to have groundwater elevations lower than those measured at the Site implying an easterly trending groundwater flow. This flow direction may be influenced a New York State Department of Transportation sump pump reportedly located in the vicinity of the Norfolk Southern railroad track overpass over South Nanticoke Street, located east of the Site. Based on the groundwater measurements, the groundwater table at the vicinity of the Site appears to resemble a saddle-like configuration with evidence of a flat surface (i.e., minimal gradient) within the Site and increasing gradients to the east and west.

Monitoring Well Location	Top of Riser (TOR) Elevation (ft.)	Groundwater Depth below TOR (ft.)	Groundwater Elevation (ft.)
MW-1	102.4	18.2	84.2
MW-2	100.0	15.8	84.2
MW-3R	97.5	13.3	84.2
MW-4	100.0	15.8	84.2
MW-5	97.2	13.1	84.1
MW-6	96.4	12.1	84.3
MW-7	97.5	13.3	84.2
MW-8	96.4	12.4	84.0
MW-9	99.2	15.3	83.9

4.00 ANALYTICAL LABORATORY TESTING

Nine (9) groundwater samples, one (1) duplicate sample (MW-3R), and one (1) matrix spike/matrix spike duplicate (MW-5), were submitted for analytical testing. The samples were packed in an ice-filled cooler and, following typical chain-of-custody procedures, sent to Spectrum Analytical Laboratories in North Kingstown, Rhode Island. Table 1 presents a summary of the samples collected and the analyses completed.

5.00 ANALYTICAL TEST RESULTS

Discussion of the laboratory results for the groundwater samples is presented below. The laboratory report and associated third party Data User Summary Report (completed by Data Validation Services of North Creek, NY) is provided in Appendix C and the data is summarized on Table 1.

The analytical test results for the groundwater samples were compared to NYSDEC Class GA criteria presented in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

The analytical data generated as part of this sampling event has also been provided to NYSDEC electronically for their Environmental Information Management System (EIMS). The data was provided in a standardized electronic data deliverable (EDD) format that uses the database software application EQuIS™ (EQuIS) from EarthSoft® Inc. The laboratory data and required information were imported into the EQuIS Data Processor (EDP) and submitted to NYSDEC.

- MW-1: Three VOCs; TCE (3.6 ppb), cis-1,2-dichloroethene (cis-1,2-DCE) (13 ppb), and toluene (2.3 ppb) were the only VOCs detected above method detection limits (MDLs). Of these detections, only cis-1,2-DCE was identified at a

concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-2: Two (2) VOCs; TCE (36 ppb) and 1,1,1-trichloroethane (0.74 ppb) were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-3R: TCE (1.2 ppb) was the only VOC detected above MDLs although at a concentration below its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-4: TCE (9.7 ppb) was the only VOC detected above MDLs and at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-5: Two (2) VOCs; TCE (31 ppb) and cis-1,2-DCE (33 ppb) were detected above MDLs, both of which were identified at a concentrations exceeding their respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-6: TCE (1.2 ppb) was the only VOC detected above MDLs although at a concentration below its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-7: TCE (2.2 ppb) was the only VOC detected above MDLs at a concentration below its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-8: Two (2) VOCs; TCE (1.3 ppb) and 1,1,1-trichloroethane (0.98 ppb) were detected above MDLs although both compounds were identified at concentrations below its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-9: Two (2) VOCs; TCE (2.3 ppb) and chloroform (0.88 ppb) were detected above MDLs although both detections were identified below their respective Class GA criteria. Cr^{+6} was not detected in this sample.

6.00 SUMMARY

GZA was retained to collect and analyze groundwater samples from nine (9) monitoring wells associated with the 312 Maple Street Site in Endicott New York as required by the January 2011 ROD established for the ERP Site No. B-00168-7. A summary of our findings follows.

- Static groundwater level measurements indicate that groundwater elevations at the Site are consistent between many of the monitoring wells which are indicative of a flat or low gradient. However, based on historic data, groundwater flow direction at the Site is believed to be in a northwesterly direction although groundwater elevation in MW-9 implies a slight easterly flowing gradient. The groundwater flow direction is anticipated to vary slightly during wetter months as compared to during periods of dryer conditions. It does not appear that the slight easterly groundwater gradient observed in MW-9 has an impact on the Site groundwater flow direction.

- TCE and cis-1,2-DCE were the only VOCs detected at concentrations above their respective NYSDEC Class GA criteria value of 5 ppb in four (4) of the nine (9) monitoring wells sampled. Specifically, DCE was identified with concentration exceedances at MW-1 (13 ppb) and MW-5 (33 ppb) and TCE was identified with concentration exceedances at MW-2 (36 ppb), MW-4 (9.7 ppb) and MW-5 (31 ppb). Toluene and 1,1,1-trichloroethane were the only other VOCs detected at select monitoring wells at concentrations above the MDLs but at concentrations below their respective Class GA criteria. Cr^{+6} was not detected at the nine wells sampled.

The enhanced anaerobic bioremediation application remediation work was completed in May 2012. This work included injections of the enhanced anaerobic bioremediation applications along the western property boundry and within the central portion of the Site. This remedial option was chosen to enhance the anaerobic breakdown of the "parent" chlorinated compounds present (specifically TCE) via reductive dehalogenation into the "daughter" breakdown products (cis-1,2-DCE) and vinyl chloride (VC), which further degrades under aerobic conditions. Additionally, this application was also designed to assist in the remediation of Cr^{+6} into the less hazardous chromium (trivalent chromium) analyte.

As part of the enhanced anerobic bioremediation application, groundwater samples from the nine wells were to be collected and tested for VOCs and Cr^{+6} annually for three years after injection work was completed. The second annual groundwater sampling completed after completion of the in-situ groundwater treatment has identified TCE concentrations apparently leveling off at concentrations below its Class GA guidance value at 6 of the 9 well locations. MW-2 and MW-4 had concentrations of 36 ppb and 31 ppb respectively which appear to be similar to the respective concentrations identified during the previous two sampling events. These locations appear to be situated at the outer perimeter of the

apparent TCE plume and may be influenced from groundwater that was located up-gradient or adjacent to the enhanced anerobic bioremediation application. MW-5, located in the middle of the apparent plume, had a significant reduction of TCE concentration from 130 ppb in 2013 to 33 ppb during this event. Table 2 shows graphical representation of the TCE and cis-1,2-DCE concentration trends between the years 2006 and 2014. Specific dates of importance relative to identified concentrations include: 2006 when the On-Site IRM activities were completed, 2011 when the Off-Site IRM was completed and 2012 when the In-situ Enhanced Bioremediation Remediation was completed. Completion of these activities are anticipated to result in a decreased TCE impacts to Site groundwater and is verified by the general trends observed in most of the on-Site wells. The increase in cis-1,2-DCE concentrations between 2012 and 2013 are indicative of the enhanced anaerobic bioremediation chemical injections breaking down the TCE into the respective daughter compounds. The continued remediation of the TCE and daughter compounds will be monitored in the subsequent monitoring events scheduled for 2015.

Two other VOCs (toluene and 1,1,1-trichloroethane) were detected within the 2014 round of groundwater sampling although at concentrations below their respective Class GA criteria. Previously identified VOCs during the 2013 sampling event were not detected during this event.

The concentrations of Cr^{+6} have also been reduced to non-detect in all of the wells sampled including MW-5 which was the apparent source of the analyte. This reduction implies that Cr^{+6} has successfully been remediated.

The third and final annual monitoring event is scheduled for spring 2015, which will be done about three years after enhanced anaerobic bioremediation application remediation activities have been done at the Site.

TABLES

TABLE 1

Summary Of Pre and Post-Bioremediation Application Groundwater Analytical Test Results (2012 through 2014)

312 Maple Street

Endicott, New York

ERP Site No. B-00168-7

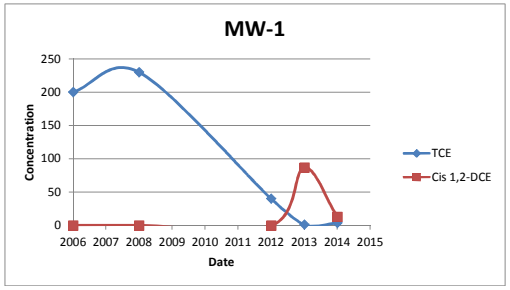
Parameter	Class GA Criteria (ug/L)	MW-1			MW-2			MW-3R			MW-4			MW-5			MW-6			MW-7			MW-8			MW-9		
		Year Sampled			Year Sampled			Year Sampled			Year Sampled			Year Sampled			Year Sampled			Year Sampled			Year Sampled			Year Sampled		
		2012 [4]	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013 [4]	2014
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																												
Acetone	50		17		6.6															5.9			9.6					
Bromomethane	5					0.81																						
Carbon Disulfide																												
1,1-Dichloroethene	5														0.96													
trans-1,2-DCE	5														0.78													
cis-1,2-Dichloroethene	5		87	13		0.67									130	33												
Chloroform	7																									0.72	0.93	0.88 J
Iodomethane	5					0.78																						
MTBE	10														4.1									0.6				
Toluene	5		8.9 J	2.3 J																								
1,1,1-Trichloroethane	5				0.97	1	0.74 J							1.8									1.2	0.66	0.98 J			
Trichloroethene	5	40	1.1	3.6	23	35	36	21	1.2	1.2	9.6	9.7	9.7	110	20	31	5.8		1.2	13	1.7	2.2	130	37	1.3	1.5	1.8	2.3
Vinyl Chloride	2		0.86																									
Hexavalent Chromium - SM 3500D by colorometric method (mg/L)																												
Hexavalent Chromium	0.05													2.9	0.92						0.05		0.04	0.17				

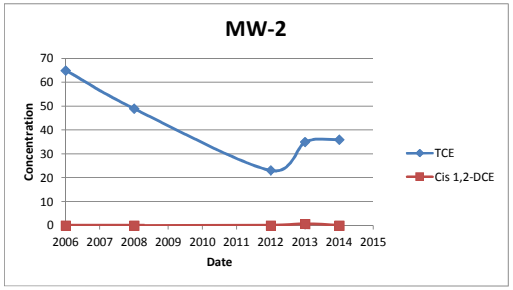
Notes:

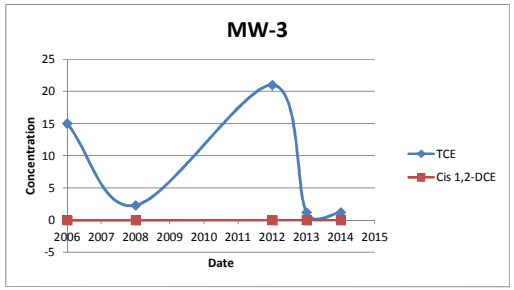
1. Compounds detected in one or more samples are presented on this table. Refer to attached laboratory report for list of all compounds included in analysis.
2. Analytical testing completed by Spectrum Analytical Laboratory of Warwick, Rhode Island, data validation completed by Data Validation Services of North Creek, NY.
3. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
4. Results presented for MW-1 (2012), MW-9 (2013), and MW-3(2014) are the higher of the sample and its respective duplicate (i.e., Dup-1-041612,Dup-1-042313, and DUP-1-043014, respectively).
5. ug/L = part per billion, mg/L = part per million, J= estimated concentration of analyte.
6. Blank cell indicates compound was not detected above respective method detection limit.
7. Shaded cell indicates concentration exceeds the respective NYSDEC Groundwater Class GA Criteria.

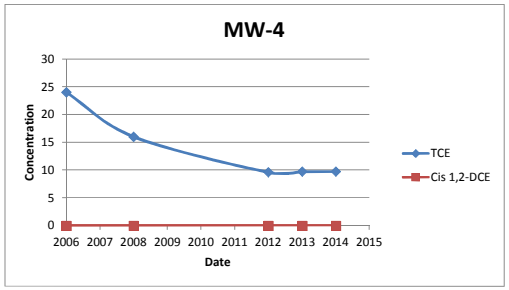
TABLE 2

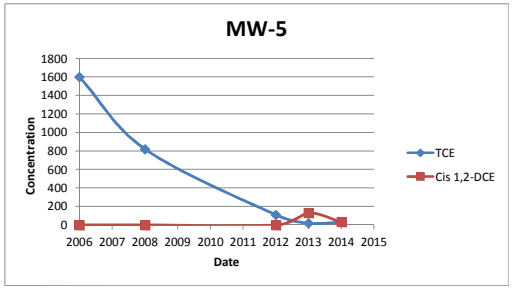
Graphical Summary of TCE and DCE Concentration Trends
312 Maple Street
Endicott, New York
ERP Site No. B-00168-7

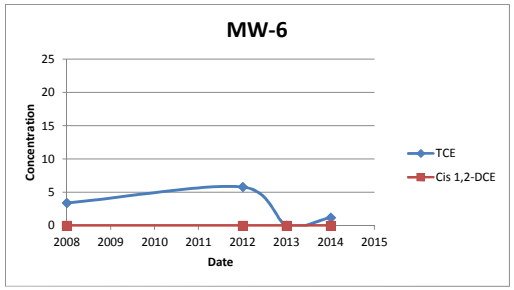


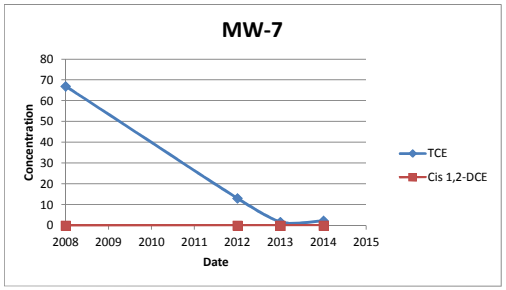


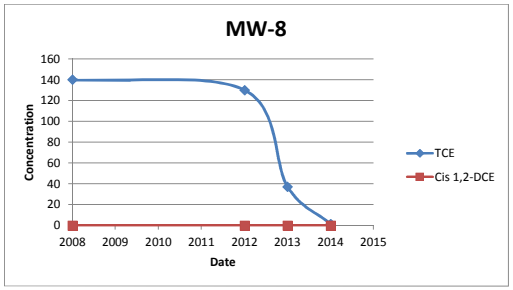


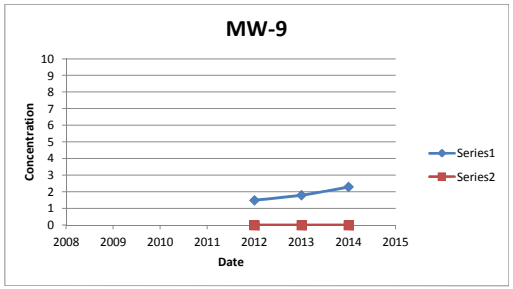








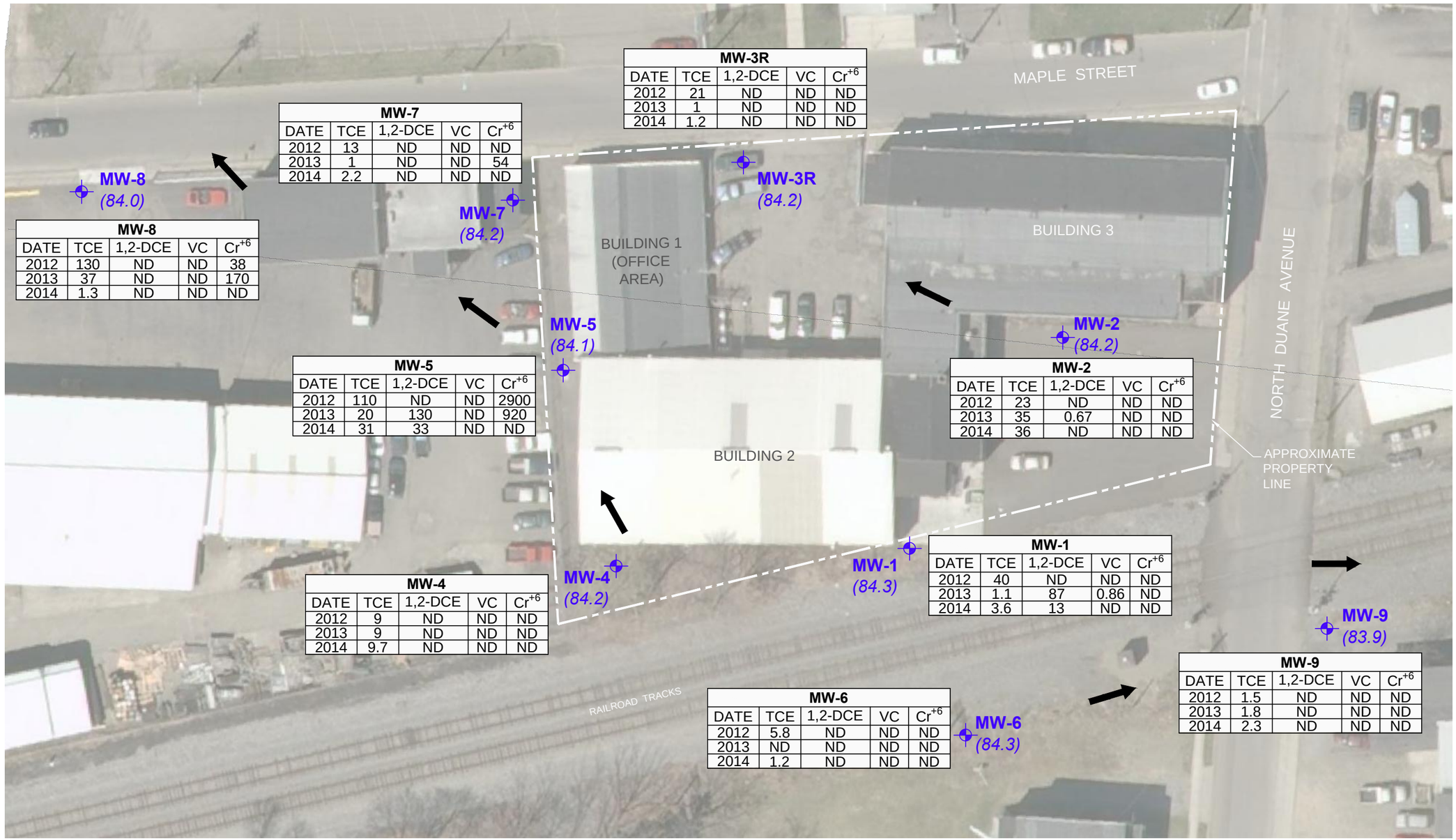




Notes:

1) Concentrations shown in parts per billion (ppb)
2) NYSDEC Class GA groundwater Criteria for TCE and cis-1,2,DCE equals 5 ppb.
3) On-Site IRM completed 2006, Off-Site IRM completed in 2011 and On-Site Insitu Enhanced Bioremediation completed in 2012.

FIGURES



MW-8

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	130	ND	ND	38
2013	37	ND	ND	170
2014	1.3	ND	ND	ND

MW-7

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	13	ND	ND	ND
2013	1	ND	ND	54
2014	2.2	ND	ND	ND

MW-3R

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	21	ND	ND	ND
2013	1	ND	ND	ND
2014	1.2	ND	ND	ND

MW-5

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	110	ND	ND	2900
2013	20	130	ND	920
2014	31	33	ND	ND

MW-2

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	23	ND	ND	ND
2013	35	0.67	ND	ND
2014	36	ND	ND	ND

MW-4

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	9	ND	ND	ND
2013	9	ND	ND	ND
2014	9.7	ND	ND	ND

MW-1

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	40	ND	ND	ND
2013	1.1	87	0.86	ND
2014	3.6	13	ND	ND

MW-6

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	5.8	ND	ND	ND
2013	ND	ND	ND	ND
2014	1.2	ND	ND	ND

MW-9

DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	1.5	ND	ND	ND
2013	1.8	ND	ND	ND
2014	2.3	ND	ND	ND

LEGEND:

MW-1 *(84.3)* — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELL, SHOWN WITH GROUNDWATER ELEVATION IN FEET, GROUNDWATER MEASUREMENTS MADE ON 05/01/2014

PRESUMED GROUNDWATER FLOW DIRECTION

TCE = Trichloroethene
1,2-DCE = Trans/cis 1,2 - Dichloroethene
VC = Vinyl Chloride
Cr^{+6} = Hexavalent Chromium

NOTES:

1. BASE MAP ADAPTED FROM AN AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.bing.com AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

3. UNITS ARE LISTED IN MICROGRAMS PER LITER (µ g/l) OR PARTS PER BILLION (ppb). ND INDICATES COMPOUND NOT DETECTED ABOVE METHOD DETECTION LIMIT.

NORTH

DRAWN BY: RJS

DATE: JULY 2014

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET
0 20 40 80

BROOME COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK

ERP SITE No. B-00168-7

POST REMEDIAL ACTION GROUNDWATER MONITORING YEAR-2 (2014)

PROJECT No.
21.0056127.10

FIGURE No.
1

© 2014 GZA GeoEnvironmental of New York

GZA-K:\PROJECTS\56100\56127.1 Broome Co 312 Maple Street\GW Monitoring\2014\Figure 1 Concentration plan.dwg [Figure 1] July 08, 2014 - 11:00am Daniel.wulf

APPENDIX A

LIMITATIONS

LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs.

6. Water level readings have been made in test holes (as described in the Report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge

rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

WATER QUALITY DATA FORMS

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-1**	Ground Surface Elevation Approx. 100.0 ft.	Riser/Screen Material: PVC
Installation Date:	7/28/1998	Protective Casing Elevation: 102.6 ft.	Top of Screen Depth: 10 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 102.4 ft.	Bottom of Screen Depth: 25 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
18.67	6.66	1.02	12	788	Lt. Gray

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition. Surface seal disturbed.	pH	+/- 0.1	Sample ID: MW-1-050114
	Surface seal sits approximately 8 inches above ground surface.	Conductivity	+/- 3%	Sample Time: VOC's 11:00, CR^{+6} 11:05
Interior Observations	Slowest setting on low-flow pump was used to obtain static water level.	Temperature	+/- 10%	# of Sample Containers: 3
	Visible suspended solids in turbidity sample. Slight odor noted in purge water.	Turbidity	+/- 10%	Duplicate Sample ID:
		ORP	+/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/1/2014	10:20	18.22	0	7.44	0.355	12.4	80.9	Lt. Gray	2.52	120.9	Depth of Water: 18.22
	10:25	19.42	0.3	6.71	0.336	11.9	26.1	Clear	0.31	66.3	Length of Water Column: 9.38
	10:30	19.43	0.6	6.66	0.341	11.7	21.1	Clear	0.25	57.8	Depth of Well: **27.60**
	10:35	19.43	0.9	6.65	0.346	11.6	20.3	Clear	0.24	52.1	Sheen Observed: Y **N**
	10:40	19.43	1.2	6.67	0.61	11.6	18.8	Clear	0.37	28.6	DNAPL Observed: Y **N**
	10:45	19.43	1.5	6.91	0.391	11.9	18.4	Clear	0.98	-7.8	Did Well Go Dry: Y **N**
	10:50	19.43	1.8	6.89	0.396	12.1	18.1	Clear	1.14	-9.8	Other: Well volume = 1.5 gallons.
	10:55	19.43	2.1	6.93	0.405	11.9	17.9	Clear	1.25	-19.9	

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-2**	Ground Surface Elevation: Approx. 100.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/29/1998	Protective Casing Elevation: Not applicable	Top of Screen Depth: 10 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 100.02 ft.	Bottom of Screen Depth: 25 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
16.34	6.64	1.06	12.3	8.8	Clear

Notes:

Field Observations				Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.			pH +/- 0.1	Sample ID: MW-2-050114
				Conductivity +/- 3%	Sample Time: VOC's 9:50, CR^{+6} 11:25
Interior Observations				Temperature +/- 10%	# of Sample Containers: 3
				Turbidity +/- 10%	Duplicate Sample ID:
				ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:				DO +/- 10%	
Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.	

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/1/2014	9:30	15.82	0	7.2	0.99	11.2	8.94	Clear	1.77	210.5	Depth of Water: 15.82
	9;34	15.87	0.8	7.03	1.01	11.1	3.64	Clear	0.71	204.6	Length of Water Column: 9.73
	9:38	15.87	1.5	7.02	1.01	10.9	3.26	Clear	0.34	200.2	Depth of Well: **25.55**
	9:42	15.87	2	7.04	0.99	11.1	2.84	Clear	0.21	194.9	Sheen Observed: Y **N**
	9:46	15.87	2.5	7.04	0.99	10.9	2.54	Clear	0.19	195.7	DNAPL Observed: Y **N**
	9;50	15.87	3	7.04	0.99	11.1	2.33	Clear	0.17	165.6	Did Well Go Dry: Y **N**
											Other: Well volume = 1.6 gallons.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-3R**	Ground Surface Elevation: Approx. 97.6 ft.	Riser/Screen Material: PVC
Installation Date:	4/17/2012	Protective Casing Elevation: Not applicable	Top of Screen Depth: 10 ft.
Installed By:	Nature's Way	Monitoring Point Elevation: 97.46 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.82	7.2	0.74	10.7	9.15	Brown

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-3R-043014
		Conductivity +/- 3%	Sample Time: 11:10
Interior Observations		Temperature +/- 10%	# of Sample Containers: 6
		Turbidity +/- 10%	Duplicate Sample ID: DUP-1-043014
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/30/2014	10:40	13.25	0	6.93	1.65	10.1	9.82	Clear	7.11	205.6	Depth of Water: 13.25
	10:50	13.26	0.6	6.92	1.63	10.2	2.16	Clear	6.62	203.1	Length of Water Column: 6.8
	10;55	13.26	1	6.93	1.62	10.2	1.46	Clear	6.38	200.7	Depth of Well: **20.05**
	11;00	13.26	1.6	6.93	1.62	10.2	0	Clear	6.23	198.7	Sheen Observed: Y **N**
	11;05	13.26	2.2	6.93	1.61	10.2	0	Clear	6.17	197.7	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1 gallon.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-4**	Ground Surface Elevation: Approx. 97.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/29/1998	Protective Casing Elevation: 100.2 ft.	Top of Screen Depth: 8 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 100.0 ft.	Bottom of Screen Depth: 23 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
16.32	7.28	0.437	10.7	1.68	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-4-043014
		Conductivity +/- 3%	Sample Time: 12:00
Interior Observations	Groundwater drawdown could not be obtained at highest purge rate setting.	Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/30/2014	11:40	15.85	0	7.45	0.468	10.1	14.62	Clear	6.01	183.2	Depth of Water: 15.82
	11:45	15.85	0.75	7.41	0.439	9.8	8.61	Clear	4.34	187.7	Length of Water Column: 9.21
	11:50	15.85	1.5	7.36	0.449	9.7	4.66	Clear	3.52	189.8	Depth of Well: **25.03**
	11:54	15.85	2.25	7.33	0.453	9.6	3.29	Clear	3.43	189.9	Sheen Observed: Y **N**
	11:58	15.85	3	7.31	0.455	9.6	1.77	Clear	3.39	190.4	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1.5 gallons.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-5**	Ground Surface Elevation: Approx. 97.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/25/06	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 97.21 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.65	7.17	0.83	11.7	3.8	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-5-043014
	Surface seal/asphalt raised due to apparent frost-heave.	Conductivity +/- 3%	Sample Time: 12:50
Interior Observations		Temperature +/- 10%	# of Sample Containers: 9 MS/MSD
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/30/2014	12:30	13.13	0	7.34	0.94	10.3	11.6	Clear	2.51	199.9	Depth of Water: 13.10
	12:34	13.13	0.5	7.22	0.97	10.3	8.4	Clear	0.89	216.4	Length of Water Column: 6.74
	12:38	13.14	1	7.23	0.95	10.3	4.3	Clear	1.08	220.5	Depth of Well: **19.84**
	12:42	13.14	1.5	7.23	0.96	10.3	3.3	Clear	1.11	220.8	Sheen Observed: Y **N**
	12:46	13.14	2	7.24	0.95	10.3	2.1	Clear	1.08	221.1	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1 gallon.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-6**	Ground Surface Elevation: Approx. 96.5 ft.	Riser/Screen Material: PVC
Installation Date:	4/28/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 96.43 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
12.72	7.64	0.476	10.8	7.6	Clear

Notes:

Field Observations				Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.			pH +/- 0.1	Sample ID: MW-6-050114
				Conductivity +/- 3%	Sample Time: VOC's 9:15, CR^{+6} 11:40
Interior Observations				Temperature +/- 10%	# of Sample Containers: 3
				Turbidity +/- 10%	Duplicate Sample ID:
				ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:				DO +/- 10%	
Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.	

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/1/2014	8:55	12.14	0	7.57	0.79	10.5	16.6	Clear	8.93	188.5	Depth of Water: 12.14
	8:59	12.16	0.6	7.39	0.74	10.2	4.4	Clear	7.16	193.3	Length of Water Column: 7.06
	9:03	12.16	1.2	7.53	0.545	9.8	2.2	Clear	8.71	188.7	Depth of Well: **19.2**
	9:07	12.16	1.8	7.51	0.546	9.8	0	Clear	8.85	189.5	Sheen Observed: Y **N**
	9:11	12.16	2.4	7.51	0.548	9.8	0	Clear	8.93	190.8	DNAPL Observed: Y **N**
	9:15	12.16	3	7.51	0.551	9.8	0	Clear	8.91	190.9	Did Well Go Dry: Y **N**
											Other: Well volume = 1.1 gallons.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-7**	Ground Surface Elevation: Approx. 98.0 ft.	Riser/Screen Material: PVC
Installation Date:	4/28/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 97.47 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.86	7.7	0.408	11.7	7.9	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-7-043014
		Conductivity +/- 3%	Sample Time: 13:55
Interior Observations		Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tamp`		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/30/2014	13:30	13.31	0	7.92	0.440	10.8	4.62	Clear	11.54	189.3	Depth of Water: 13.31
	13:35	13.35	0.6	7.92	0.437	10.8	3.12	Clear	10.82	189.6	Length of Water Column: 5.89
	13:40	13.34	1	7.86	0.442	10.8	1.61	Clear	10.38	190.6	Depth of Well: **19.2**
	13:45	13.34	1.5	7.86	0.446	10.8	1.21	Clear	10.24	191.1	Sheen Observed: Y **N**
	13:50	13.34	2	7.86	0.448	10.8	1.12	Clear	10.18	191.6	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 0.9 gallons.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-8**	Ground Surface Elevation: Approx. 96.5 ft.	Riser/Screen Material: PVC
Installation Date:	4/29/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 96.4 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
12.92	7.37	0.69	11.6	10.4	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-8-043014
		Conductivity +/- 3%	Sample Time: 15:20
Interior Observations	Groundwater drawdown could not be obtained at highest purge rate setting.	Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/30/2014	14:55	12.39	0	7.35	0.72	10.6	3.12	Clear	5.98	197.7	Depth of Water: 12.39
	15:00	12.44	0.75	7.34	0.72	10.7	1.14	Clear	6.7	197.8	Length of Water Column: 5.99
	15:05	12.44	1.5	7.34	0.72	10.7	0	Clear	6.56	197.4	Depth of Well: **18.38**
	15:10	12.44	2.25	7.33	0.71	10.7	0	Clear	6.48	197.0	Sheen Observed: Y **N**
	15:15	12.44	3	7.33	0.71	10.7	0	Clear	6.42	196.6	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1 gallon.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-9**	Ground Surface Elevation: Approx. 99.4 ft.	Riser/Screen Material: PVC
Installation Date:	9/7/07	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Nature's Way	Monitoring Point Elevation: 99.22 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
15.69	7.35	0.86	11	8.6	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	Road box was loose due to cracked concrete seal. Cracking may be due to	pH	+/- 0.1	Sample ID: MW-9-050114
	weather conditions and/or driveway usage.	Conductivity	+/- 3%	Sample Time: VOC's 8:40, CR^{+6} 11:35
Interior Observations	Top-of-PVC riser was cracked. Riser may have shifted due to frost heave/damage	Temperature	+/- 10%	# of Sample Containers: 3
	from driveway usage.	Turbidity	+/- 10%	Duplicate Sample ID:
	Annulus too small to monitor groundwater fluctuations while purging.	ORP	+/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (yes/**no**)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
5/1/2014	8:20	15.25	0	7.50	1.16	10.2	83.9	Cloudy	8.33	198.5	Depth of Water: 15.25
	8:24	-	0.5	7.41	1.09	9.7	14.4	Clear	7.56	197.9	Length of Water Column: 4.28
	8:28	-	1	7.39	1.09	9.6	10.6	Clear	7.45	198.1	Depth of Well: **19.53**
	8:32	-	1.5	7.39	1.09	9.7	9.4	Clear	7.34	197.9	Sheen Observed: Y **N**
	8:36	-	2	7.39	1.08	9.6	8.4	Clear	7.38	198.1	DNAPL Observed: Y **N**
	8:40	-	2.5	7.39	1.08	9.7	7.6	Clear	7.37	198.2	Did Well Go Dry: Y **N**
											Other: Well volume = 0.7 gallons.

APPENDIX C

ANALYTICAL TEST RESULTS AND DATA USABILITY SUMMARY REPORT

Report Date:
21-May-14 09:58

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: N0695
Project : Maple Street
Project #:

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N0695-01	MW-3R-043014	Aqueous	30-Apr-14 11:10	01-May-14 11:20
N0695-02	MW-4-043014	Aqueous	30-Apr-14 12:00	01-May-14 11:20
N0695-03	MW-5-043014	Aqueous	30-Apr-14 12:50	01-May-14 11:20
N0695-04	DUP-1-043014	Aqueous	30-Apr-14 00:00	01-May-14 11:20
N0695-05	MW-7-043014	Aqueous	30-Apr-14 13:55	01-May-14 11:20
N0695-06	MW-8-043014	Aqueous	30-Apr-14 15:20	01-May-14 11:20
N0695-07	MW-9-050114	Aqueous	01-May-14 08:40	02-May-14 09:36
N0695-07	MW-9-050114	Aqueous	01-May-14 11:35	02-May-14 09:36
N0695-08	MW-6-050114	Aqueous	01-May-14 09:15	02-May-14 09:36
N0695-08	MW-6-050114	Aqueous	01-May-14 11:40	02-May-14 09:36
N0695-09	MW-2-050114	Aqueous	01-May-14 09:50	02-May-14 09:36
N0695-09	MW-2-050114	Aqueous	01-May-14 11:25	02-May-14 09:36
N0695-10	MW-1-050114	Aqueous	01-May-14 11:00	02-May-14 09:36
N0695-10	MW-1-050114	Aqueous	01-May-14 11:05	02-May-14 09:36
N0695-11	TRIP BLANK	Aqueous	01-May-14 00:00	02-May-14 09:36

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 : Maple Street **SDG :** N0695

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-3R-043014	N0695-01	SW8260_W				SEE DATA
MW-4-043014	N0695-02	SW8260_W				SEE DATA
MW-5-043014	N0695-03	SW8260_W				SEE DATA
DUP-1-043014	N0695-04	SW8260_W				SEE DATA
MW-7-043014	N0695-05	SW8260_W				SEE DATA
MW-8-043014	N0695-06	SW8260_W				SEE DATA
MW-9-050114	N0695-07	SW8260_W				SEE DATA
MW-6-050114	N0695-08	SW8260_W				SEE DATA
MW-2-050114	N0695-09	SW8260_W				SEE DATA
MW-1-050114	N0695-10	SW8260_W				SEE DATA
TRIP BLANK	N0695-11	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 : Maple Street **SDG :** N0695

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
N0695-01A	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-02A	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-03A	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-03AMS	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-03AMSD	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-04A	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-05A	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-06A	AQ	4/30/2014	5/1/2014	NA	5/4/2014
N0695-07A	AQ	5/1/2014	5/2/2014	NA	5/6/2014
N0695-08A	AQ	5/1/2014	5/2/2014	NA	5/6/2014
N0695-09A	AQ	5/1/2014	5/2/2014	NA	5/6/2014
N0695-10A	AQ	5/1/2014	5/2/2014	NA	5/6/2014
N0695-11A	AQ	5/1/2014	5/2/2014	NA	5/5/2014

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

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

Project Name : Maple Street **SDG :** N0695

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
N0695-01A	AQ	SW8260_W	NA	LOW	1
N0695-02A	AQ	SW8260_W	NA	LOW	1
N0695-03A	AQ	SW8260_W	NA	LOW	1
N0695-03AMS	AQ	SW8260_W	NA	LOW	1
N0695-03AMSD	AQ	SW8260_W	NA	LOW	1
N0695-04A	AQ	SW8260_W	NA	LOW	1
N0695-05A	AQ	SW8260_W	NA	LOW	1
N0695-06A	AQ	SW8260_W	NA	LOW	1
N0695-07A	AQ	SW8260_W	NA	LOW	1
N0695-08A	AQ	SW8260_W	NA	LOW	1
N0695-09A	AQ	SW8260_W	NA	LOW	1
N0695-10A	AQ	SW8260_W	NA	LOW	1
N0695-11A	AQ	SW8260_W	NA	LOW	1

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

WorkOrder: N0695

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE,
Comments: N/A

Case:
SDG:
PO: 21.0056127.10

HC Due: 05/23/14
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0695-01A	MW-3R-043014	04/30/2014 11:10	05/01/2014	Aqueous	SW8260_W	/					VOA
N0695-01B	MW-3R-043014	04/30/2014 11:10	05/01/2014	Aqueous	SM3500_CR+	/					A2
N0695-02A	MW-4-043014	04/30/2014 12:00	05/01/2014	Aqueous	SW8260_W	/					VOA
N0695-02B	MW-4-043014	04/30/2014 12:00	05/01/2014	Aqueous	SM3500_CR+	/					A2
N0695-03A	MW-5-043014	04/30/2014 12:50	05/01/2014	Aqueous	SW8260_W	/			Y		VOA
N0695-03B	MW-5-043014	04/30/2014 12:50	05/01/2014	Aqueous	SM3500_CR+	/			Y		A2
N0695-04A	DUP-1-043014	04/30/2014 00:00	05/01/2014	Aqueous	SW8260_W	/					VOA
N0695-04B	DUP-1-043014	04/30/2014 00:00	05/01/2014	Aqueous	SM3500_CR+	/					A2
N0695-05A	MW-7-043014	04/30/2014 13:55	05/01/2014	Aqueous	SW8260_W	/					VOA
N0695-05B	MW-7-043014	04/30/2014 13:55	05/01/2014	Aqueous	SM3500_CR+	/					A2
N0695-06A	MW-8-043014	04/30/2014 15:20	05/01/2014	Aqueous	SW8260_W	/					VOA
N0695-06B	MW-8-043014	04/30/2014 15:20	05/01/2014	Aqueous	SM3500_CR+	/					A2
N0695-07A	MW-9-050114	05/01/2014 08:40	05/02/2014	Aqueous	SW8260_W	/					VOA
N0695-07B	MW-9-050114	05/01/2014 11:35	05/02/2014	Aqueous	SM3500_CR+	/					A2
N0695-08A	MW-6-050114	05/01/2014 09:15	05/02/2014	Aqueous	SW8260_W	/					VOA
N0695-08B	MW-6-050114	05/01/2014 11:40	05/02/2014	Aqueous	SM3500_CR+	/					A2
N0695-09A	MW-2-050114	05/01/2014 09:50	05/02/2014	Aqueous	SW8260_W	/					VOA
N0695-09B	MW-2-050114	05/01/2014 11:25	05/02/2014	Aqueous	SM3500_CR+	/					A2

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: N0695

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE,
Comments: N/A

Case:
SDG:
PO: 21.0056127.10

HC Due: 05/23/14
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0695-10A	MW-1-050114	05/01/2014 11:00	05/02/2014	Aqueous	SW8260_W	/					VOA
N0695-10B	MW-1-050114	05/01/2014 11:05	05/02/2014	Aqueous	SM3500_CR+	/					A2
N0695-11A	TRIP BLANK	05/01/2014 00:00	05/02/2014	Aqueous	SW8260_W	/					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

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- 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: GZA GEOENVIRONMENTAL OF NY
535 WASHINGTON ST. 11th FLOOR
BUFFALO, NY 14203
Telephone #: 716-844-7034
Project Mgr. DANIEL TROY

Invoice To: GZA

P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: ENDICOTT State: NY
Sampler(s): JOHN BRIANTE

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: 2

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 8260	02 +6
01	MW-3R-043014	4/30/14	1110	G	GW	2			1	X	X
02	MW-4-043014	4/30/14	1200	G	GW	2			1	X	X
03	MW-5-043014	4/30/14	1260	G	GW	2x3			1x3	X	X
04	DUP-1-043014	4/30/14		G	GW	2			1	X	X
05	MW-7-043014	4/30/14	1355	G	GW	2			1	X	X
06	MW-8-043014	4/30/14	1520	G	GW	2			1	X	X

NO695

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards: ASP CAT B

MS/MSD

Relinquished by:	Received by:	Date:	Time:	Temp°C
UPS	UPS	4/30/14	1600	
		05/01/14	11:20	1.8°C

☒ EDD Format NYSDEC EQUIS
☒ E-mail to DANIEL.TROY@GZA.COM

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

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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: 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: GZA GEOENVIRONMENTAL OF NY
535 WASHINGTON ST. 11th FLOOR
BUFFALO, NY 14203
Telephone #: 716-844-7034
Project Mgr. DANIEL TROY

Invoice To: GZA

P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: ENDICOTT State: NY
Sampler(s): JOHN BENANTE

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: 2

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 8260	CP+6	QA/QC Reporting Notes:
NO695 - 07	MW-9-050114	5/1/14	840	G	GW	2			1	X	X	CR+6 COLLECTED AT 1135
- 08	MW-6-050114	5/1/14	915	G	GW	2			1	X	X	CR+6 COLLECTED AT 1140
- 09	MW-2-050114	5/1/14	960	G	GW	2			1	X	X	CR+6 COLLECTED AT 1125
- 10	MW-1-050114	5/1/14	1100	G	GW	2			1	X	X	CR+6 COLLECTED AT 1105
NO695 - 11	TRIP BLANK	5/1/14	-	-	-	2				X		

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards: ASP CAT B

Relinquished by:	Received by:	Date:	Time:	Temp°C
	FedEx	5/1/14	12:15	
FedEx		5/2/14	9:30	3.2°C

☒ EDD Format NYSDEC EQUIS
☒ E-mail to DANIEL.TROY@GZA.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: RWB	Log-in Date 05/01/2014
Work Order: N0695	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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. UPS 1Z75R4V296954316
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	1.8 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	05/01/2014
12. Time Received	11:20

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"
N0695-01						H	
N0695-02						H	
N0695-03						H	
N0695-04						H	
N0695-05						H	
N0695-06						H	

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

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

Received By: TEB	Page 01 of 00
Reviewed By: NJL	Log-in Date 05/02/2014
Work Order: N0695	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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. UPS 1Z75R4V20198206102
6. Sample Tags — Present / Absent
   Sample Tag Numbers — Listed / Not Listed on Chain-of-Custody
7. Sample Condition — Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle — Present / Absent

9. Cooler Temperature	3.2 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	05/02/2014
12. Time Received	09:36

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"
N0695-07						H	
N0695-08						H	
N0695-09						H	
N0695-10						H	
N0695-11						H	

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

Sample Condition Form

SPECTRUM ANALYTICAL, INC.
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* Volatiles *

646 Camp Ave · North Kingstown, RI 02852-4008 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: N0695

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.

MW-4-043014 (N0695-02A), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

MW-5-043014 (N0695-03AMS), recovery is above criteria for Dibromofluoromethane at 117% with criteria of (85-115).

MW-5-043014 (N0695-03AMSD), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

DUP-1-043014 (N0695-04A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

MW-7-043014 (N0695-05A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

MW-8-043014 (N0695-06A), recovery is above criteria for Dibromofluoromethane at 117% 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-76932 in batch 76932, recovery is above criteria for Iodomethane at 145% with criteria of (72-121).

LCSD-76932 in batch 76932, recovery is above criteria for Iodomethane at 126% with criteria of (72-121).

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

Matrix spikes were performed on samples: MW-5-043014 (N0695-03AMS) and MW-5-043014 (N0695-03AMSD).

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

MW-5-043014 (N0695-03AMS), recovery is above criteria for 1,2-Dichloroethane at 133% with criteria of (70-130) and Iodomethane at 138% with criteria of (72-121).

MW-5-043014 (N0695-03AMSD), recovery is above criteria for 1,2-Dichloroethane at 132% with criteria of (70-130) and 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:

No sample in this SDG required analysis at dilution.

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:

VSTD00510I 2-Chloroethyl vinyl ether , Isobutyl alcohol due to M6

VSTD00510I trans-1,3-Dichloropropene due to M7

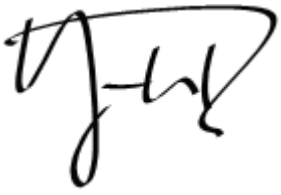
VSTD00510Z Acetone due to M3

VSTD02010I Isobutyl alcohol due to M6

VSTD02010Z Acetone due to M3

VSTD05010I 2-Chloroethyl vinyl ether 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:_____5/20/2014_____

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.: N0695 Mod. Ref No.: SDG No.: SN0695

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-76932	114	105	93	104				0
02	LCSD-76932	112	106	95	106				0
03	MB-76932	113	104	94	95				0
04	MW-3R-043014	114	109	98	98				0
05	MW-4-043014	115 *	113	93	95				1
06	MW-5-043014	115	109	94	95				0
07	DUP-1-043014	116 *	112	94	96				1
08	MW-7-043014	116 *	109	95	93				1
09	MW-8-043014	117 *	113	95	96				1
10	MW-5-043014MS	117 *	109	91	106				1
11	MW-5-043014MSD	115 *	106	92	105				1
12	LCS-76949	101	97	100	101				0
13	LCSD-76949	99	99	99	99				0
14	MB-76949	104	104	101	92				0
15	TRIP BLANK	104	104	103	92				0
16	MW-9-050114	109	102	99	90				0
17	MW-6-050114	106	102	97	89				0
18	MW-2-050114	106	105	99	91				0
19	MW-1-050114	109	104	103	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

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.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix Spike - EPA Sample No.: MW-5-043014 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	57.6515	115		30-155
Chloromethane	50.0000	0.0000	59.2287	118		40-125
Vinyl chloride	50.0000	0.0000	55.8971	112		50-145
Bromomethane	50.0000	0.0000	51.7200	103		30-145
Chloroethane	50.0000	0.0000	55.9268	112		60-135
Trichlorofluoromethane	50.0000	0.0000	66.7161	133		60-145
1,1-Dichloroethene	50.0000	0.0000	57.6766	115		70-130
Acetone	50.0000	0.0000	47.4856	95		40-140
Iodomethane	50.0000	0.0000	68.9399	138	*	72-121
Carbon disulfide	50.0000	0.0000	53.4262	107		35-160
Methylene chloride	50.0000	0.0000	53.8935	108		55-140
trans-1,2-Dichloroethen	50.0000	0.0000	54.8932	110		60-140
Methyl tert-butyl ether	50.0000	0.0000	54.9291	110		65-125
1,1-Dichloroethane	50.0000	0.0000	57.3707	115		70-135
Vinyl acetate	50.0000	0.0000	48.5611	97		38-163
2-Butanone	50.0000	0.0000	50.1772	100		30-150
cis-1,2-Dichloroethene	50.0000	32.8002	84.8820	104		70-125
2,2-Dichloropropane	50.0000	0.0000	40.0165	80		70-135
Bromochloromethane	50.0000	0.0000	55.3425	111		65-130
Chloroform	50.0000	0.0000	60.4976	121		65-135
1,1,1-Trichloroethane	50.0000	0.0000	62.7872	126		65-130
1,1-Dichloropropene	50.0000	0.0000	56.3378	113		75-130
Carbon tetrachloride	50.0000	0.0000	62.9341	126		65-140
1,2-Dichloroethane	50.0000	0.0000	66.7126	133	*	70-130
Benzene	50.0000	0.0000	52.8467	106		80-120
Trichloroethene	50.0000	31.3076	87.0782	112		70-125
1,2-Dichloropropane	50.0000	0.0000	52.9849	106		75-125
Dibromomethane	50.0000	0.0000	59.7653	120		75-125
Bromodichloromethane	50.0000	0.0000	59.0739	118		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	47.2486	94		70-130
4-Methyl-2-pentanone	50.0000	0.0000	62.2504	125		60-135
Toluene	50.0000	0.0000	52.6389	105		75-120
trans-1,3-Dichloroprope	50.0000	0.0000	49.8609	100		55-140
1,1,2-Trichloroethane	50.0000	0.0000	54.2300	108		75-125
1,3-Dichloropropane	50.0000	0.0000	47.2687	95		75-125
Tetrachloroethene	50.0000	0.0000	46.5913	93		45-150
2-Hexanone	50.0000	0.0000	44.2468	88		55-130
Dibromochloromethane	50.0000	0.0000	49.9459	100		60-135
1,2-Dibromoethane	50.0000	0.0000	48.6629	97		80-120
Chlorobenzene	50.0000	0.0000	47.6646	95		80-120
1,1,1,2-Tetrachloroetha	50.0000	0.0000	49.6371	99		80-130
Ethylbenzene	50.0000	0.0000	45.0273	90		75-125
m,p-Xylene	100.0000	0.0000	91.4621	91		75-130
o-Xylene	50.0000	0.0000	46.2544	93		80-120

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix Spike - EPA Sample No.: MW-5-043014 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	137.7164	92		81-121
Styrene	50.0000	0.0000	40.8973	82		65-135
Bromoform	50.0000	0.0000	45.9914	92		70-130
Isopropylbenzene	50.0000	0.0000	47.7540	96		75-125
1,1,2,2-Tetrachloroetha	50.0000	0.0000	41.1126	82		65-130
Bromobenzene	50.0000	0.0000	41.6058	83		75-125
1,2,3-Trichloropropane	50.0000	0.0000	43.9064	88		75-125
n-Propylbenzene	50.0000	0.0000	42.1174	84		70-130
2-Chlorotoluene	50.0000	0.0000	41.7332	83		75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	43.6627	87		75-130
4-Chlorotoluene	50.0000	0.0000	41.9548	84		75-130
tert-Butylbenzene	50.0000	0.0000	41.5122	83		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	43.1118	86		75-130
sec-Butylbenzene	50.0000	0.0000	42.0945	84		70-125
4-Isopropyltoluene	50.0000	0.0000	43.3072	87		75-130
1,3-Dichlorobenzene	50.0000	0.0000	42.4216	85		75-125
1,4-Dichlorobenzene	50.0000	0.0000	42.2479	84		75-125
n-Butylbenzene	50.0000	0.0000	42.5708	85		70-135
1,2-Dichlorobenzene	50.0000	0.0000	43.6595	87		70-120
1,2-Dibromo-3-chloropro	50.0000	0.0000	45.0809	90		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	33.7860	68		65-135
Hexachlorobutadiene	50.0000	0.0000	39.3761	79		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	35.9616	72		55-140
Naphthalene	50.0000	0.0000	31.6560	63		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	55.2055	110		4		0-40	30-155
Chloromethane	50.0000	59.9290	120		1		0-40	40-125
Vinyl chloride	50.0000	57.2406	114		2		0-40	50-145
Bromomethane	50.0000	55.3212	111		7		0-40	30-145
Chloroethane	50.0000	58.4947	117		4		0-40	60-135
Trichlorofluoromethane	50.0000	65.9036	132		1		0-40	60-145
1,1-Dichloroethene	50.0000	56.8408	114		1		0-40	70-130
Acetone	50.0000	46.5439	93		2		0-40	40-140
Iodomethane	50.0000	72.5529	145	*	5		0-40	72-121
Carbon disulfide	50.0000	53.6566	107		0		0-40	35-160
Methylene chloride	50.0000	54.9736	110		2		0-40	55-140
trans-1,2-Dichloroethen	50.0000	56.4365	113		3		0-40	60-140
Methyl tert-butyl ether	50.0000	55.3737	111		1		0-40	65-125
1,1-Dichloroethane	50.0000	55.8983	112		3		0-40	70-135
Vinyl acetate	50.0000	49.6998	99		2		0-40	38-163
2-Butanone	50.0000	51.6091	103		3		0-40	30-150
cis-1,2-Dichloroethene	50.0000	86.6788	108		3		0-40	70-125
2,2-Dichloropropane	50.0000	39.6700	79		1		0-40	70-135
Bromochloromethane	50.0000	54.3845	109		2		0-40	65-130

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix Spike - EPA Sample No.: MW-5-043014 Level: (TRACE or LOW) LOW

Chloroform	50.0000	59.9194	120		1		0-40	65-135
1,1,1-Trichloroethane	50.0000	62.7366	125		0		0-40	65-130
1,1-Dichloropropene	50.0000	58.5406	117		4		0-40	75-130
Carbon tetrachloride	50.0000	63.9404	128		2		0-40	65-140
1,2-Dichloroethane	50.0000	66.1958	132	*	1		0-40	70-130
Benzene	50.0000	53.4419	107		1		0-40	80-120
Trichloroethene	50.0000	87.0145	111		0		0-40	70-125
1,2-Dichloropropane	50.0000	53.9557	108		2		0-40	75-125
Dibromomethane	50.0000	59.0959	118		1		0-40	75-125
Bromodichloromethane	50.0000	59.0964	118		0		0-40	75-120
cis-1,3-Dichloropropene	50.0000	48.0678	96		2		0-40	70-130
4-Methyl-2-pentanone	50.0000	63.0490	126		1		0-40	60-135
Toluene	50.0000	52.3842	105		0		0-40	75-120
trans-1,3-Dichloroprope	50.0000	50.3007	101		1		0-40	55-140
1,1,2-Trichloroethane	50.0000	54.3476	109		0		0-40	75-125
1,3-Dichloropropane	50.0000	47.7498	95		1		0-40	75-125
Tetrachloroethene	50.0000	46.4945	93		0		0-40	45-150
2-Hexanone	50.0000	44.6841	89		1		0-40	55-130
Dibromochloromethane	50.0000	49.9609	100		0		0-40	60-135
1,2-Dibromoethane	50.0000	49.3632	99		1		0-40	80-120
Chlorobenzene	50.0000	47.4283	95		0		0-40	80-120
1,1,1,2-Tetrachloroetha	50.0000	50.6674	101		2		0-40	80-130
Ethylbenzene	50.0000	45.8629	92		2		0-40	75-125
m,p-Xylene	100.0000	92.3898	92		1		0-40	75-130
o-Xylene	50.0000	46.4035	93		0		0-40	80-120
Xylene (Total)	150.0000	138.7933	93		1		0-40	81-121
Styrene	50.0000	40.7406	81		0		0-40	65-135
Bromoform	50.0000	47.3615	95		3		0-40	70-130
Isopropylbenzene	50.0000	48.0864	96		1		0-40	75-125
1,1,2,2-Tetrachloroetha	50.0000	42.6017	85		4		0-40	65-130
Bromobenzene	50.0000	44.9340	90		8		0-40	75-125
1,2,3-Trichloropropane	50.0000	46.1269	92		5		0-40	75-125
n-Propylbenzene	50.0000	43.3198	87		3		0-40	70-130
2-Chlorotoluene	50.0000	43.6497	87		4		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	45.3879	91		4		0-40	75-130
4-Chlorotoluene	50.0000	43.0024	86		2		0-40	75-130
tert-Butylbenzene	50.0000	42.8191	86		3		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	45.0387	90		4		0-40	75-130
sec-Butylbenzene	50.0000	43.2671	87		3		0-40	70-125
4-Isopropyltoluene	50.0000	44.6731	89		3		0-40	75-130
1,3-Dichlorobenzene	50.0000	44.6931	89		5		0-40	75-125
1,4-Dichlorobenzene	50.0000	45.1748	90		7		0-40	75-125
n-Butylbenzene	50.0000	44.1956	88		4		0-40	70-135
1,2-Dichlorobenzene	50.0000	46.2610	93		6		0-40	70-120
1,2-Dibromo-3-chloropro	50.0000	50.3984	101		11		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	38.3032	77		13		0-40	65-135
Hexachlorobutadiene	50.0000	42.0552	84		7		0-40	50-140

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix Spike - EPA Sample No.: MW-5-043014 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	40.6799	81		12		0-40	55-140
Naphthalene	50.0000	43.1443	86		31		0-40	55-140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 4 out of 136 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCS-76932 LCS Lot No.:

Date Extracted: 05/03/2014 Date Analyzed (1): 05/04/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	52.9444	106		30 - 155
Chloromethane	50.0000	0.0000	60.1304	120		40 - 125
Vinyl chloride	50.0000	0.0000	56.1095	112		50 - 145
Bromomethane	50.0000	0.0000	52.0803	104		30 - 145
Chloroethane	50.0000	0.0000	57.3036	115		60 - 135
Trichlorofluoromethane	50.0000	0.0000	62.5801	125		60 - 145
1,1-Dichloroethene	50.0000	0.0000	55.3173	111		70 - 130
Acetone	50.0000	0.0000	37.3337	75		40 - 140
Iodomethane	50.0000	0.0000	72.6956	145	*	72 - 121
Carbon disulfide	50.0000	0.0000	53.1591	106		35 - 160
Methylene chloride	50.0000	0.0000	56.2661	113		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	55.4940	111		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.8537	102		65 - 125
1,1-Dichloroethane	50.0000	0.0000	55.9539	112		70 - 135
Vinyl acetate	50.0000	0.0000	55.6791	111		38 - 163
2-Butanone	50.0000	0.0000	39.0858	78		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	53.0360	106		70 - 125
2,2-Dichloropropane	50.0000	0.0000	48.7624	98		70 - 135
Bromochloromethane	50.0000	0.0000	54.9797	110		65 - 130
Chloroform	50.0000	0.0000	58.6662	117		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	61.2637	123		65 - 130
1,1-Dichloropropene	50.0000	0.0000	58.8351	118		75 - 130
Carbon tetrachloride	50.0000	0.0000	61.7492	123		65 - 140
1,2-Dichloroethane	50.0000	0.0000	63.7184	127		70 - 130
Benzene	50.0000	0.0000	54.2911	109		80 - 120
Trichloroethene	50.0000	0.0000	55.5051	111		70 - 125
1,2-Dichloropropane	50.0000	0.0000	54.6655	109		75 - 125
Dibromomethane	50.0000	0.0000	56.6116	113		75 - 125
Bromodichloromethane	50.0000	0.0000	57.5258	115		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	50.6000	101		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	50.0420	100		60 - 135
Toluene	50.0000	0.0000	53.9343	108		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	51.1768	102		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	52.6146	105		75 - 125
1,3-Dichloropropane	50.0000	0.0000	46.9548	94		75 - 125
Tetrachloroethene	50.0000	0.0000	48.0479	96		45 - 150
2-Hexanone	50.0000	0.0000	37.9194	76		55 - 130
Dibromochloromethane	50.0000	0.0000	50.1240	100		60 - 135
1,2-Dibromoethane	50.0000	0.0000	45.8935	92		80 - 120
Chlorobenzene	50.0000	0.0000	47.8307	96		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	49.9535	100		80 - 130
Ethylbenzene	50.0000	0.0000	47.8743	96		75 - 125
m,p-Xylene	100.0000	0.0000	96.3725	96		75 - 130
o-Xylene	50.0000	0.0000	49.1861	98		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCS-76932 LCS Lot No.:

Date Extracted: 05/03/2014 Date Analyzed (1): 05/04/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	145.5586	97		81 - 121
Styrene	50.0000	0.0000	47.8667	96		65 - 135
Bromoform	50.0000	0.0000	44.3038	89		70 - 130
Isopropylbenzene	50.0000	0.0000	49.7147	99		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	41.1549	82		65 - 130
Bromobenzene	50.0000	0.0000	44.8499	90		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	42.5343	85		75 - 125
n-Propylbenzene	50.0000	0.0000	45.5002	91		70 - 130
2-Chlorotoluene	50.0000	0.0000	45.4312	91		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	48.4049	97		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.7433	93		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.0116	92		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	46.9265	94		75 - 130
sec-Butylbenzene	50.0000	0.0000	45.8201	92		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.3776	95		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	48.0087	96		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.1624	92		75 - 125
n-Butylbenzene	50.0000	0.0000	47.3722	95		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.5929	95		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	42.4473	85		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	40.9456	82		65 - 135
Hexachlorobutadiene	50.0000	0.0000	45.1719	90		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	40.5043	81		55 - 140
Naphthalene	50.0000	0.0000	41.7735	84		55 - 140

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

* Values outside of QC limits

Spike Recovery: 1 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCS-76949 LCS Lot No.:

Date Extracted: 05/05/2014 Date Analyzed (1): 05/05/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	47.1316	94		30 - 155
Chloromethane	50.0000	0.0000	47.6391	95		40 - 125
Vinyl chloride	50.0000	0.0000	49.5180	99		50 - 145
Bromomethane	50.0000	0.0000	55.8328	112		30 - 145
Chloroethane	50.0000	0.0000	47.8784	96		60 - 135
Trichlorofluoromethane	50.0000	0.0000	48.6179	97		60 - 145
1,1-Dichloroethene	50.0000	0.0000	50.8899	102		70 - 130
Acetone	50.0000	0.0000	42.2372	84		40 - 140
Iodomethane	50.0000	0.0000	52.0706	104		72 - 121
Carbon disulfide	50.0000	0.0000	49.7917	100		35 - 160
Methylene chloride	50.0000	0.0000	52.4525	105		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.4437	97		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.9643	102		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.3278	99		70 - 135
Vinyl acetate	50.0000	0.0000	50.2882	101		38 - 163
2-Butanone	50.0000	0.0000	46.3113	93		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	50.9273	102		70 - 125
2,2-Dichloropropane	50.0000	0.0000	52.8943	106		70 - 135
Bromochloromethane	50.0000	0.0000	50.7617	102		65 - 130
Chloroform	50.0000	0.0000	51.0109	102		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	50.4400	101		65 - 130
1,1-Dichloropropene	50.0000	0.0000	50.5071	101		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.3713	103		65 - 140
1,2-Dichloroethane	50.0000	0.0000	48.9064	98		70 - 130
Benzene	50.0000	0.0000	50.1586	100		80 - 120
Trichloroethene	50.0000	0.0000	50.0224	100		70 - 125
1,2-Dichloropropane	50.0000	0.0000	51.7569	104		75 - 125
Dibromomethane	50.0000	0.0000	50.6860	101		75 - 125
Bromodichloromethane	50.0000	0.0000	53.0856	106		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.0682	106		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	49.3875	99		60 - 135
Toluene	50.0000	0.0000	50.3797	101		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	54.0148	108		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.1335	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	51.4007	103		75 - 125
Tetrachloroethene	50.0000	0.0000	49.1065	98		45 - 150
2-Hexanone	50.0000	0.0000	47.0803	94		55 - 130
Dibromochloromethane	50.0000	0.0000	52.4753	105		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.8430	102		80 - 120
Chlorobenzene	50.0000	0.0000	50.9395	102		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	49.9589	100		80 - 130
Ethylbenzene	50.0000	0.0000	50.6878	101		75 - 125
m,p-Xylene	100.0000	0.0000	104.4738	104		75 - 130
o-Xylene	50.0000	0.0000	52.8004	106		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCS-76949 LCS Lot No.:

Date Extracted: 05/05/2014 Date Analyzed (1): 05/05/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	157.2742	105		81 - 121
Styrene	50.0000	0.0000	51.9568	104		65 - 135
Bromoform	50.0000	0.0000	53.7220	107		70 - 130
Isopropylbenzene	50.0000	0.0000	53.9075	108		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	49.5563	99		65 - 130
Bromobenzene	50.0000	0.0000	53.0755	106		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	50.4071	101		75 - 125
n-Propylbenzene	50.0000	0.0000	51.5405	103		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.3178	99		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	51.5600	103		75 - 130
4-Chlorotoluene	50.0000	0.0000	49.7054	99		75 - 130
tert-Butylbenzene	50.0000	0.0000	53.7804	108		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	51.1679	102		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.9276	100		70 - 125
4-Isopropyltoluene	50.0000	0.0000	51.1372	102		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	51.9689	104		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	51.5312	103		75 - 125
n-Butylbenzene	50.0000	0.0000	52.0107	104		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	52.7024	105		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	53.8372	108		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	51.0381	102		65 - 135
Hexachlorobutadiene	50.0000	0.0000	52.1382	104		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	49.3892	99		55 - 140
Naphthalene	50.0000	0.0000	46.6422	93		55 - 140

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCSD-76932 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	48.2195	96		10		40	30 - 155
Chloromethane	50.0000	50.3723	101		17		40	40 - 125
Vinyl chloride	50.0000	46.8797	94		17		40	50 - 145
Bromomethane	50.0000	46.8350	94		10		40	30 - 145
Chloroethane	50.0000	47.3126	95		19		40	60 - 135
Trichlorofluoromethane	50.0000	55.1596	110		13		40	60 - 145
1,1-Dichloroethene	50.0000	47.3480	95		16		40	70 - 130
Acetone	50.0000	33.9607	68		10		40	40 - 140
Iodomethane	50.0000	62.8966	126	*	14		40	72 - 121
Carbon disulfide	50.0000	44.8317	90		16		40	35 - 160
Methylene chloride	50.0000	47.5722	95		17		40	55 - 140
trans-1,2-Dichloroethene	50.0000	47.0445	94		17		40	60 - 140
Methyl tert-butyl ether	50.0000	45.8914	92		10		40	65 - 125
1,1-Dichloroethane	50.0000	47.5671	95		16		40	70 - 135
Vinyl acetate	50.0000	48.4124	97		13		40	38 - 163
2-Butanone	50.0000	34.8873	70		11		40	30 - 150
cis-1,2-Dichloroethene	50.0000	45.4092	91		15		40	70 - 125
2,2-Dichloropropane	50.0000	39.9963	80		20		40	70 - 135
Bromochloromethane	50.0000	47.7010	95		15		40	65 - 130
Chloroform	50.0000	50.2641	101		15		40	65 - 135
1,1,1-Trichloroethane	50.0000	51.2799	103		18		40	65 - 130
1,1-Dichloropropene	50.0000	48.0650	96		21		40	75 - 130
Carbon tetrachloride	50.0000	52.7539	106		15		40	65 - 140
1,2-Dichloroethane	50.0000	55.2484	110		14		40	70 - 130
Benzene	50.0000	46.0052	92		17		40	80 - 120
Trichloroethene	50.0000	46.4019	93		18		40	70 - 125
1,2-Dichloropropane	50.0000	45.9244	92		17		40	75 - 125
Dibromomethane	50.0000	49.9286	100		12		40	75 - 125
Bromodichloromethane	50.0000	49.1708	98		16		40	75 - 120
cis-1,3-Dichloropropene	50.0000	43.9932	88		14		40	70 - 130
4-Methyl-2-pentanone	50.0000	46.7832	94		6		40	60 - 135
Toluene	50.0000	46.0779	92		16		40	75 - 120
trans-1,3-Dichloropropene	50.0000	44.6910	89		14		40	55 - 140
1,1,2-Trichloroethane	50.0000	46.3321	93		12		40	75 - 125
1,3-Dichloropropane	50.0000	42.4623	85		10		40	75 - 125
Tetrachloroethene	50.0000	43.6435	87		10		40	45 - 150
2-Hexanone	50.0000	34.6188	69		10		40	55 - 130
Dibromochloromethane	50.0000	43.5365	87		14		40	60 - 135
1,2-Dibromoethane	50.0000	42.5002	85		8		40	80 - 120
Chlorobenzene	50.0000	42.6273	85		12		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	44.6363	89		12		40	80 - 130
Ethylbenzene	50.0000	42.0936	84		13		40	75 - 125
m,p-Xylene	100.0000	84.9862	85		12		40	75 - 130
o-Xylene	50.0000	43.0230	86		13		40	80 - 120
Xylene (Total)	150.0000	128.0092	85		13		40	81 - 121
Styrene	50.0000	42.1275	84		13		40	65 - 135

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCSD-76932 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	39.7639	80		11		40	70 - 130
Isopropylbenzene	50.0000	44.4997	89		11		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	38.0443	76		8		40	65 - 130
Bromobenzene	50.0000	40.3307	81		11		40	75 - 125
1,2,3-Trichloropropane	50.0000	39.0376	78		9		40	75 - 125
n-Propylbenzene	50.0000	41.2522	83		9		40	70 - 130
2-Chlorotoluene	50.0000	40.6478	81		12		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	42.6648	85		13		40	75 - 130
4-Chlorotoluene	50.0000	40.0864	80		15		40	75 - 130
tert-Butylbenzene	50.0000	40.0420	80		14		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	41.5814	83		12		40	75 - 130
sec-Butylbenzene	50.0000	41.7881	84		9		40	70 - 125
4-Isopropyltoluene	50.0000	42.5116	85		11		40	75 - 130
1,3-Dichlorobenzene	50.0000	41.4377	83		15		40	75 - 125
1,4-Dichlorobenzene	50.0000	41.3062	83		10		40	75 - 125
n-Butylbenzene	50.0000	42.5237	85		11		40	70 - 135
1,2-Dichlorobenzene	50.0000	41.9593	84		12		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	38.4725	77		10		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	35.8450	72		13		40	65 - 135
Hexachlorobutadiene	50.0000	40.7838	82		9		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	37.1330	74		9		40	55 - 140
Naphthalene	50.0000	38.0584	76		10		40	55 - 140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 1 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCSD-76949 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	48.3424	97		3		40	30 - 155
Chloromethane	50.0000	48.1922	96		1		40	40 - 125
Vinyl chloride	50.0000	50.4467	101		2		40	50 - 145
Bromomethane	50.0000	55.5040	111		1		40	30 - 145
Chloroethane	50.0000	48.0671	96		0		40	60 - 135
Trichlorofluoromethane	50.0000	49.5106	99		2		40	60 - 145
1,1-Dichloroethene	50.0000	51.3750	103		1		40	70 - 130
Acetone	50.0000	41.5191	83		1		40	40 - 140
Iodomethane	50.0000	55.7181	111		7		40	72 - 121
Carbon disulfide	50.0000	49.4593	99		1		40	35 - 160
Methylene chloride	50.0000	51.4036	103		2		40	55 - 140
trans-1,2-Dichloroethene	50.0000	49.6499	99		2		40	60 - 140
Methyl tert-butyl ether	50.0000	50.3827	101		1		40	65 - 125
1,1-Dichloroethane	50.0000	49.5406	99		0		40	70 - 135
Vinyl acetate	50.0000	50.8952	102		1		40	38 - 163
2-Butanone	50.0000	47.3774	95		2		40	30 - 150
cis-1,2-Dichloroethene	50.0000	51.0377	102		0		40	70 - 125
2,2-Dichloropropane	50.0000	52.3912	105		1		40	70 - 135
Bromochloromethane	50.0000	49.6406	99		3		40	65 - 130
Chloroform	50.0000	50.5739	101		1		40	65 - 135
1,1,1-Trichloroethane	50.0000	50.8848	102		1		40	65 - 130
1,1-Dichloropropene	50.0000	51.3418	103		2		40	75 - 130
Carbon tetrachloride	50.0000	51.6103	103		0		40	65 - 140
1,2-Dichloroethane	50.0000	49.4465	99		1		40	70 - 130
Benzene	50.0000	50.7187	101		1		40	80 - 120
Trichloroethene	50.0000	50.7691	102		2		40	70 - 125
1,2-Dichloropropane	50.0000	52.2015	104		0		40	75 - 125
Dibromomethane	50.0000	49.8215	100		1		40	75 - 125
Bromodichloromethane	50.0000	52.5494	105		1		40	75 - 120
cis-1,3-Dichloropropene	50.0000	53.4742	107		1		40	70 - 130
4-Methyl-2-pentanone	50.0000	48.8624	98		1		40	60 - 135
Toluene	50.0000	50.9679	102		1		40	75 - 120
trans-1,3-Dichloropropene	50.0000	54.1816	108		0		40	55 - 140
1,1,2-Trichloroethane	50.0000	51.0628	102		0		40	75 - 125
1,3-Dichloropropane	50.0000	51.4339	103		0		40	75 - 125
Tetrachloroethene	50.0000	50.6654	101		3		40	45 - 150
2-Hexanone	50.0000	46.5387	93		1		40	55 - 130
Dibromochloromethane	50.0000	51.8229	104		1		40	60 - 135
1,2-Dibromoethane	50.0000	51.1685	102		0		40	80 - 120
Chlorobenzene	50.0000	51.0399	102		0		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	50.0664	100		0		40	80 - 130
Ethylbenzene	50.0000	52.4378	105		4		40	75 - 125
m,p-Xylene	100.0000	103.8741	104		0		40	75 - 130
o-Xylene	50.0000	53.9622	108		2		40	80 - 120
Xylene (Total)	150.0000	157.8364	105		0		40	81 - 121
Styrene	50.0000	52.7371	105		1		40	65 - 135

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab Sample ID: LCSD-76949 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	53.3530	107		0		40	70 - 130
Isopropylbenzene	50.0000	54.0786	108		0		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	48.4799	97		2		40	65 - 130
Bromobenzene	50.0000	51.7203	103		3		40	75 - 125
1,2,3-Trichloropropane	50.0000	50.1081	100		1		40	75 - 125
n-Propylbenzene	50.0000	51.1906	102		1		40	70 - 130
2-Chlorotoluene	50.0000	49.4035	99		0		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	51.3574	103		0		40	75 - 130
4-Chlorotoluene	50.0000	50.4128	101		2		40	75 - 130
tert-Butylbenzene	50.0000	52.4881	105		3		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	51.1818	102		0		40	75 - 130
sec-Butylbenzene	50.0000	49.2233	98		2		40	70 - 125
4-Isopropyltoluene	50.0000	50.8450	102		0		40	75 - 130
1,3-Dichlorobenzene	50.0000	49.9212	100		4		40	75 - 125
1,4-Dichlorobenzene	50.0000	51.7638	104		1		40	75 - 125
n-Butylbenzene	50.0000	51.6041	103		1		40	70 - 135
1,2-Dichlorobenzene	50.0000	51.8288	104		1		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	55.0317	110		2		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	48.7003	97		5		40	65 - 135
Hexachlorobutadiene	50.0000	49.6282	99		5		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	47.6666	95		4		40	55 - 140
Naphthalene	50.0000	46.9553	94		1		40	55 - 140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab File ID: V8D4472.D Lab Sample ID: MB-76932

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/04/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 5:02

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-76932	LCS-76932	V8D4469.D	3:41
02	LCSD-76932	LCSD-76932	V8D4470.D	4:08
03	MW-3R-043014	N0695-01A	V8D4485.D	10:59
04	MW-4-043014	N0695-02A	V8D4486.D	11:26
05	MW-5-043014	N0695-03A	V8D4487.D	11:54
06	DUP-1-043014	N0695-04A	V8D4488.D	12:22
07	MW-7-043014	N0695-05A	V8D4489.D	12:49
08	MW-8-043014	N0695-06A	V8D4490.D	13:17
09	MW-5-043014MS	N0695-03AMS	V8D4491.D	13:44
10	MW-5-043014MSD	N0695-03AMSD	V8D4492.D	14:12

COMMENTS:

som13.12.31.1153

SW846

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab File ID: V8D4557.D Lab Sample ID: MB-76949

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/05/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 18:24

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-76949	LCS-76949	V8D4554.D	17:02
02	LCSD-76949	LCSD-76949	V8D4555.D	17:29
03	TRIP BLANK	N0695-11A	V8D4558.D	18:52
04	MW-9-050114	N0695-07A	V8D4571.D	0:45
05	MW-6-050114	N0695-08A	V8D4572.D	1:12
06	MW-2-050114	N0695-09A	V8D4573.D	1:39
07	MW-1-050114	N0695-10A	V8D4574.D	2:07

COMMENTS:

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.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab File ID: V8D4262.D BFB Injection Date: 04/28/2014

Instrument ID: V10 BFB Injection Time: 9:29

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	33.3
75	30.0 - 80.0% of mass 95	56.2
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	0.5 (0.5)1
174	50.0 -120% of mass 95	89.7
175	5.0 - 9.0% of mass 174	7.1 (7.9)1
176	95.0 - 101% of mass 174	88.4 (98.5)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	VSTD02010Z	VSTD02010Z	V8D4263.D	04/28/2014	9:57
02	VSTD00510Z	VSTD00510Z	V8D4264.D	04/28/2014	10:24
03	VSTD20010Z	VSTD20010Z	V8D4267.D	04/28/2014	11:46
04	VSTD10010Z	VSTD10010Z	V8D4268.D	04/28/2014	12:14
05	VSTD00110Z	VSTD00110Z	V8D4271.D	04/28/2014	13:36
06	VSTD05010Z	VSTD05010Z	V8D4272.D	04/28/2014	14:13

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB10H

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab File ID: V8D4466.D BFB Injection Date: 05/04/2014

Instrument ID: V10 BFB Injection Time: 2:20

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.4
75	30.0 - 80.0% of mass 95	60.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	77.2
175	5.0 - 9.0% of mass 174	6.9 (9.0)1
176	95.0 - 101% of mass 174	76.8 (99.5)1
177	5.0 - 9.0% of mass 176	6.6 (8.5)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	VSTD05010H	VSTD05010H	V8D4468.D	05/04/2014	3:14
02	LCS-76932	LCS-76932	V8D4469.D	05/04/2014	3:41
03	LCSD-76932	LCSD-76932	V8D4470.D	05/04/2014	4:08
04	MB-76932	MB-76932	V8D4472.D	05/04/2014	5:02
05	MW-3R-043014	N0695-01A	V8D4485.D	05/04/2014	10:59
06	MW-4-043014	N0695-02A	V8D4486.D	05/04/2014	11:26
07	MW-5-043014	N0695-03A	V8D4487.D	05/04/2014	11:54
08	DUP-1-043014	N0695-04A	V8D4488.D	05/04/2014	12:22
09	MW-7-043014	N0695-05A	V8D4489.D	05/04/2014	12:49
10	MW-8-043014	N0695-06A	V8D4490.D	05/04/2014	13:17
11	MW-5-043014MS	N0695-03AMS	V8D4491.D	05/04/2014	13:44
12	MW-5-043014MSD	N0695-03AMSD	V8D4492.D	05/04/2014	14:12

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB10I

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab File ID: V8D4543.D BFB Injection Date: 05/05/2014

Instrument ID: V10 BFB Injection Time: 11:41

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	39.6
75	30.0 - 80.0% of mass 95	65.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	76.2
175	5.0 - 9.0% of mass 174	6.2 (8.1)1
176	95.0 - 101% of mass 174	75.0 (98.5)1
177	5.0 - 9.0% of mass 176	5.0 (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	VSTD05010I	VSTD05010I	V8D4544.D	05/05/2014	12:27
02	VSTD02010I	VSTD02010I	V8D4545.D	05/05/2014	12:55
03	VSTD00510I	VSTD00510I	V8D4546.D	05/05/2014	13:22
04	VSTD00110I	VSTD00110I	V8D4547.D	05/05/2014	13:50
05	VSTD20010I	VSTD20010I	V8D4549.D	05/05/2014	14:45
06	VSTD10010I	VSTD10010I	V8D4550.D	05/05/2014	15:12

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

EPA SAMPLE NO.
BFB10J

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Lab File ID: V8D4552.D BFB Injection Date: 05/05/2014

Instrument ID: V10 BFB Injection Time: 16:07

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.5
75	30.0 - 80.0% of mass 95	62.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 -120% of mass 95	77.4
175	5.0 - 9.0% of mass 174	6.5 (8.4)1
176	95.0 - 101% of mass 174	76.8 (99.3)1
177	5.0 - 9.0% of mass 176	5.6 (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	VSTD05010J	VSTD05010J	V8D4553.D	05/05/2014	16:35
02	LCS-76949	LCS-76949	V8D4554.D	05/05/2014	17:02
03	LCSD-76949	LCSD-76949	V8D4555.D	05/05/2014	17:29
04	MB-76949	MB-76949	V8D4557.D	05/05/2014	18:24
05	TRIP BLANK	N0695-11A	V8D4558.D	05/05/2014	18:52
06	MW-9-050114	N0695-07A	V8D4571.D	05/06/2014	0:45
07	MW-6-050114	N0695-08A	V8D4572.D	05/06/2014	1:12
08	MW-2-050114	N0695-09A	V8D4573.D	05/06/2014	1:39
09	MW-1-050114	N0695-10A	V8D4574.D	05/06/2014	2:07

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/28/2014 04/28/2014

EPA Sample No.(VSTD#####): VSTD05010H Date Analyzed: 05/04/2014

Lab File ID (Standard): V8D4468.D Time Analyzed: 3:14

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	691455		5.236		646519		8.223		350922		10.725	
	UPPER LIMIT	1382910		5.736		1293038		8.723		701844		11.225	
	LOWER LIMIT	345728		4.736		323260		7.723		175461		10.225	
	EPA SAMPLE NO.												
01	LCS-76932	701847		5.236		656959		8.220		349784		10.725	
02	LCSD-76932	720452		5.236		652384		8.223		350136		10.725	
03	MB-76932	687787		5.236		621259		8.223		250293		10.728	
04	MW-3R-043014	634491		5.239		556359		8.223		222551		10.728	
05	MW-4-043014	619179		5.236		568695		8.226		228825		10.731	
06	MW-5-043014	614263		5.236		562083		8.223		221774		10.731	
07	DUP-1-043014	607727		5.236		559731		8.223		221936		10.728	
08	MW-7-043014	609151		5.236		559633		8.223		220727		10.728	
09	MW-8-043014	603778		5.239		550581		8.223		218137		10.728	
10	MW-5-043014MS	625971		5.236		593083		8.223		332477		10.728	
11	MW-5-043014MSD	632727		5.236		597335		8.223		321631		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.: N0695 Mod. Ref No.: SDG No.: SN0695

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/05/2014 05/05/2014

EPA Sample No.(VSTD#####): VSTD05010J Date Analyzed: 05/05/2014

Lab File ID (Standard): V8D4553.D Time Analyzed: 16:35

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	588161		5.233		575691		8.223		321854		10.728	
	UPPER LIMIT	1176322		5.733		1151382		8.723		643708		11.228	
	LOWER LIMIT	294081		4.733		287846		7.723		160927		10.228	
	EPA SAMPLE NO.												
01	LCS-76949	599815		5.236		584857		8.223		319107		10.725	
02	LCSD-76949	604455		5.236		589827		8.226		327353		10.725	
03	MB-76949	558309		5.239		551284		8.223		233176		10.731	
04	TRIP BLANK	560506		5.239		536512		8.223		224536		10.728	
05	MW-9-050114	480508		5.236		478879		8.223		186856		10.728	
06	MW-6-050114	477169		5.236		468708		8.223		185438		10.728	
07	MW-2-050114	475710		5.239		470228		8.223		184095		10.731	
08	MW-1-050114	465034		5.236		448268		8.226		182023		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.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4485.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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	1.2	J
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

EPA SAMPLE NO.

MW-3R-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4485.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4485.d
Report Date: 14-May-2014 10:11

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

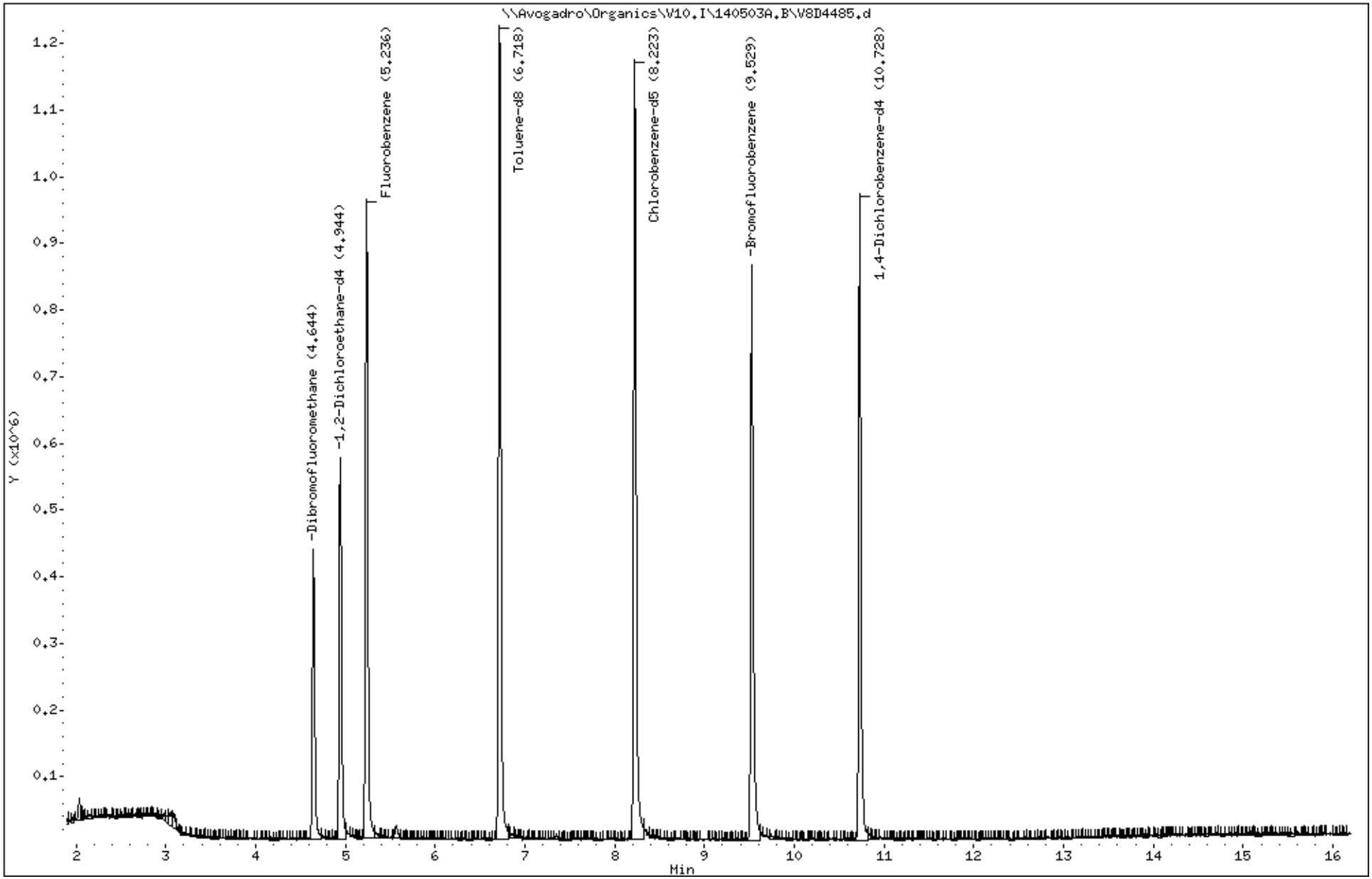
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Lab Smp Id: N0695-01A Client Smp ID: MW-3R-043014
Inj Date : 04-MAY-2014 10:59
Operator : MMS   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-01A,,76932
Misc Info :
Comment   :
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Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 71
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	4.641	(0.886)	223758	56.9124	57
$	42 1,2-Dichloroethane-d4	102	4.943	4.940	(0.944)	40544	54.4082	54
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	634491	50.0000	
	47 Trichloroethene	130	5.576	5.564	(1.064)	4824	1.19528	1.2
$	58 Toluene-d8	98	6.718	6.715	(0.817)	712697	48.9968	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	556359	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	311560	49.1873	49
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	222551	50.0000	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4485.d
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Client ID: MW-3R-043014
Instrument: V10.i
Sample Info: 5ML,N0695-01A,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4485.d

Date : 04-MAY-2014 10:59

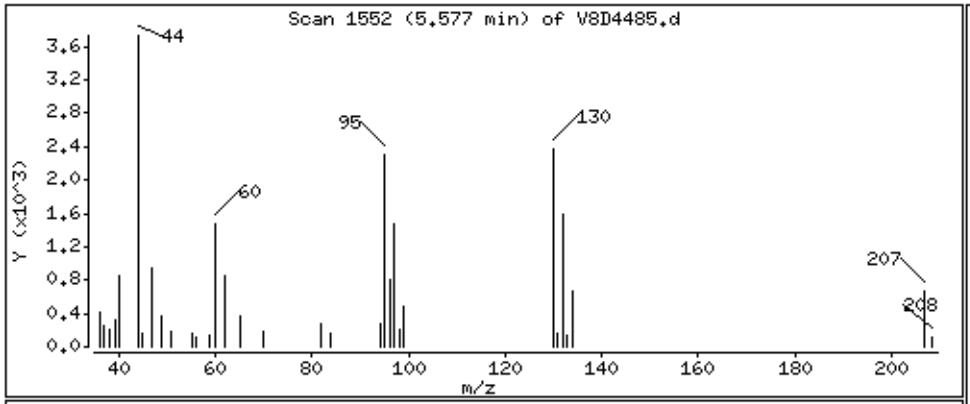
Client ID: MW-3R-043014 Instrument: V10.i

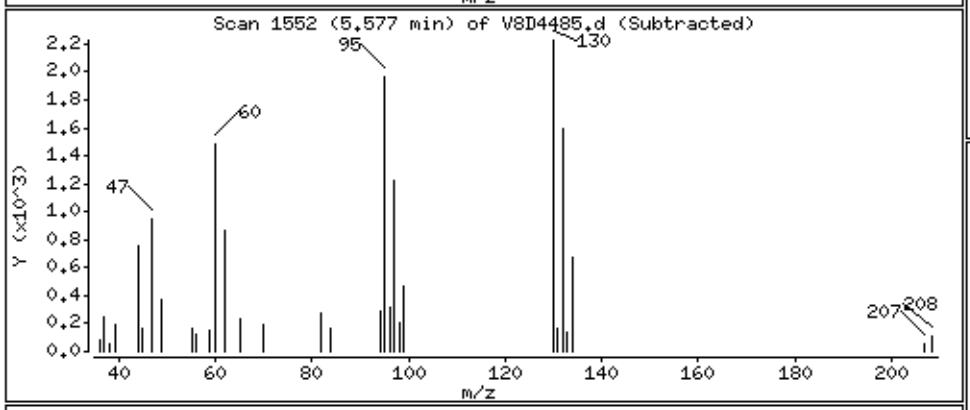
Sample Info: 5ML,N0695-01A,,76932

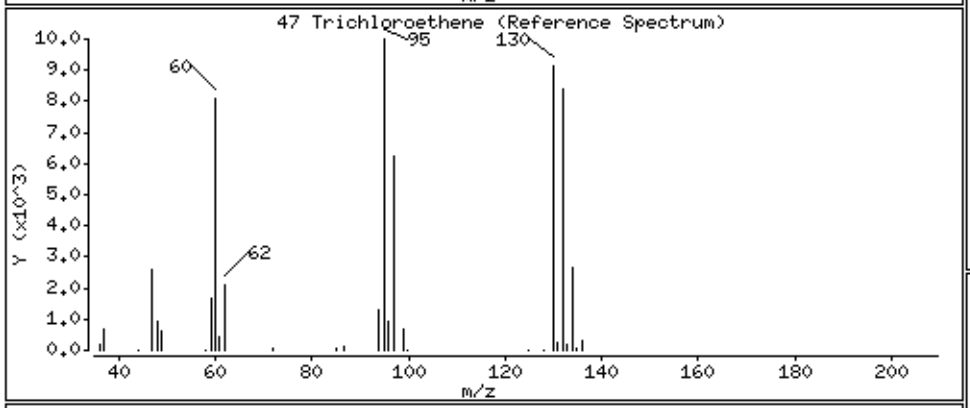
Purge Volume: 5.0 Operator: MMS SRC: LIMS

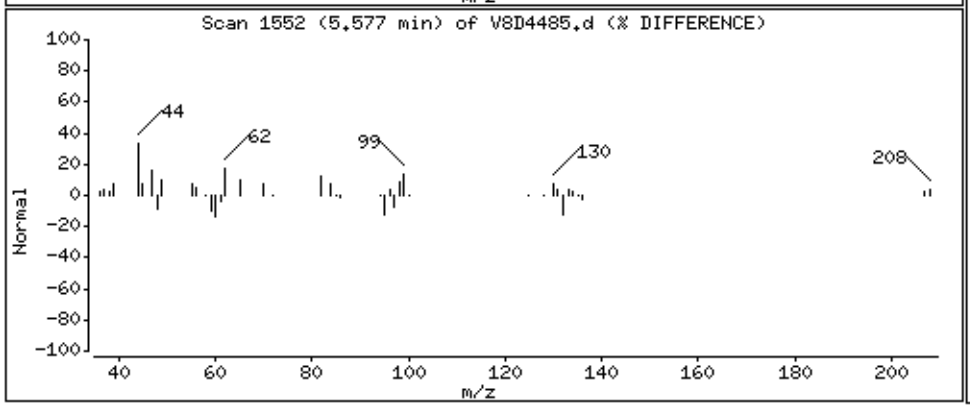
Column phase: DB-624 Column diameter: 0.25

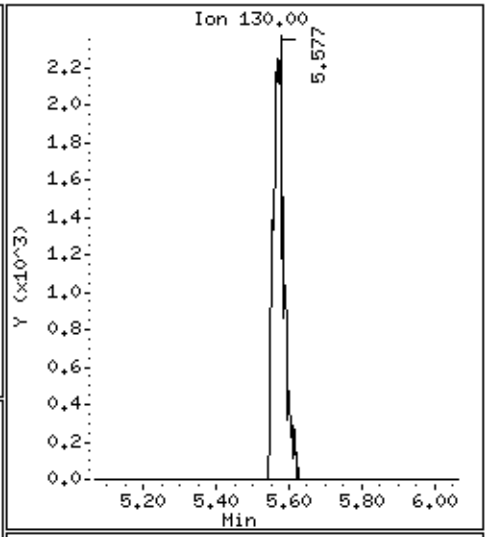
47 Trichloroethene Concentration: 1.2 ug/L

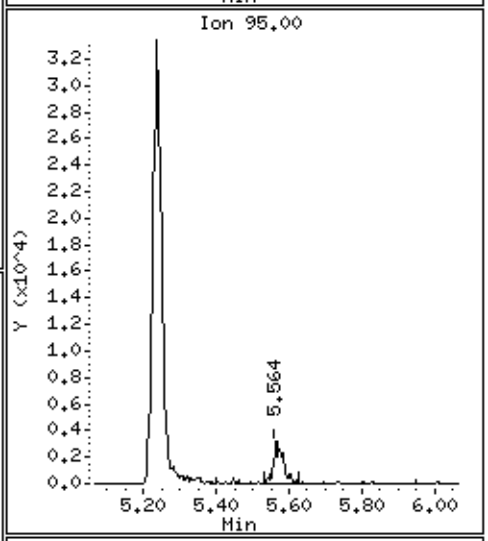


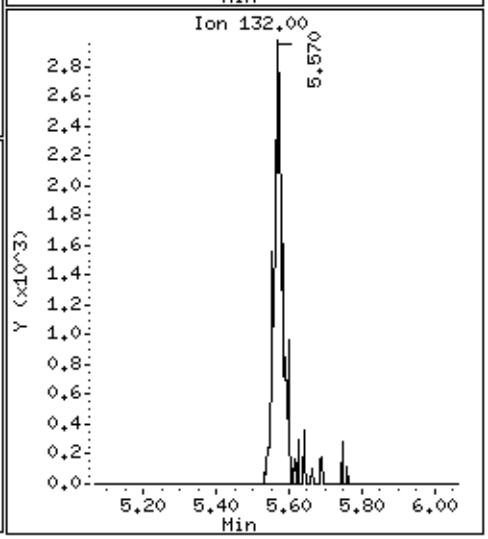












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4486.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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	9.7	
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

EPA SAMPLE NO.

MW-4-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4486.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4486.d
Report Date: 14-May-2014 10:11

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

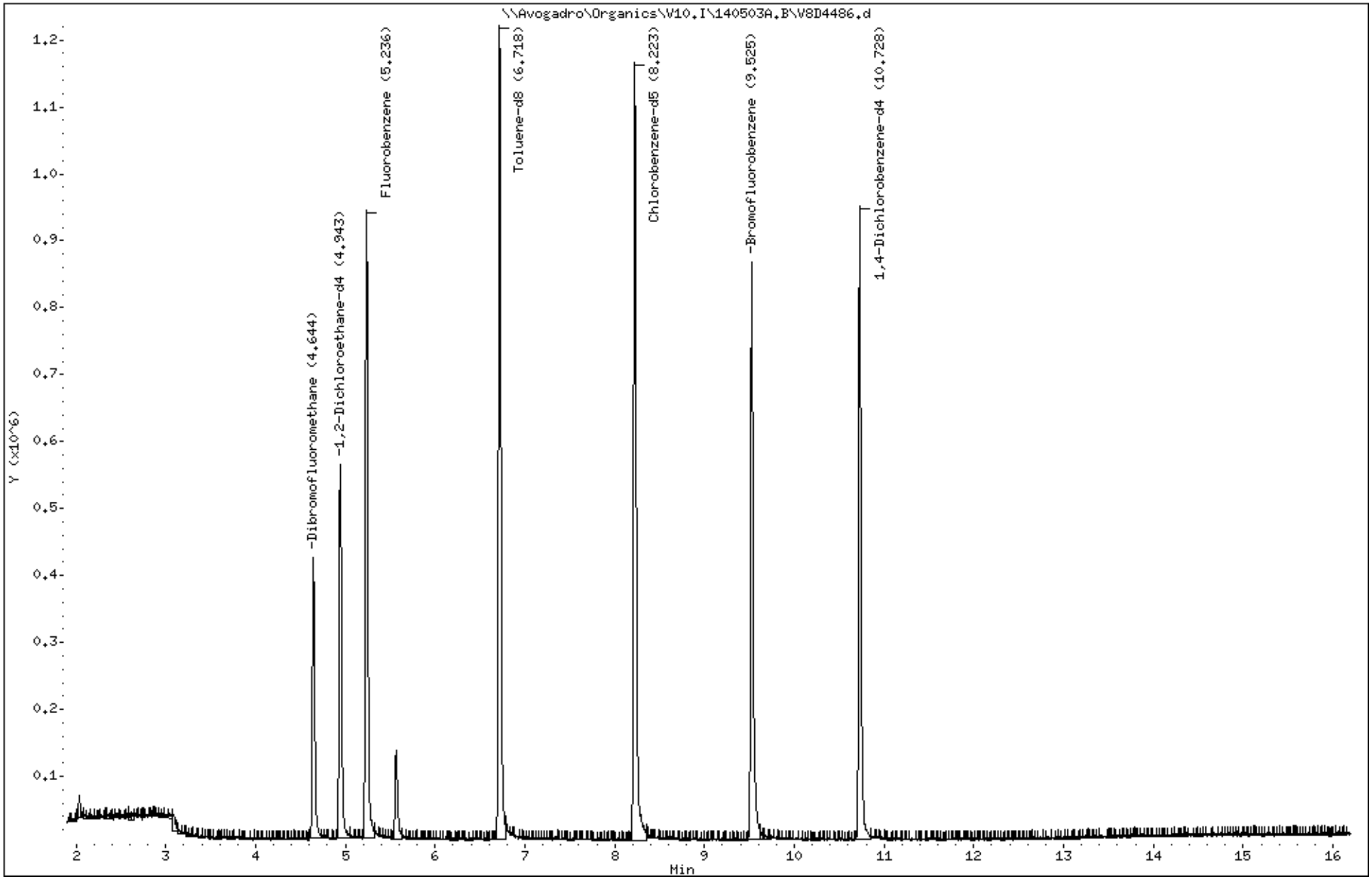
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Lab Smp Id: N0695-02A Client Smp ID: MW-4-043014
Inj Date : 04-MAY-2014 11:26
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-02A,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 72
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	4.641	(0.886)	221515	57.7352	58
$ 42 1,2-Dichloroethane-d4	102	4.940	4.940	(0.944)	41004	56.3863	56
* 46 Fluorobenzene	96	5.235	5.236	(1.000)	619179	50.0000	
47 Trichloroethene	130	5.570	5.564	(1.064)	38221	9.70455	9.7
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	693013	46.6100	47
* 68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	568695	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	307413	47.4799	47
* 92 1,4-Dichlorobenzene-d4	152	10.730	10.724	(1.000)	228825	50.0000	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4486.d
Date : 04-MAY-2014 11:26
Client ID: MW-4-043014
Instrument: V10.i
Sample Info: 5ML,N0695-02A,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4486.d

Date : 04-MAY-2014 11:26

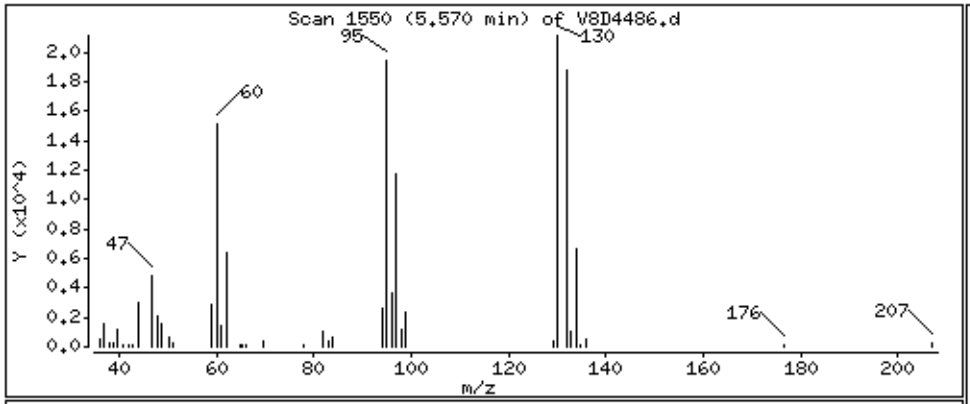
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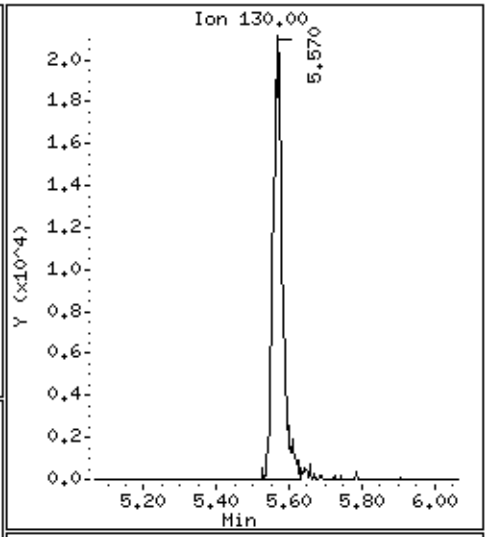
Sample Info: 5ML,N0695-02A,,76932

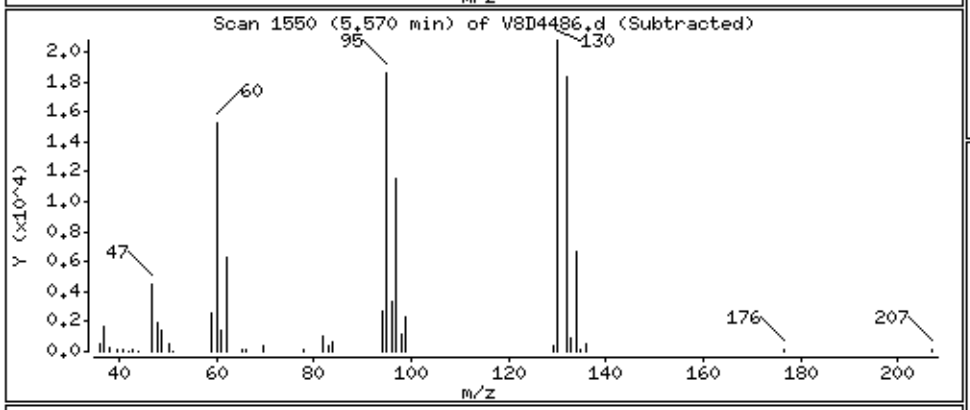
Purge Volume: 5.0 Operator: MMS SRC: LIMS

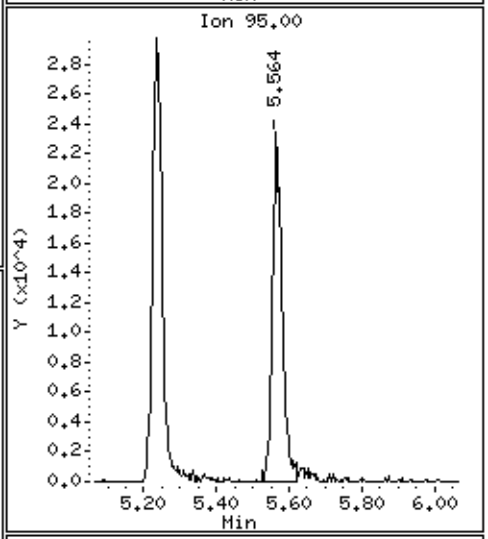
Column phase: DB-624 Column diameter: 0.25

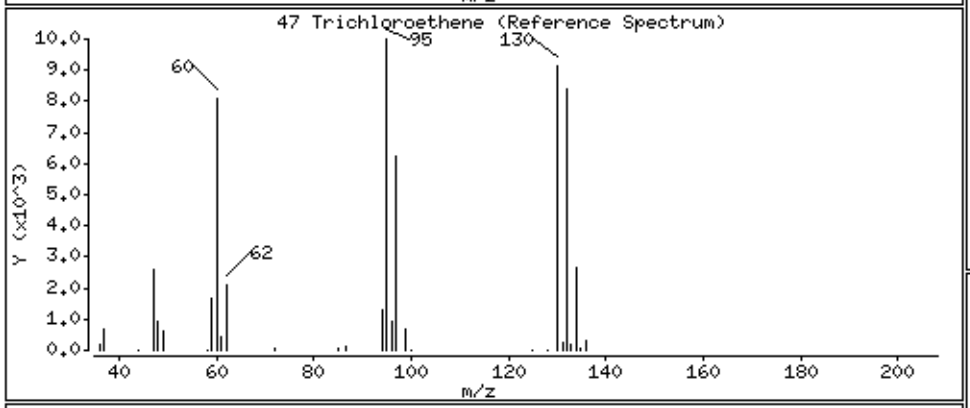
47 Trichloroethene Concentration: 9.7 ug/L

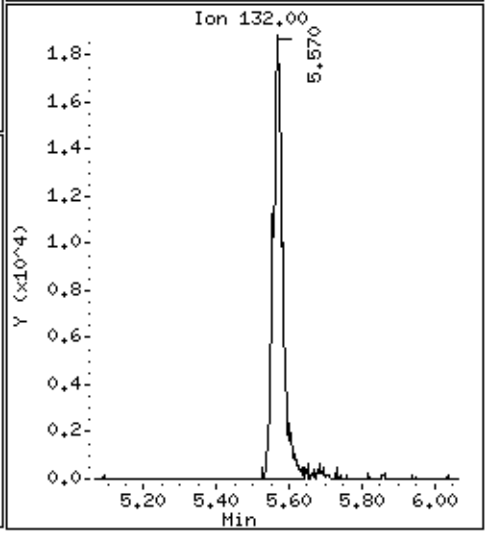


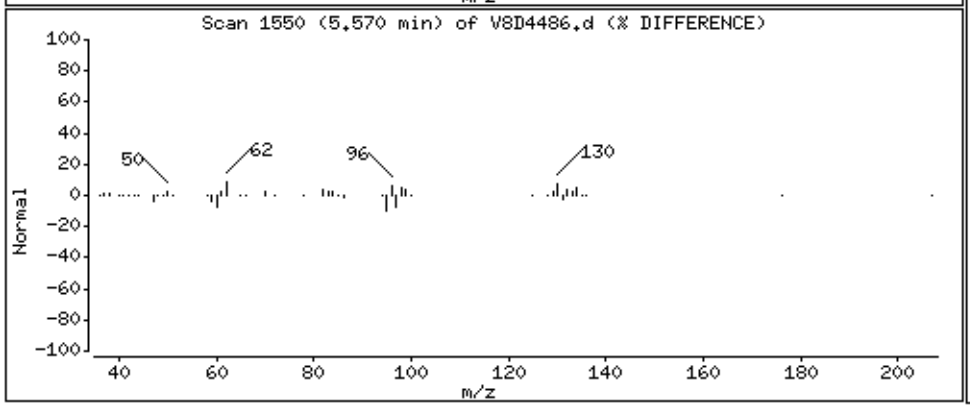












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4487.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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	33	
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	31	
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

EPA SAMPLE NO.

MW-5-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4487.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4487.d
Report Date: 14-May-2014 10:11

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

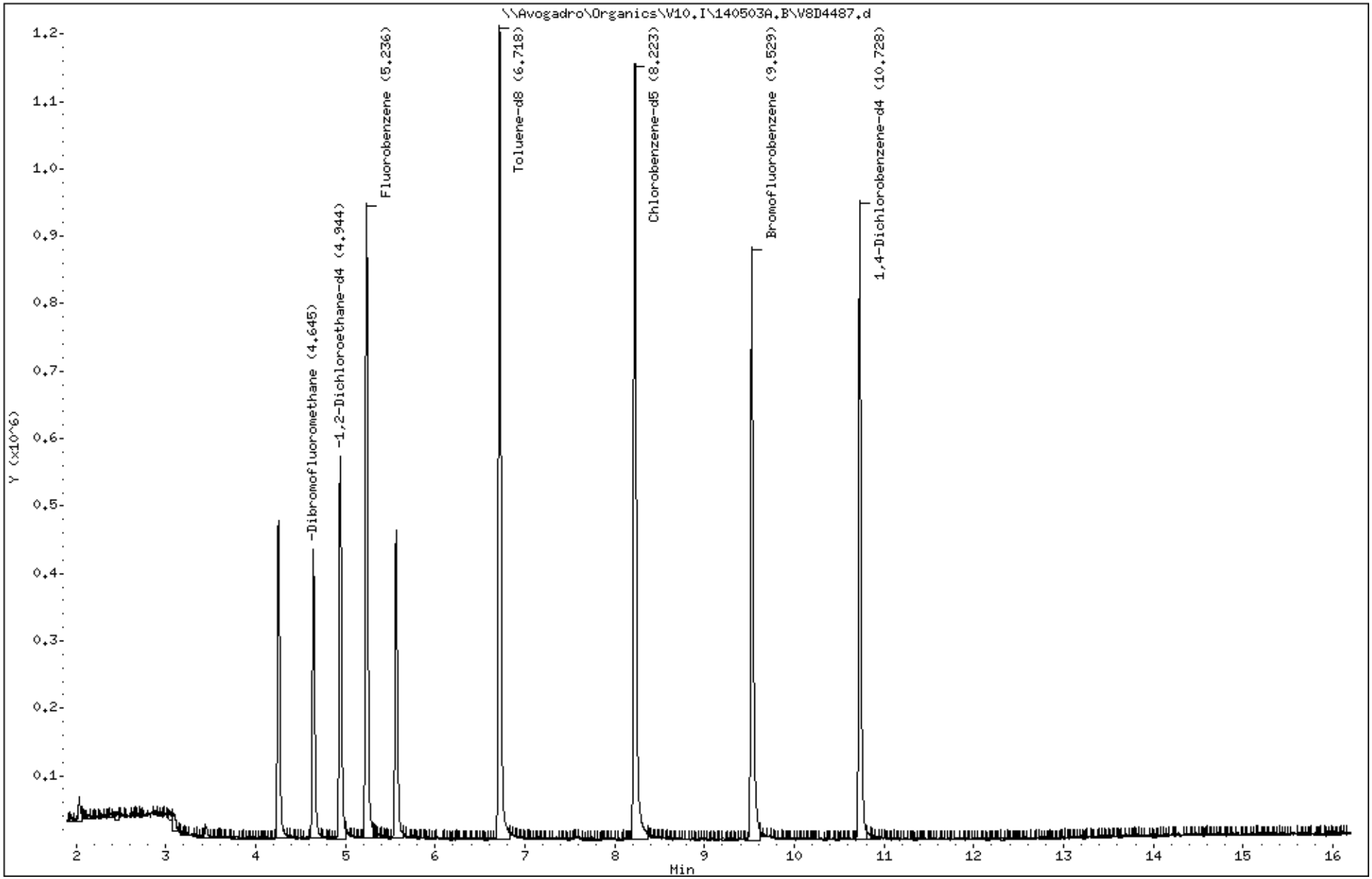
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Inj Date : 04-MAY-2014 11:54
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-03A,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 73
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	4.252	4.255	(0.812)	135734	32.8002	33
$	36 Dibromofluoromethane	113	4.647	4.641	(0.888)	218576	57.4251	57
$	42 1,2-Dichloroethane-d4	102	4.940	4.940	(0.944)	39485	54.7320	55
M	50 1,2-Dichloroethene (Total)	96				135734	32.8002	33
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	614263	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	122325	31.3076	31
$	58 Toluene-d8	98	6.718	6.715	(0.817)	687506	46.7836	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	562083	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.525	(1.159)	305453	47.7321	48
*	92 1,4-Dichlorobenzene-d4	152	10.731	10.724	(1.000)	221774	50.0000	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4487.d
Date : 04-MAY-2014 11:54
Client ID: MW-5-043014
Instrument: V10.i
Sample Info: 5ML,N0695-03A,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4487.d

Date : 04-MAY-2014 11:54

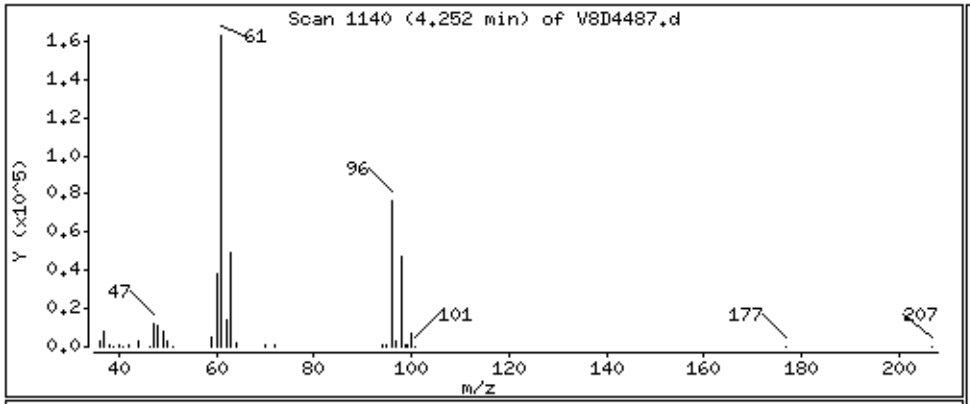
Client ID: MW-5-043014 Instrument: V10.i

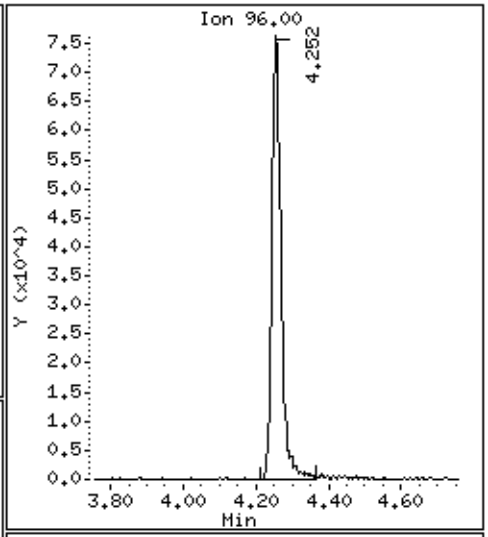
Sample Info: 5ML,N0695-03A,,76932

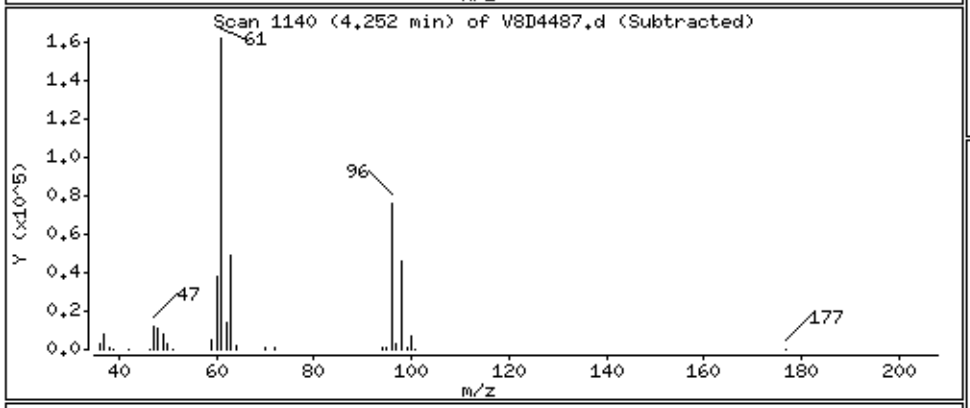
Purge Volume: 5.0 Operator: MMS SRC: LIMS

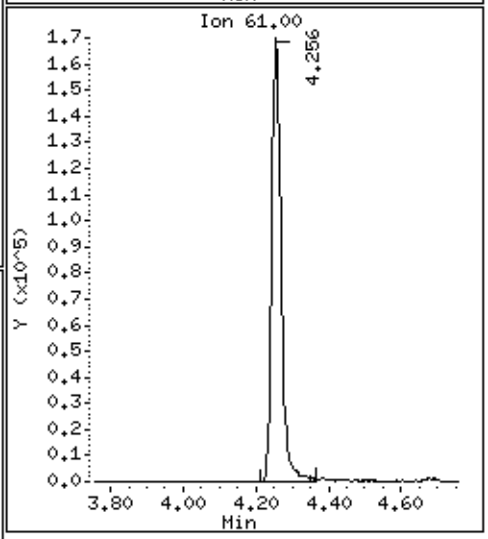
Column phase: DB-624 Column diameter: 0.25

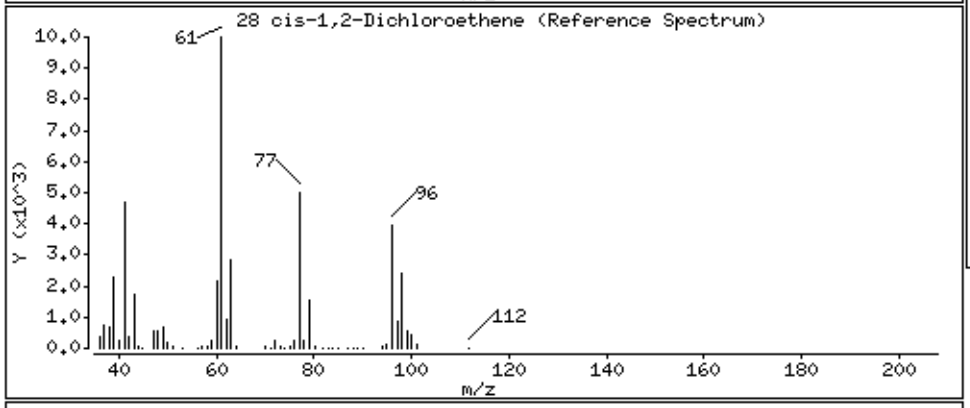
28 cis-1,2-Dichloroethene Concentration: 33 ug/L

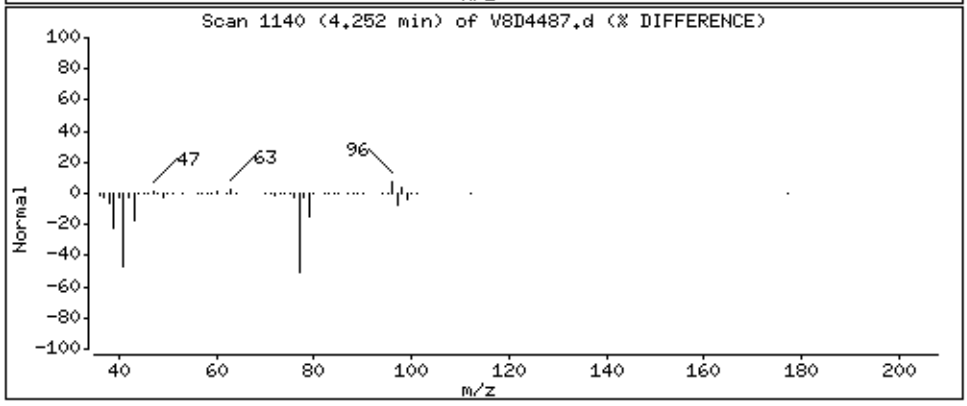












Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4487.d

Date : 04-MAY-2014 11:54

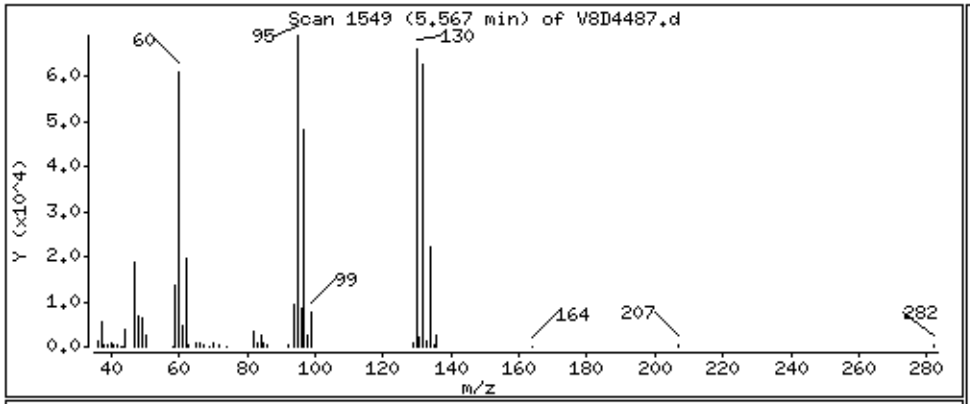
Client ID: MW-5-043014 Instrument: V10.i

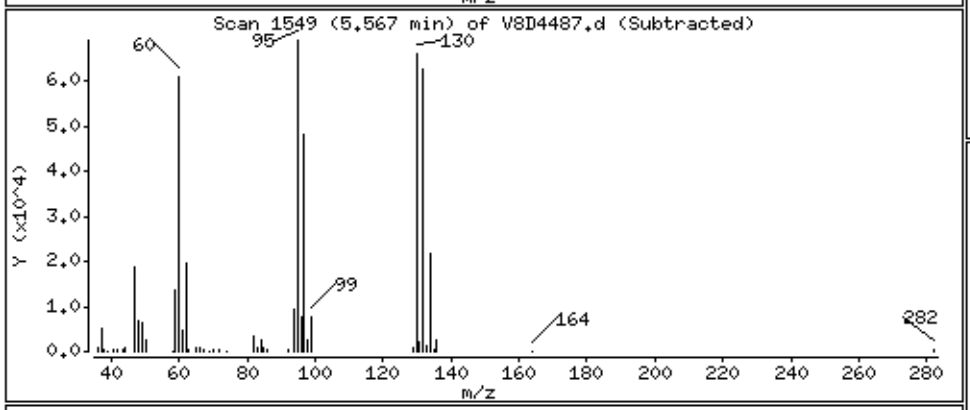
Sample Info: 5ML,N0695-03A,,76932

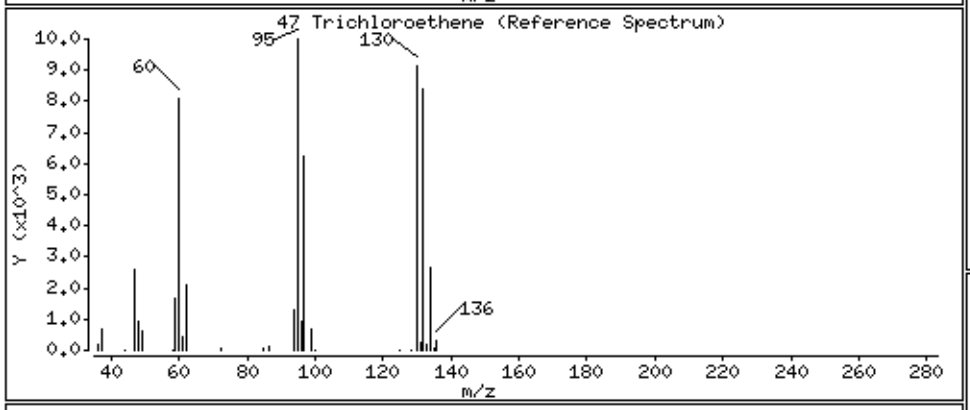
Purge Volume: 5.0 Operator: MMS SRC: LIMS

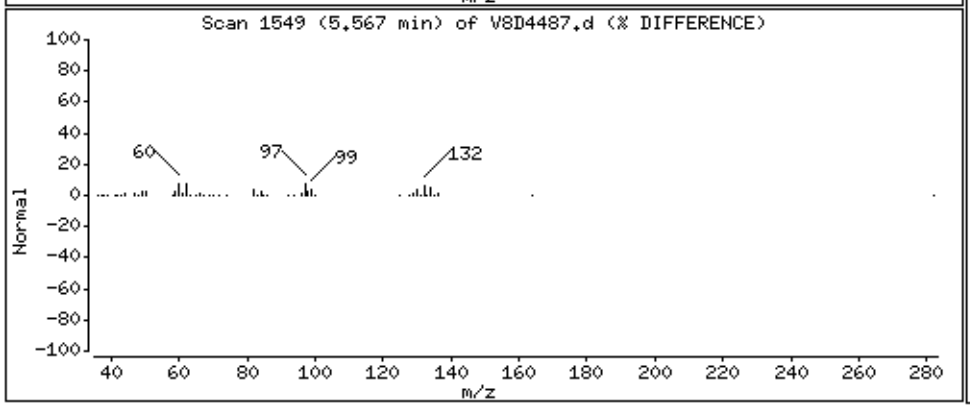
Column phase: DB-624 Column diameter: 0.25

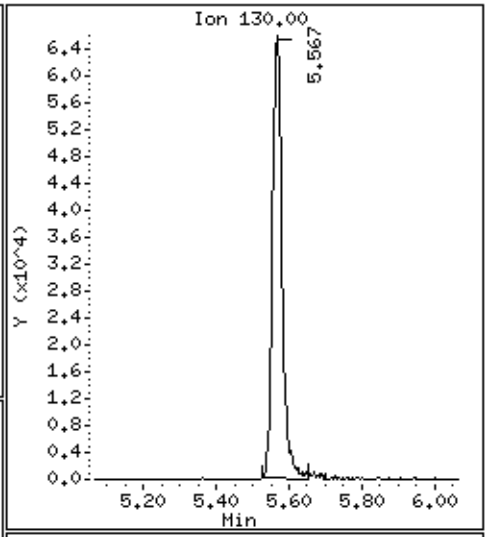
47 Trichloroethene Concentration: 31 ug/L

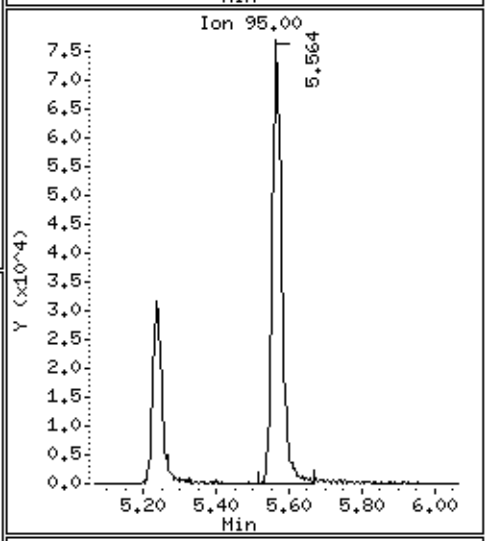


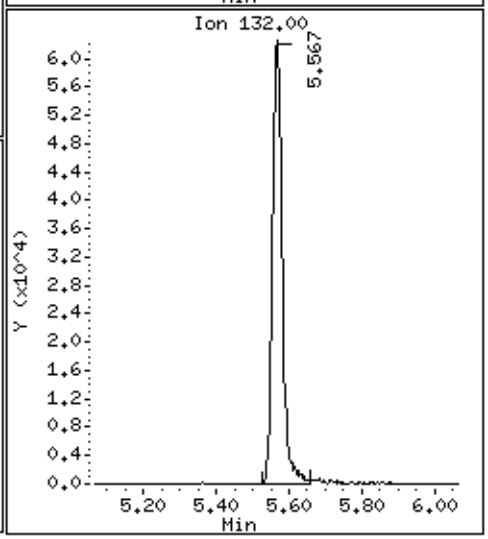












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4488.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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	0.98	J
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

EPA SAMPLE NO.

DUP-1-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4488.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4488.d
Report Date: 14-May-2014 10:11

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4488.d
Lab Smp Id: N0695-04A Client Smp ID: DUP-1-043014
Inj Date : 04-MAY-2014 12:22
Operator : MMS   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-04A,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 74
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

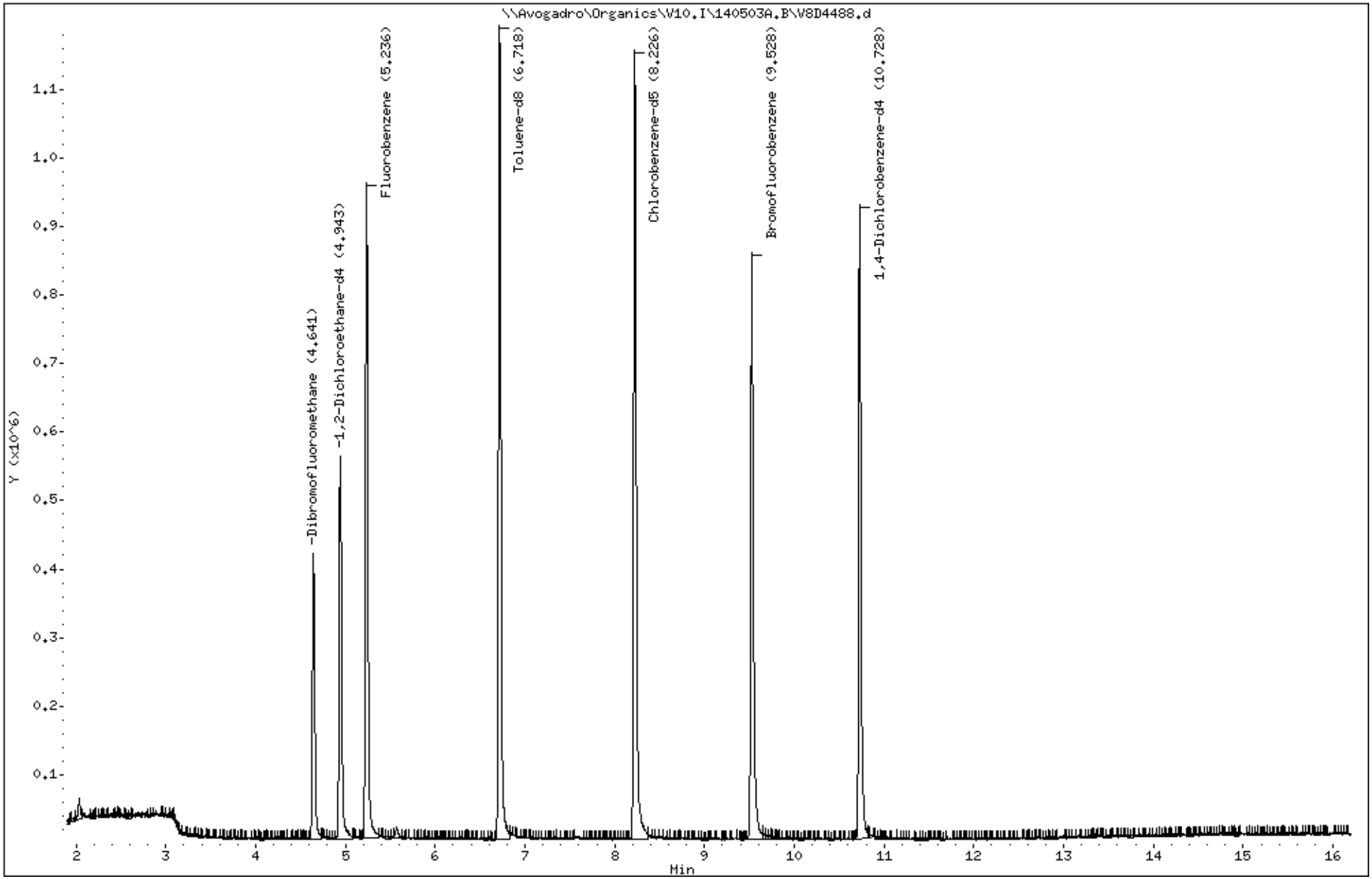
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 36 Dibromofluoromethane	113	4.644	4.641	(0.887)	217840	57.8473	58(R)
$ 42 1,2-Dichloroethane-d4	102	4.946	4.940	(0.945)	39884	55.8796	56
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	607727	50.0000	
47 Trichloroethene	130	5.570	5.564	(1.064)	3787	0.97966	0.98(QH)
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	690431	47.1801	47
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	559731	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	307177	48.2032	48
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	221936	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4488.d
Date : 04-MAY-2014 12:22
Client ID: DUP-1-043014
Instrument: V10.i
Sample Info: 5ML,N0695-04A,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4488.d

Date : 04-MAY-2014 12:22

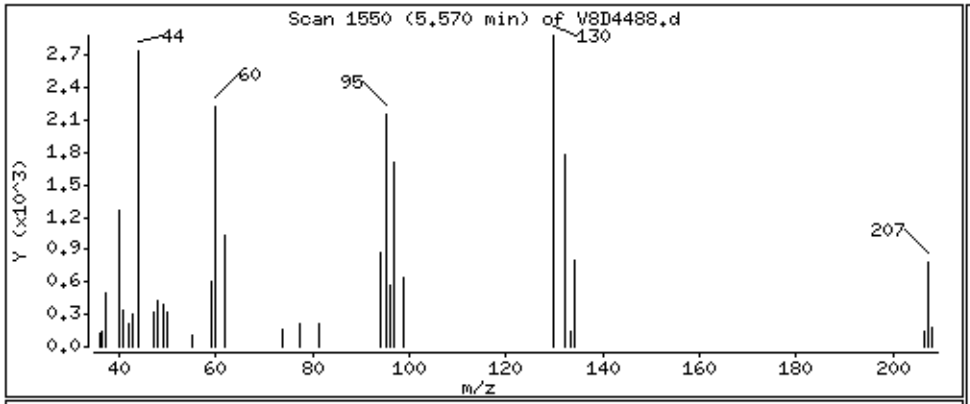
Client ID: DUP-1-043014 Instrument: V10.i

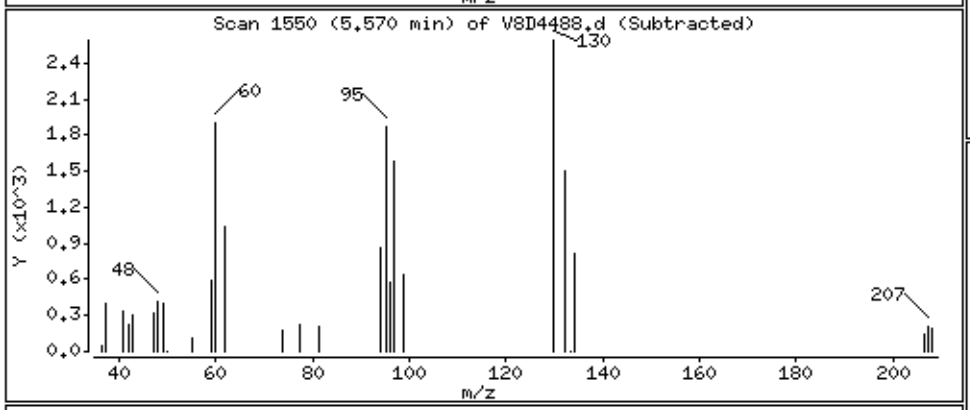
Sample Info: 5ML,N0695-04A,,76932

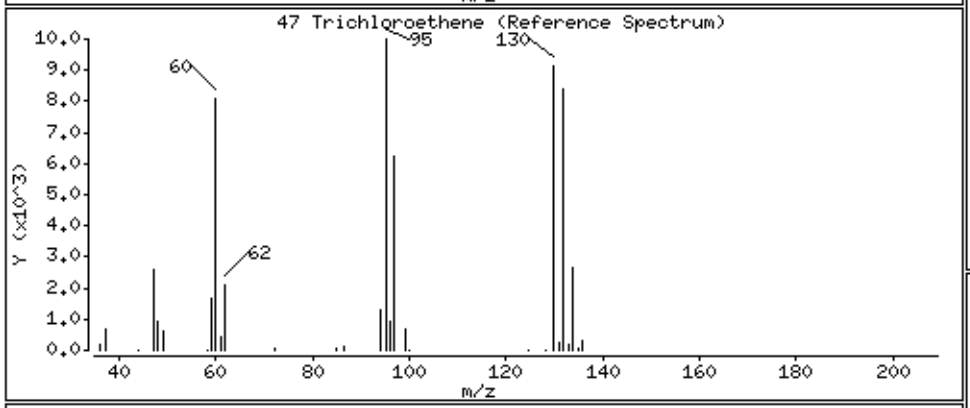
Purge Volume: 5.0 Operator: MMS SRC: LIMS

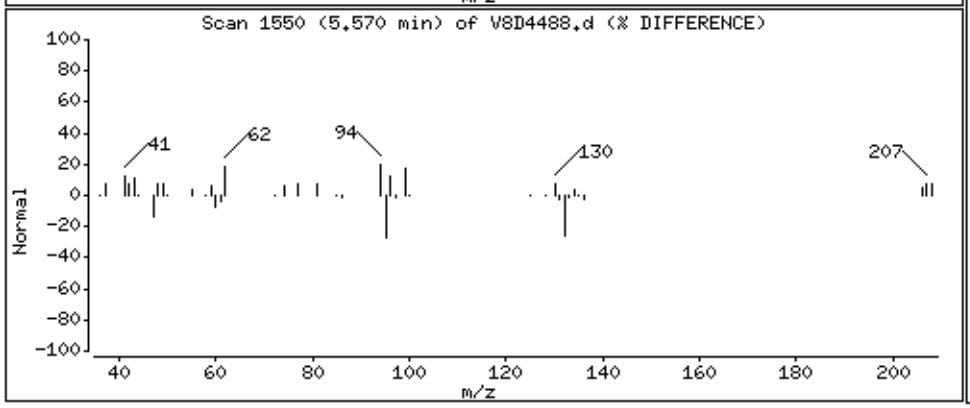
Column phase: DB-624 Column diameter: 0.25

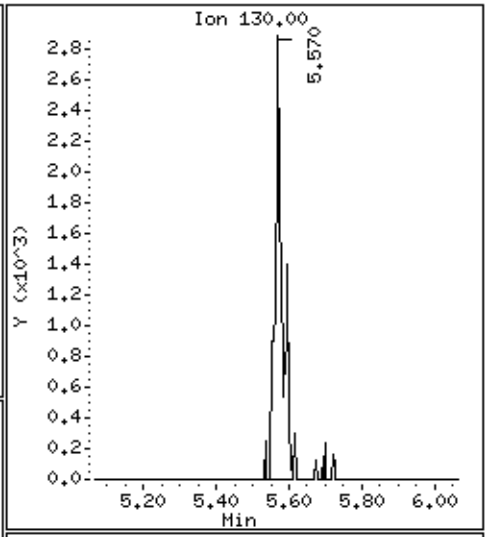
47 Trichloroethene Concentration: 0.98 ug/L

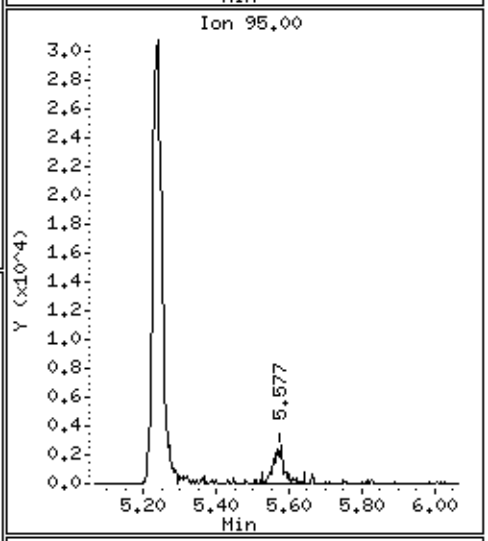


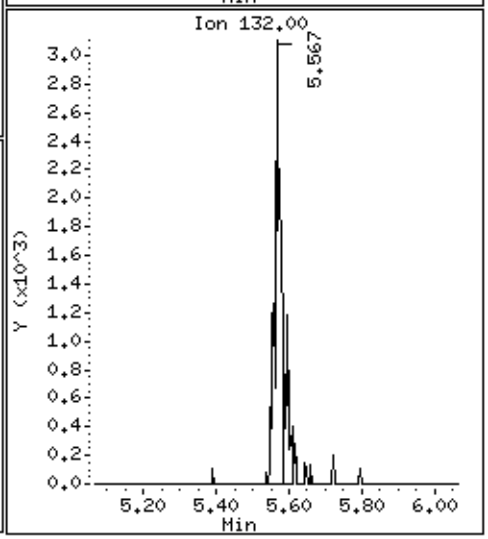












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4489.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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	2.2	J
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

EPA SAMPLE NO.

MW-7-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4489.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4489.d
Report Date: 14-May-2014 10:11

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4489.d
Lab Smp Id: N0695-05A Client Smp ID: MW-7-043014
Inj Date : 04-MAY-2014 12:49
Operator : MMS   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-05A,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 75
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

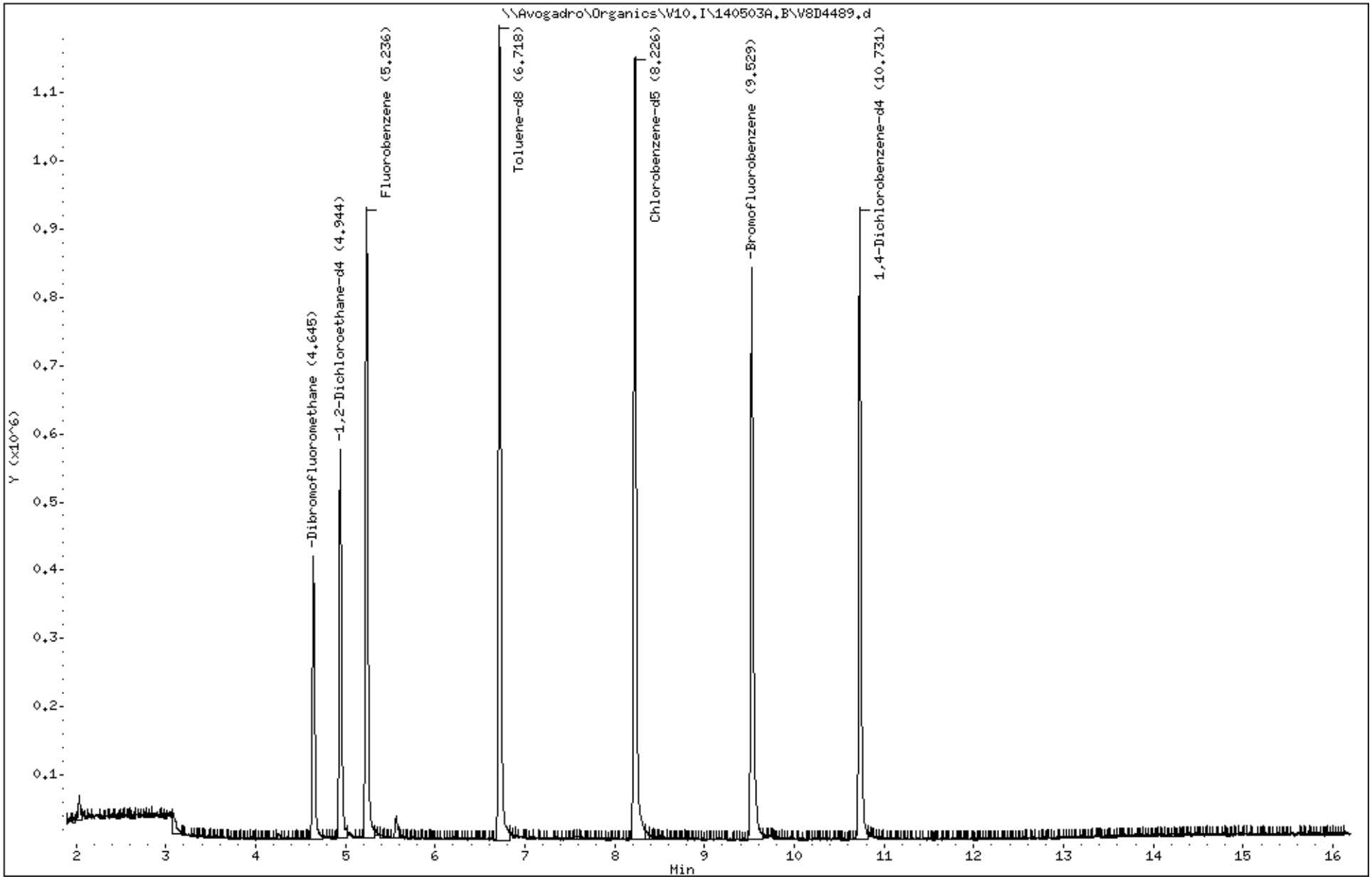
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 36 Dibromofluoromethane	113	4.644	4.641	(0.887)	219636	58.1879	58(R)
$ 42 1,2-Dichloroethane-d4	102	4.943	4.940	(0.944)	38850	54.3037	54
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	609151	50.0000	
47 Trichloroethene	130	5.567	5.564	(1.063)	8412	2.17102	2.2
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	693710	47.4124	47
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	559633	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	296340	46.5108	46
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	220727	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4489.d
Date : 04-MAY-2014 12:49
Client ID: MW-7-043014
Instrument: V10.i
Sample Info: 5ML,N0695-05A,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4489.d

Date : 04-MAY-2014 12:49

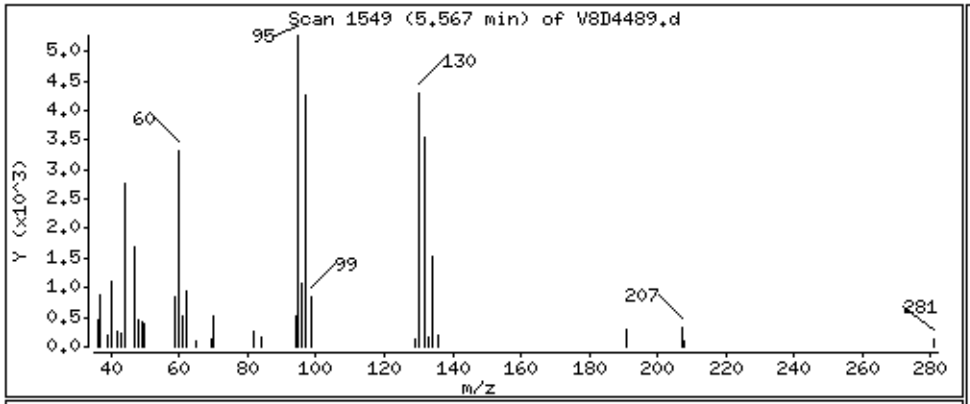
Client ID: MW-7-043014 Instrument: V10.i

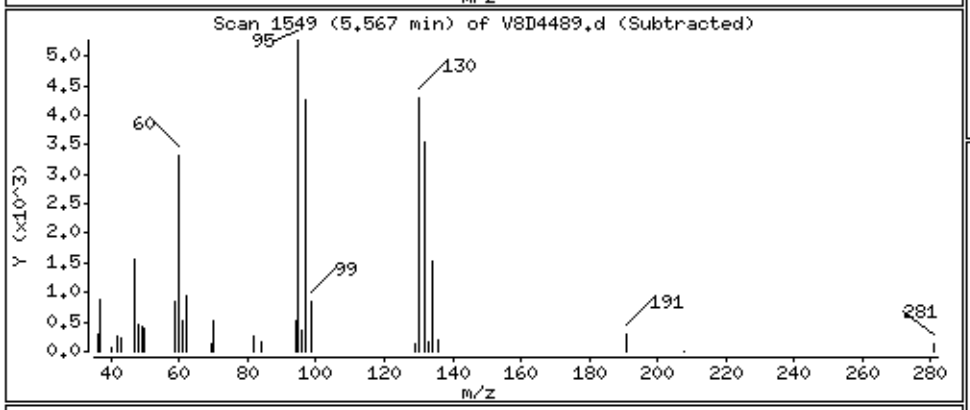
Sample Info: 5ML,N0695-05A,,76932

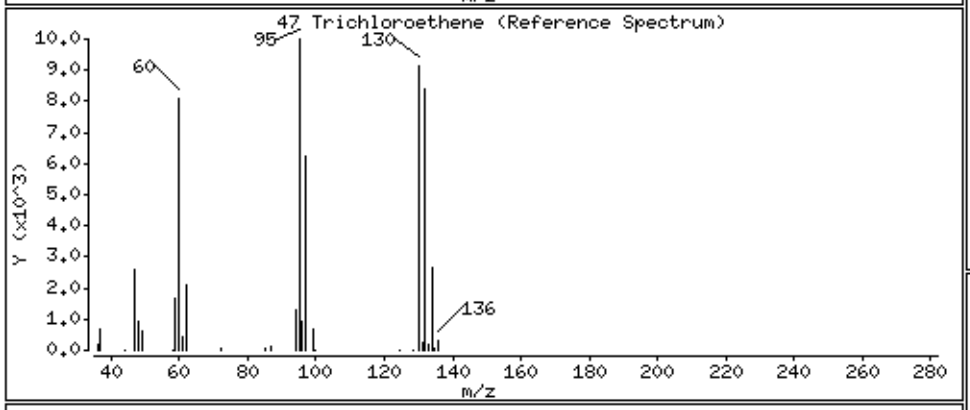
Purge Volume: 5.0 Operator: MMS SRC: LIMS

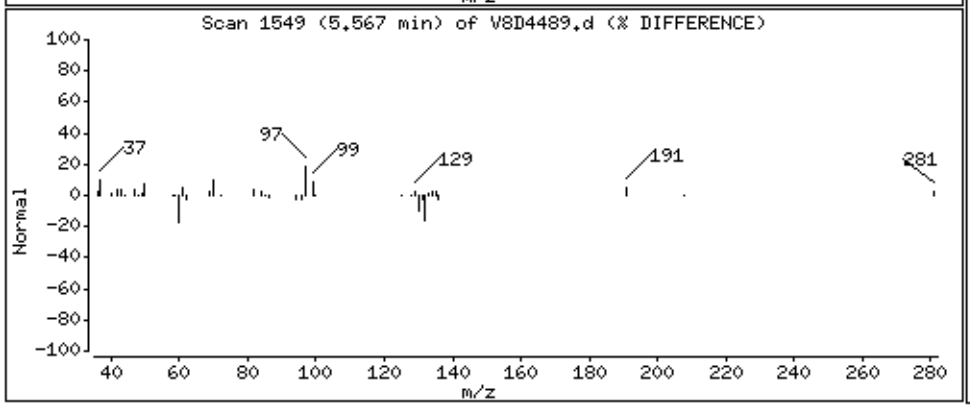
Column phase: DB-624 Column diameter: 0.25

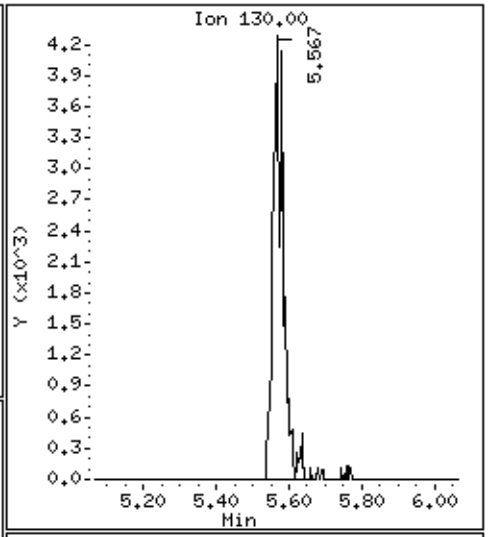
47 Trichloroethene Concentration: 2.2 ug/L

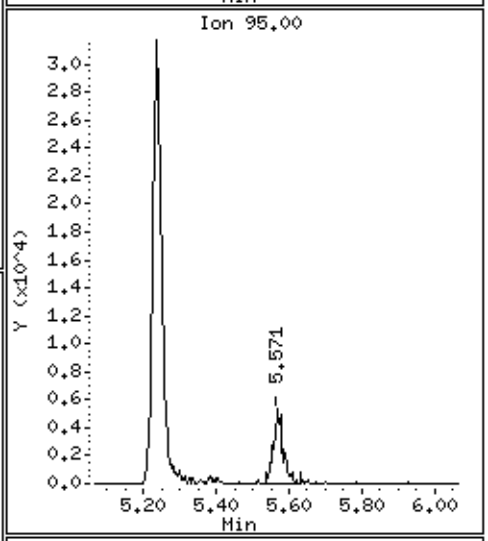


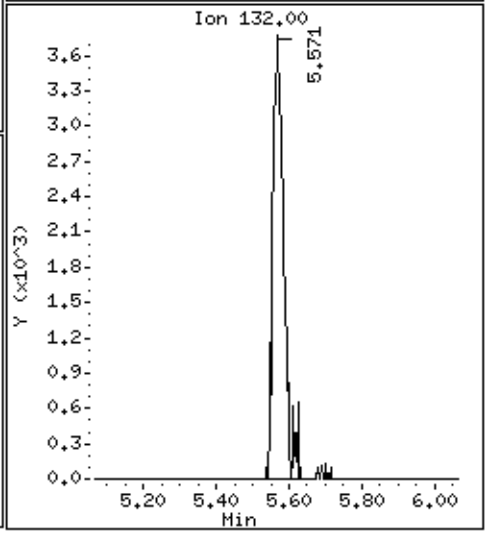












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4490.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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	0.98	J
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	1.3	J
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

EPA SAMPLE NO.

MW-8-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4490.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4490.d
Report Date: 14-May-2014 10:11

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4490.d
Lab Smp Id: N0695-06A Client Smp ID: MW-8-043014
Inj Date : 04-MAY-2014 13:17
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-06A,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.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

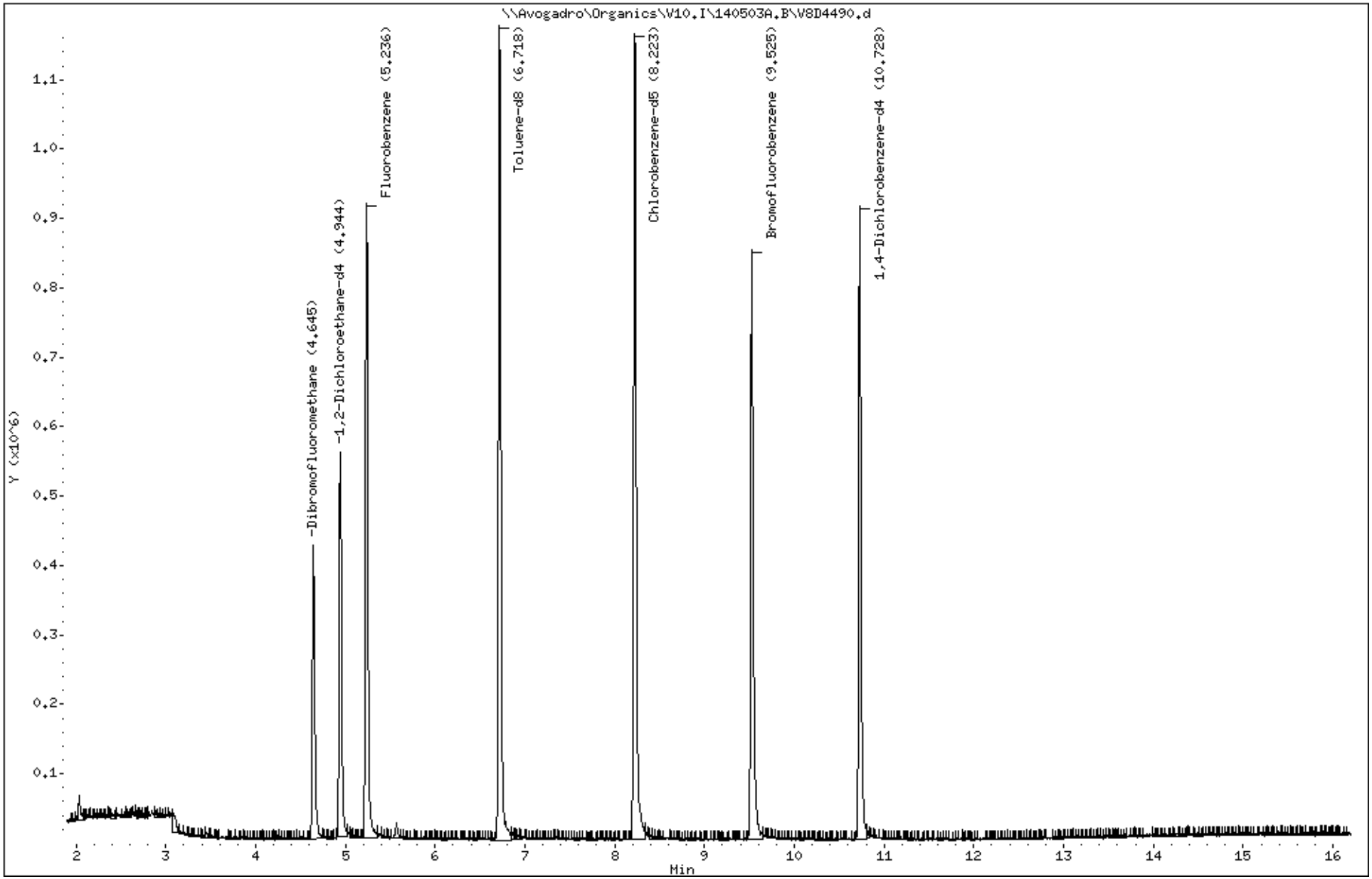
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	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)	218390	58.3727	58(R)
	37 1,1,1-Trichloroethane	97	4.679	4.680	(0.893)	8143	0.97789	0.98
$	42 1,2-Dichloroethane-d4	102	4.943	4.940	(0.944)	40196	56.6851	57
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	603778	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	4845	1.26155	1.3
$	58 Toluene-d8	98	6.718	6.715	(0.817)	682164	47.3898	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	550581	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.525	(1.159)	301289	48.0650	48
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	218137	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4490.d
Date : 04-MAY-2014 13:17
Client ID: MW-8-043014
Instrument: V10.i
Sample Info: 5ML,N0695-06A,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4490.d

Date : 04-MAY-2014 13:17

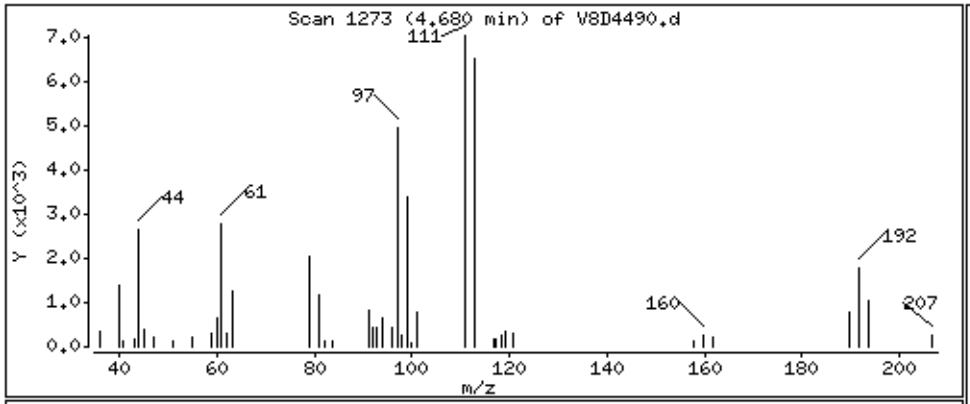
Client ID: MW-8-043014 Instrument: V10.i

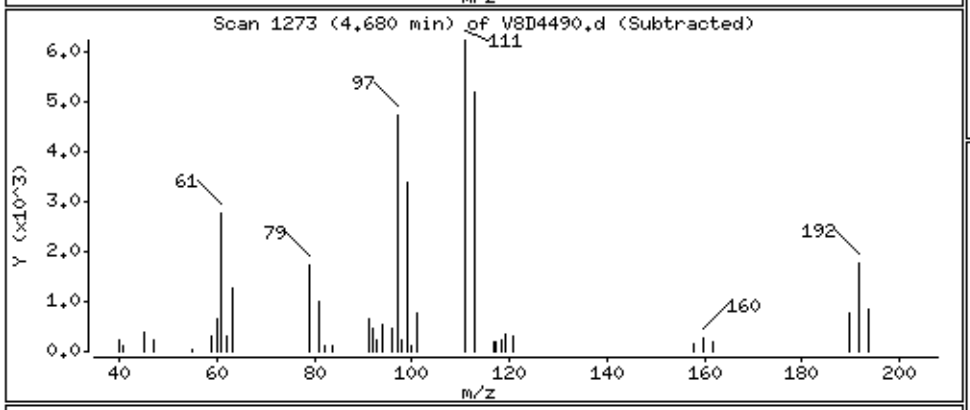
Sample Info: 5ML,N0695-06A,,76932

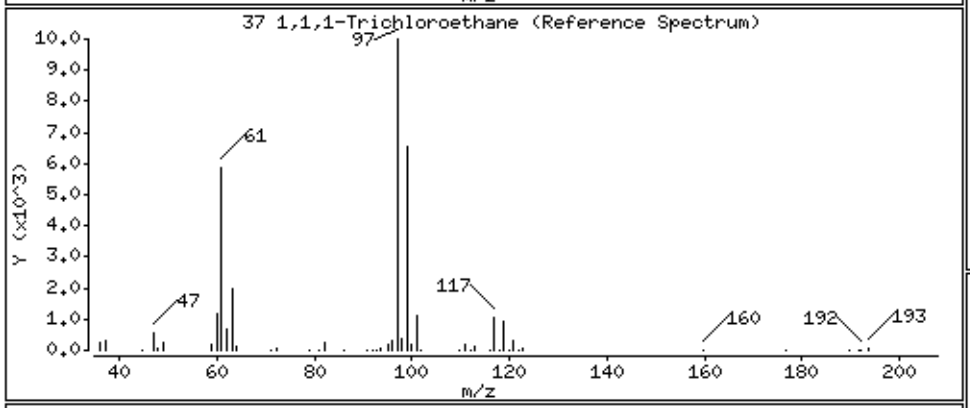
Purge Volume: 5.0 Operator: MMS SRC: LIMS

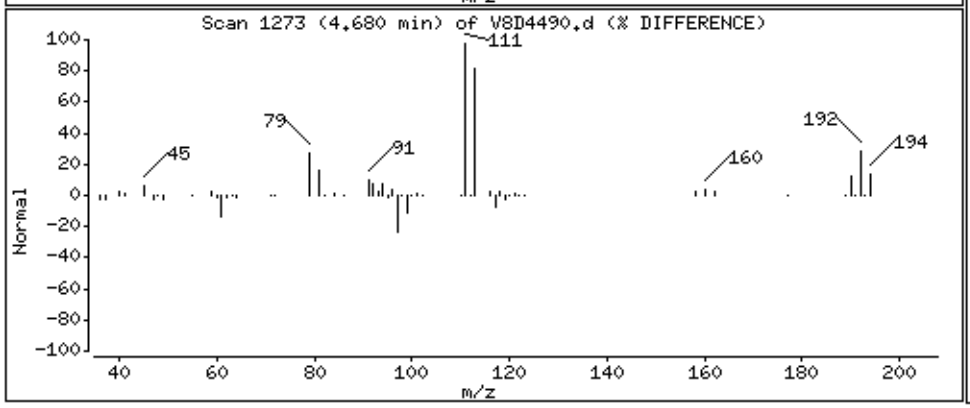
Column phase: DB-624 Column diameter: 0.25

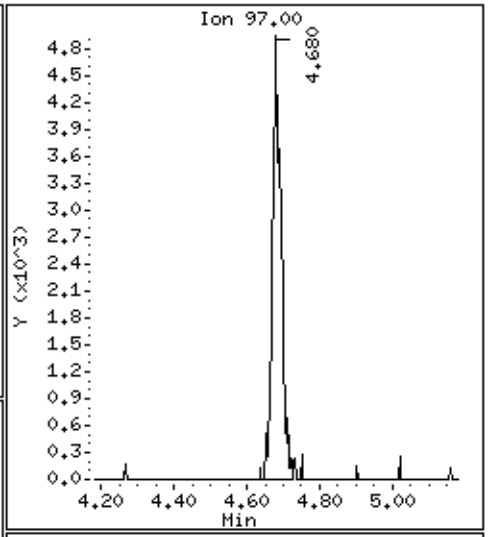
37 1,1,1-Trichloroethane Concentration: 0.98 ug/L

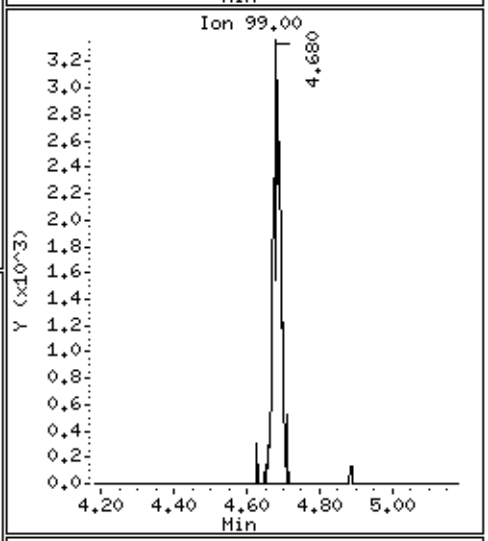


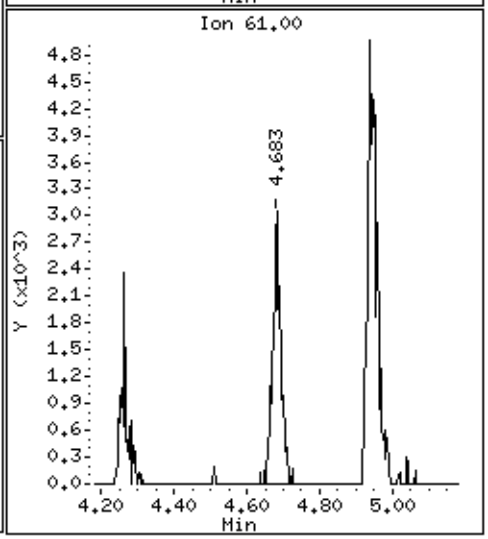












Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4490.d

Date : 04-MAY-2014 13:17

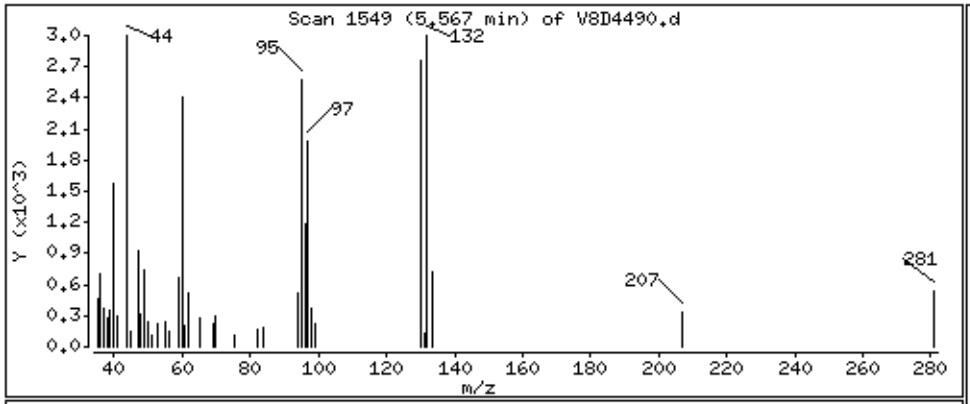
Client ID: MW-8-043014 Instrument: V10.i

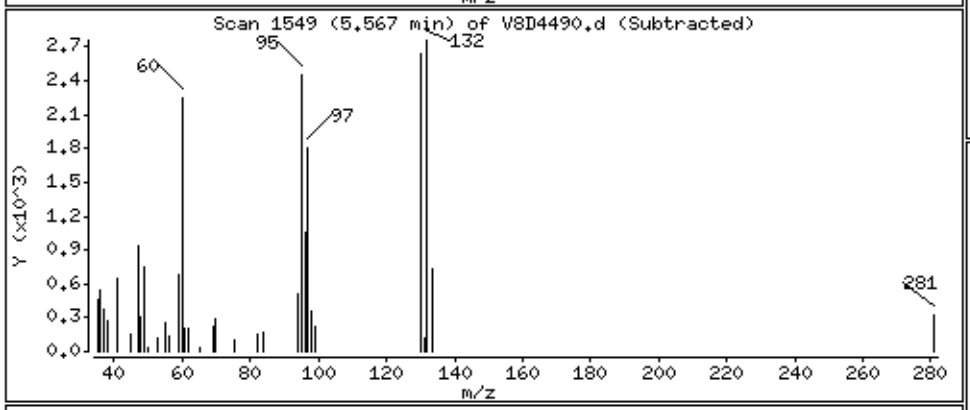
Sample Info: 5ML,N0695-06A,,76932

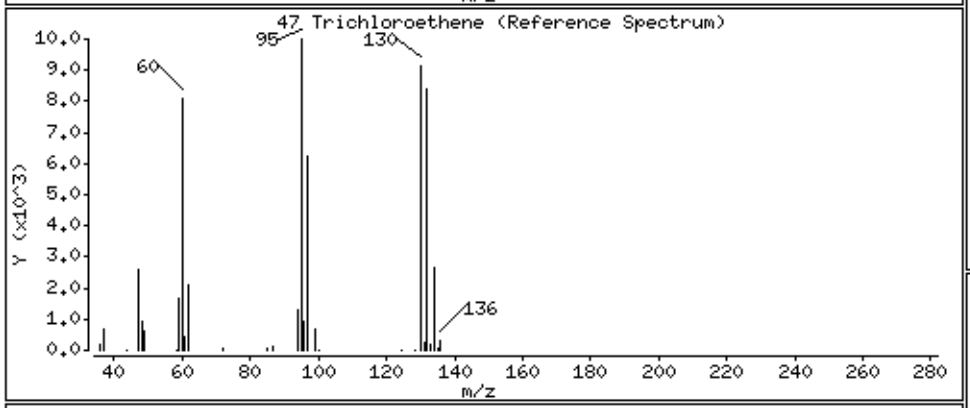
Purge Volume: 5.0 Operator: MMS SRC: LIMS

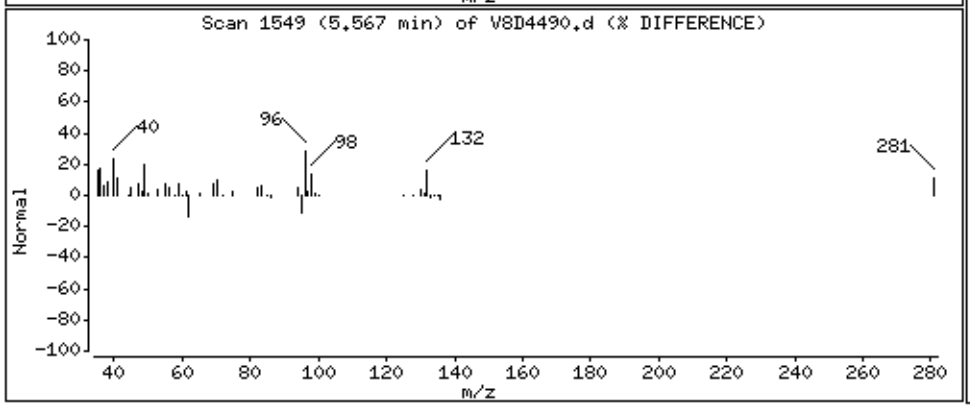
Column phase: DB-624 Column diameter: 0.25

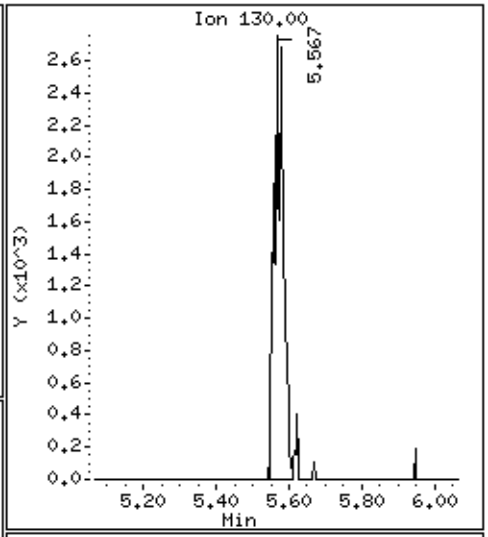
47 Trichloroethene Concentration: 1.3 ug/L

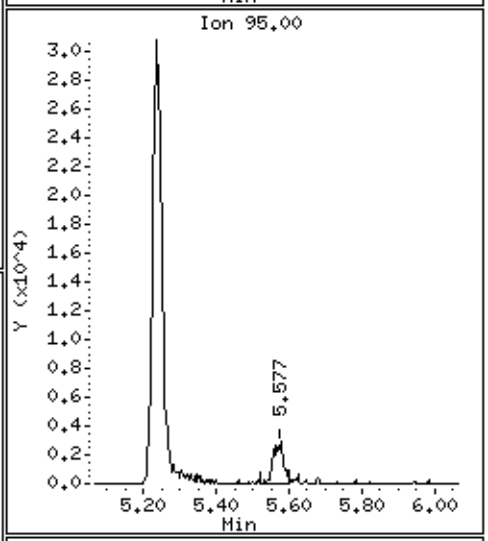


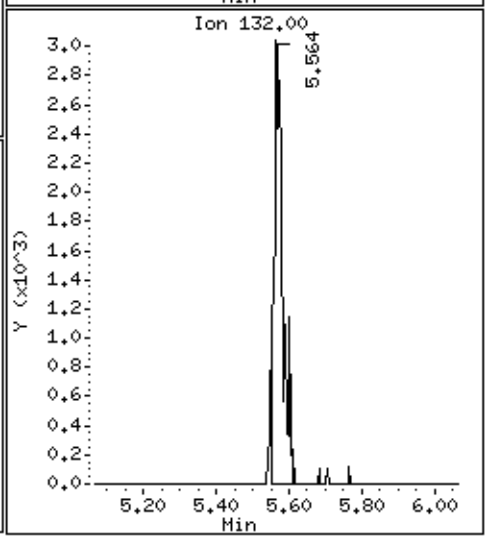












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4571.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	0.88	J
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	2.3	J
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

EPA SAMPLE NO.

MW-9-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4571.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4571.d
Report Date: 14-May-2014 10:15

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

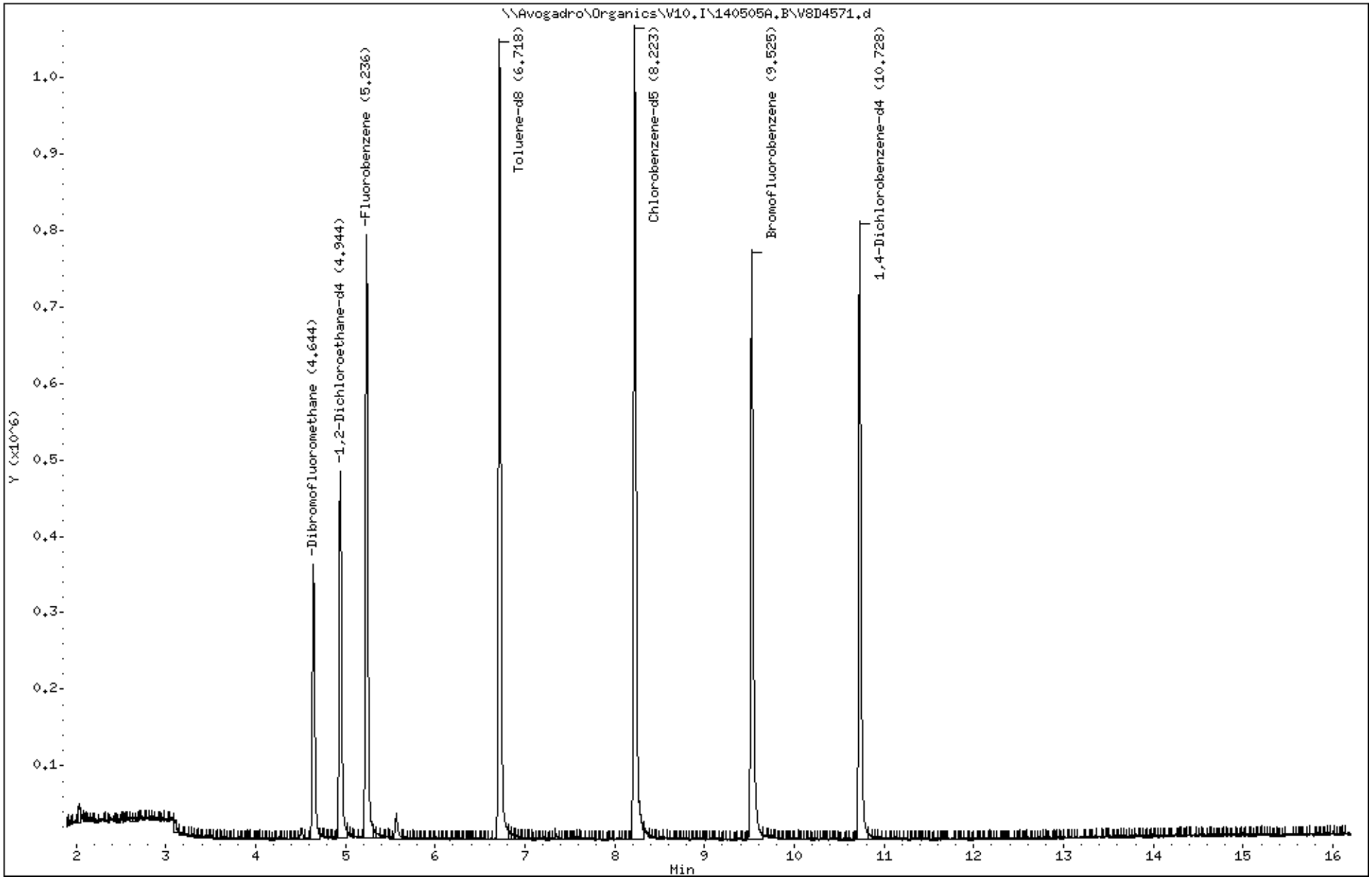
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Lab Smp Id: N0695-07A Client Smp ID: MW-9-050114
Inj Date : 06-MAY-2014 00:45
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-07A,,76949,
Misc Info :
Comment   :
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Meth Date : 14-May-2014 10:15 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 32
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	4.506	4.506	(0.861)	7310	0.87836	0.88
$	36 Dibromofluoromethane	113	4.641	4.641	(0.886)	193767	54.4667	54
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	31102	51.1011	51
*	46 Fluorobenzene	96	5.236	5.232	(1.000)	480508	50.0000	
	47 Trichloroethene	130	5.573	5.564	(1.064)	7716	2.26207	2.3
$	58 Toluene-d8	98	6.718	6.718	(0.817)	566198	49.4253	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	478879	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	263380	44.9904	45
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.727	(1.000)	186856	50.0000	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4571.d
Date : 06-MAY-2014 00:45
Client ID: MW-9-050114
Instrument: V10.i
Sample Info: 5ML,N0695-07A,,76949,
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4571.d

Date : 06-MAY-2014 00:45

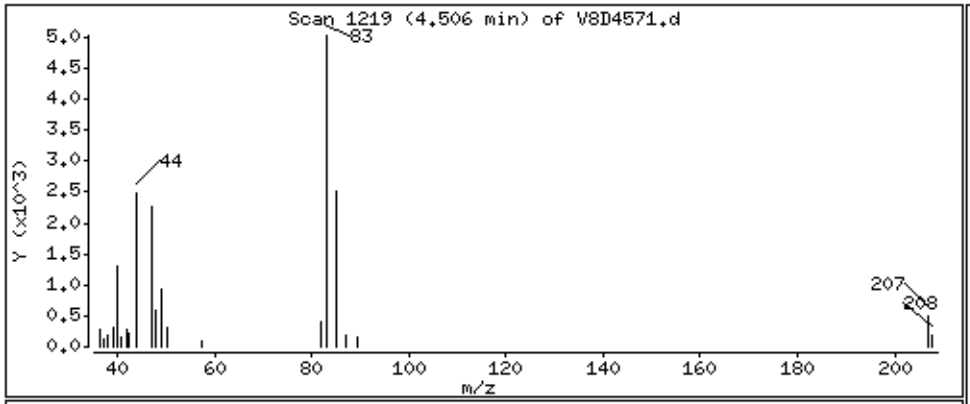
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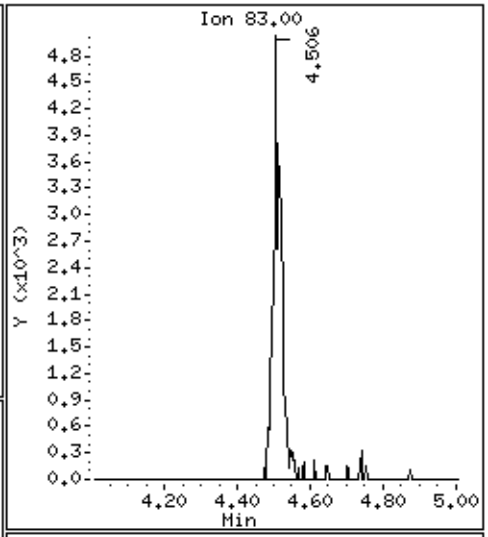
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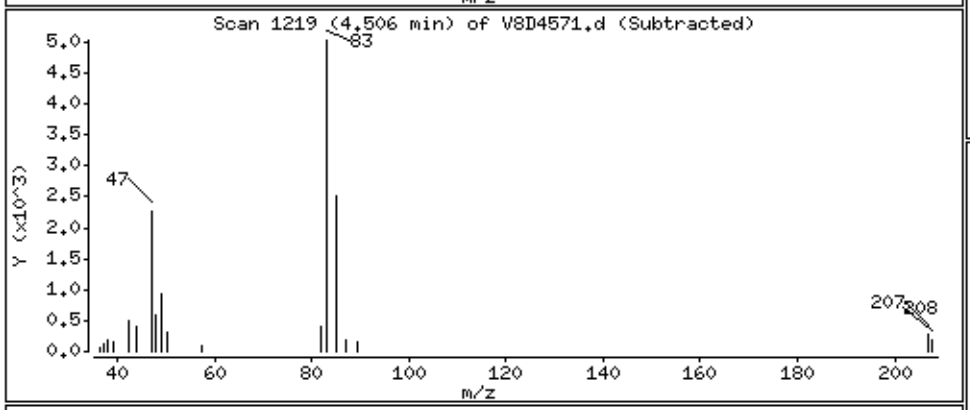
Purge Volume: 5.0 Operator: WL SRC: LIMS

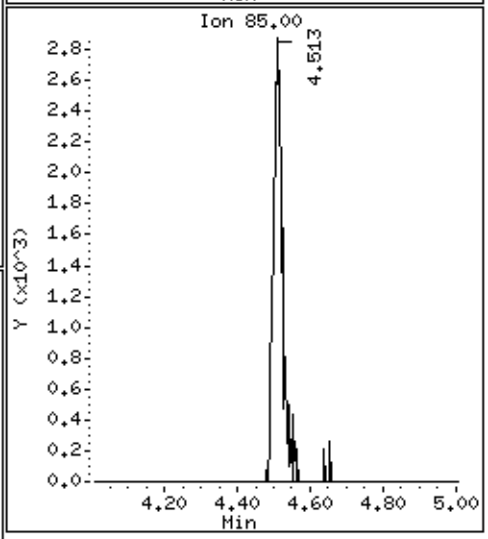
Column phase: DB-624 Column diameter: 0.25

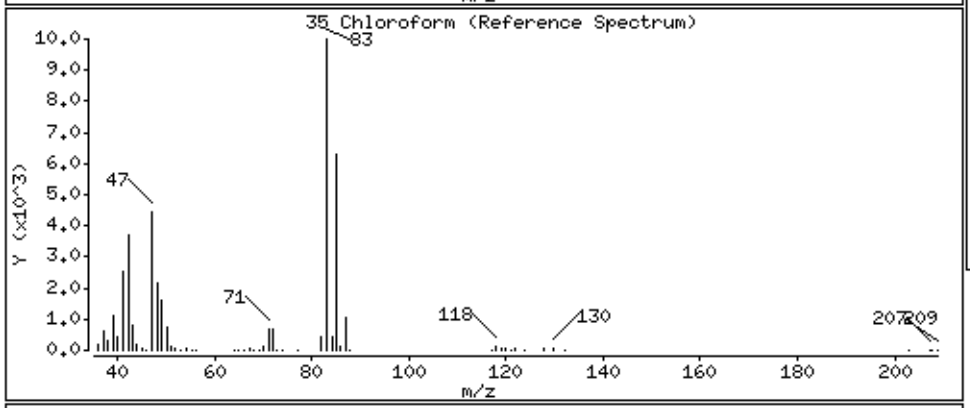
35 Chloroform Concentration: 0.88 ug/L

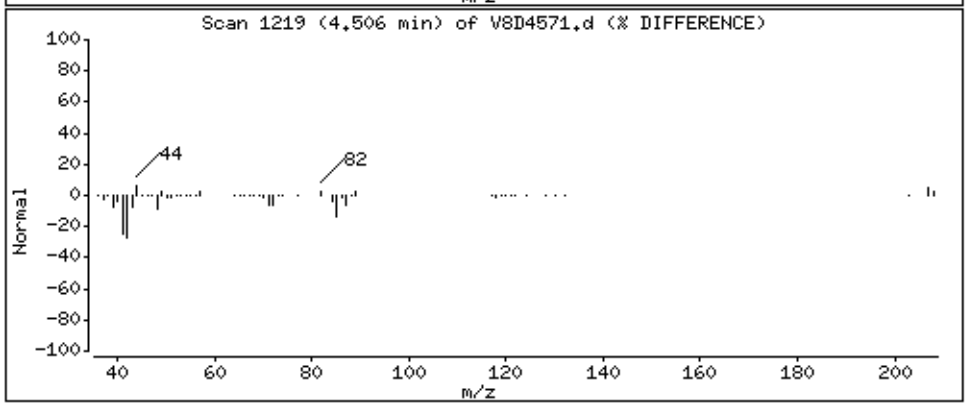












Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4571.d

Date : 06-MAY-2014 00:45

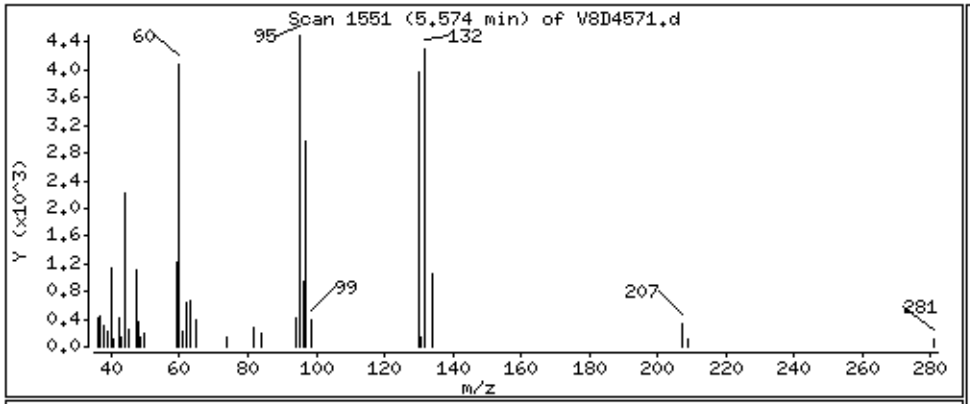
Client ID: MW-9-050114 Instrument: V10.i

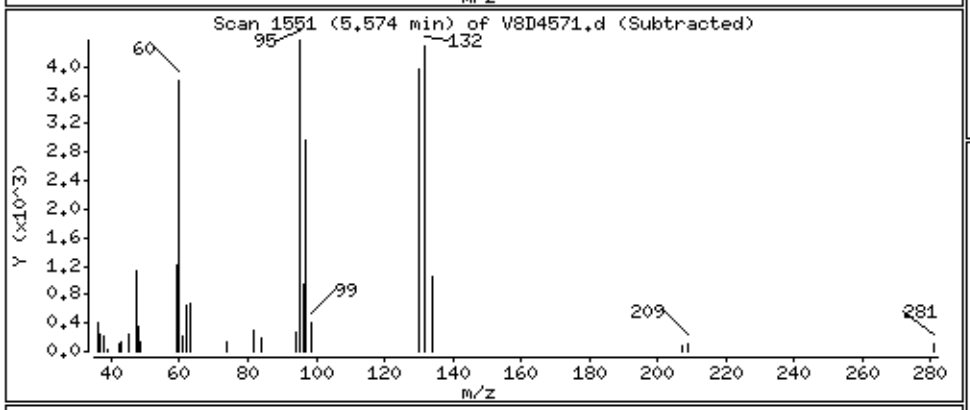
Sample Info: 5ML,N0695-07A,,76949,

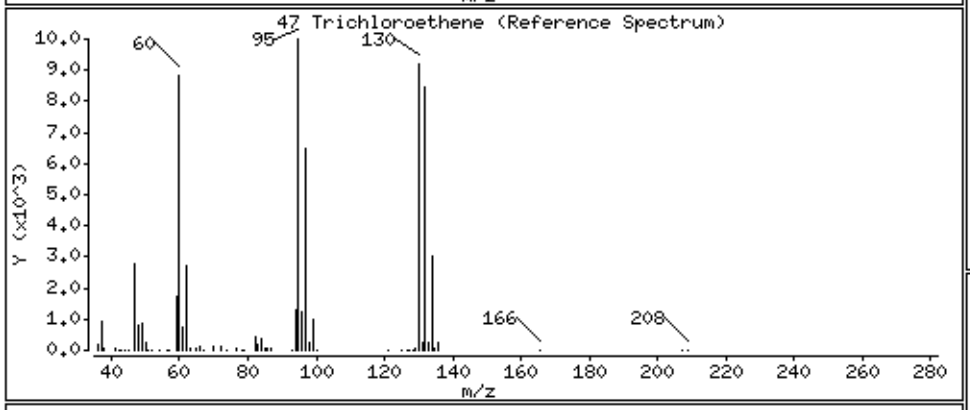
Purge Volume: 5.0 Operator: WL SRC: LIMS

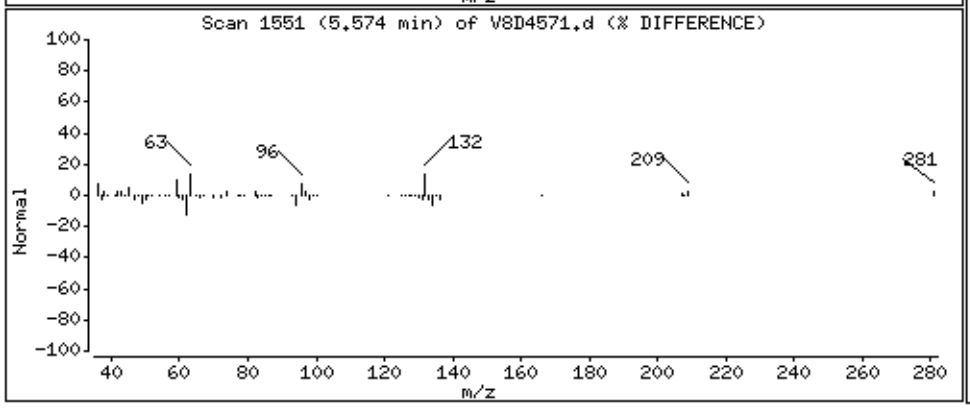
Column phase: DB-624 Column diameter: 0.25

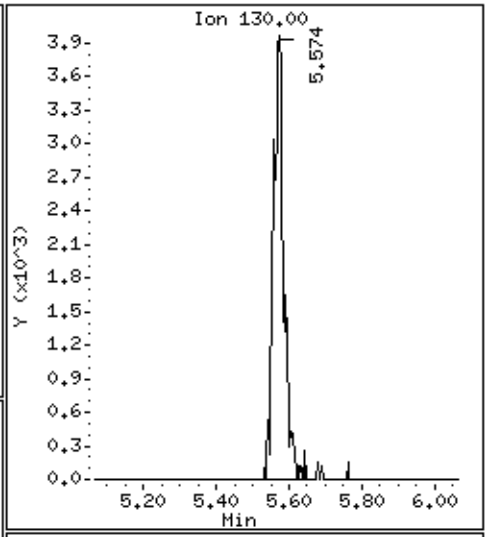
47 Trichloroethene Concentration: 2.3 ug/L

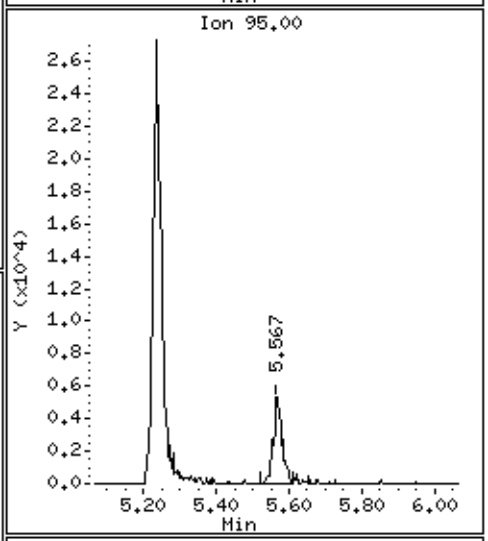


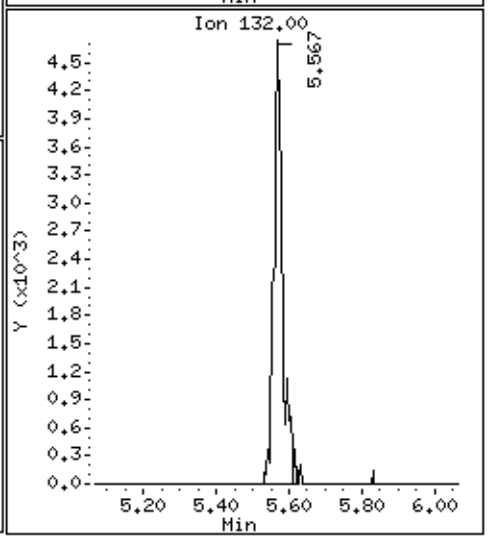












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4572.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	1.2	J
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

EPA SAMPLE NO.

MW-6-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4572.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4572.d
Report Date: 14-May-2014 10:15

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4572.d
Lab Smp Id: N0695-08A Client Smp ID: MW-6-050114
Inj Date : 06-MAY-2014 01:12
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-08A,,76949,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:15 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

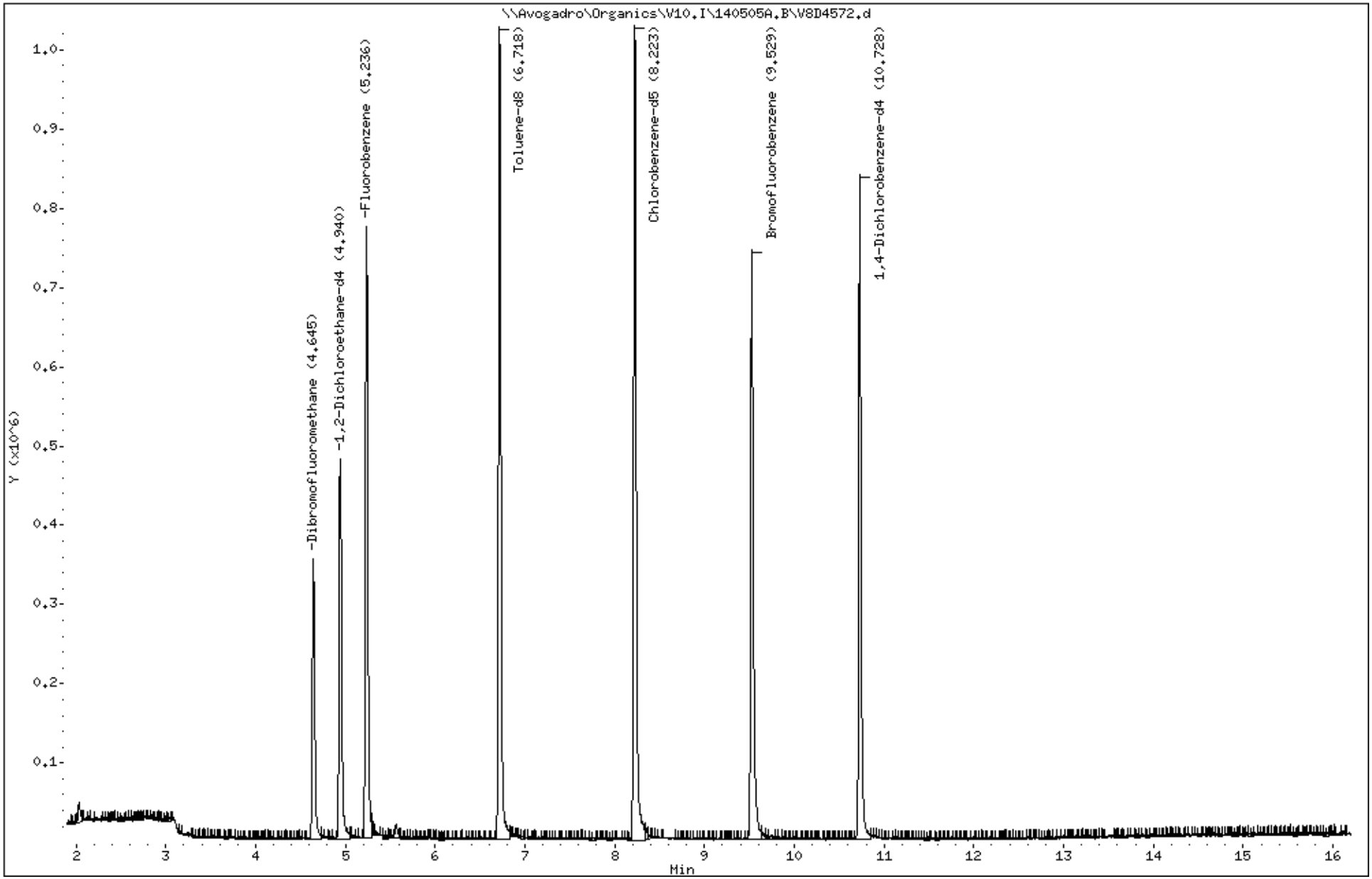
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	187950	53.2013	53
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	30863	51.0633	51
*	46 Fluorobenzene	96	5.236	5.232	(1.000)	477169	50.0000	
	47 Trichloroethene	130	5.570	5.564	(1.064)	3992	1.17851	1.2(Q)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	543011	48.4298	48
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	468708	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	255278	44.5527	44
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.727	(1.000)	185438	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4572.d
Date : 06-MAY-2014 01:12
Client ID: MW-6-050114
Instrument: V10.i
Sample Info: 5ML,N0695-08A,,76949,
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4572.d

Date : 06-MAY-2014 01:12

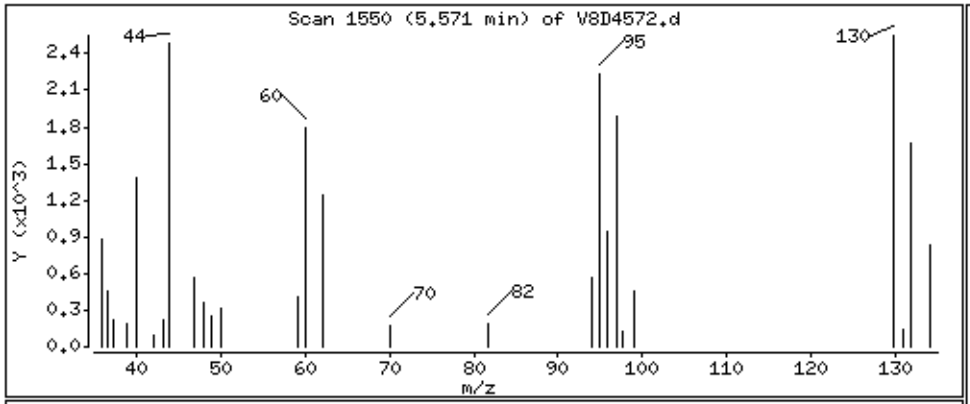
Client ID: MW-6-050114 Instrument: V10.i

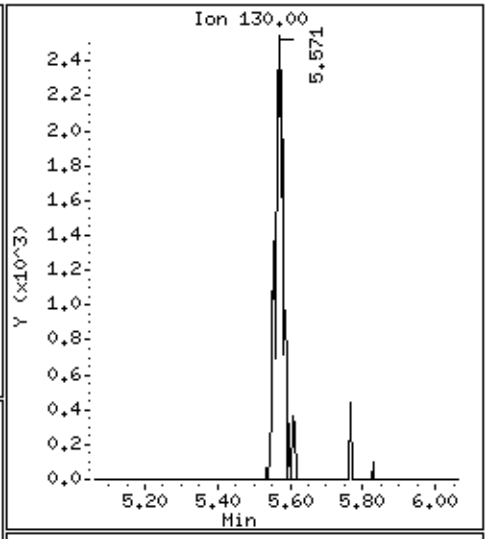
Sample Info: 5ML,N0695-08A,,76949,

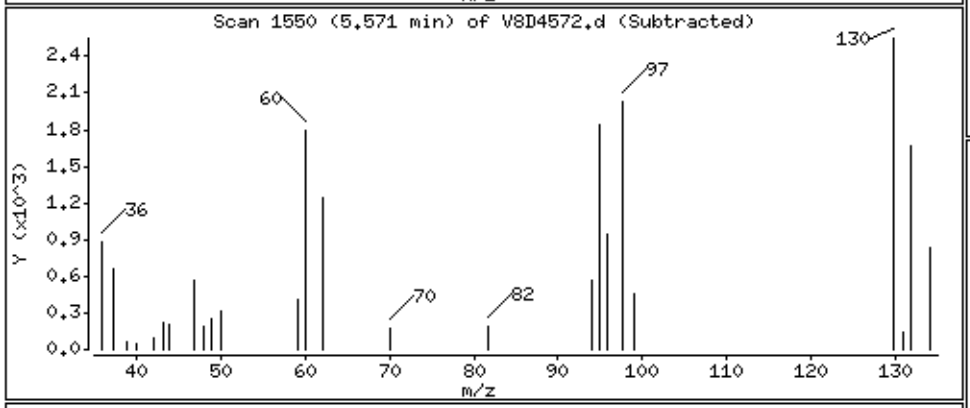
Purge Volume: 5.0 Operator: WL SRC: LIMS

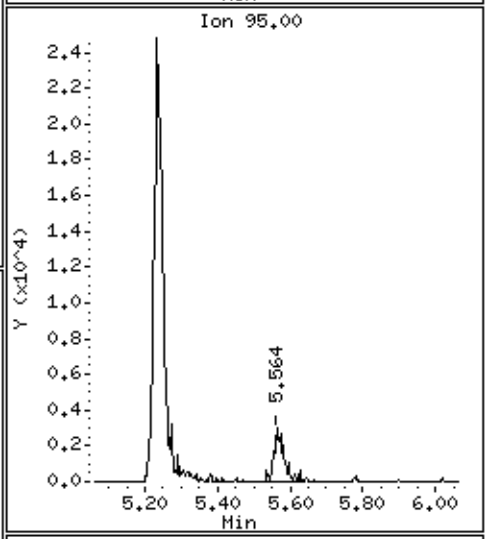
Column phase: DB-624 Column diameter: 0.25

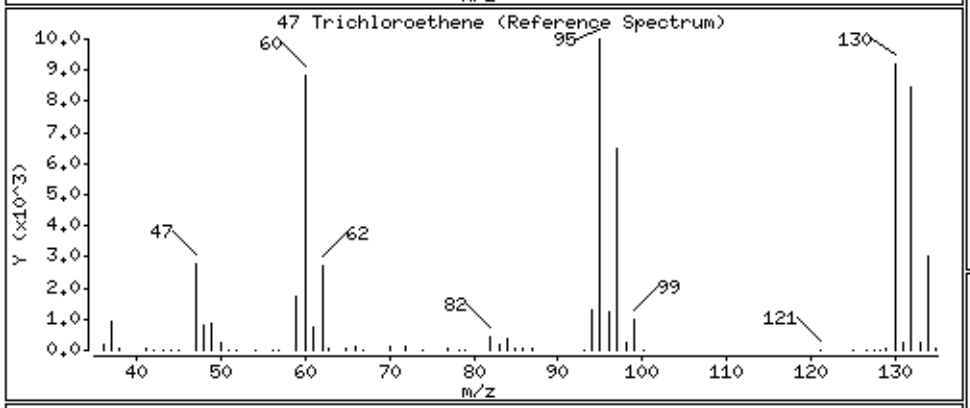
47 Trichloroethene Concentration: 1.2 ug/L

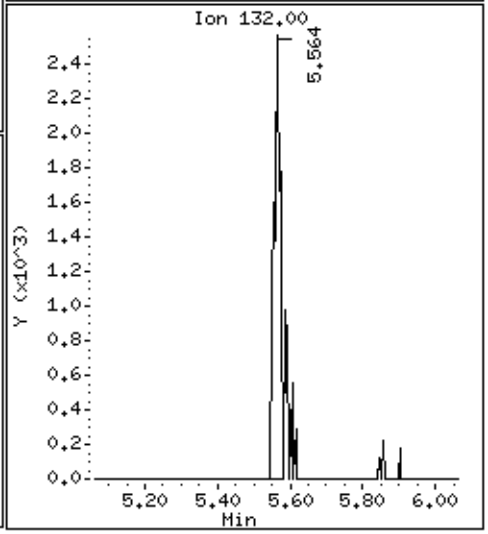


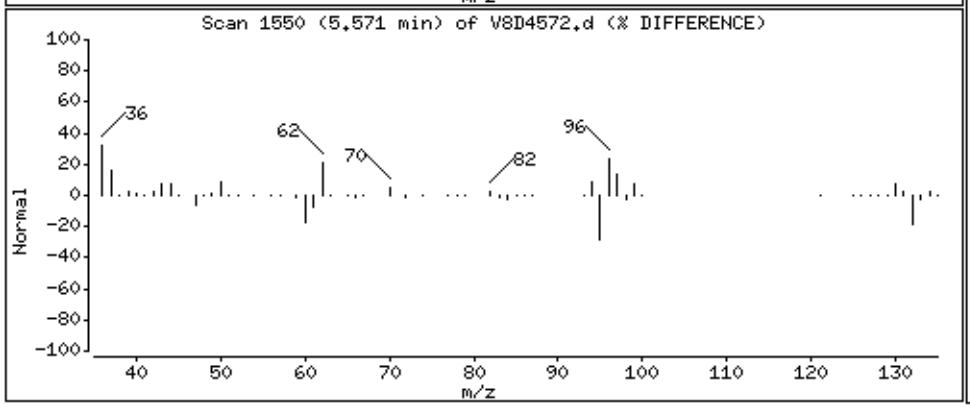












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4573.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	0.74	J
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	36	
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

EPA SAMPLE NO.

MW-2-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4573.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4573.d
Report Date: 14-May-2014 10:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

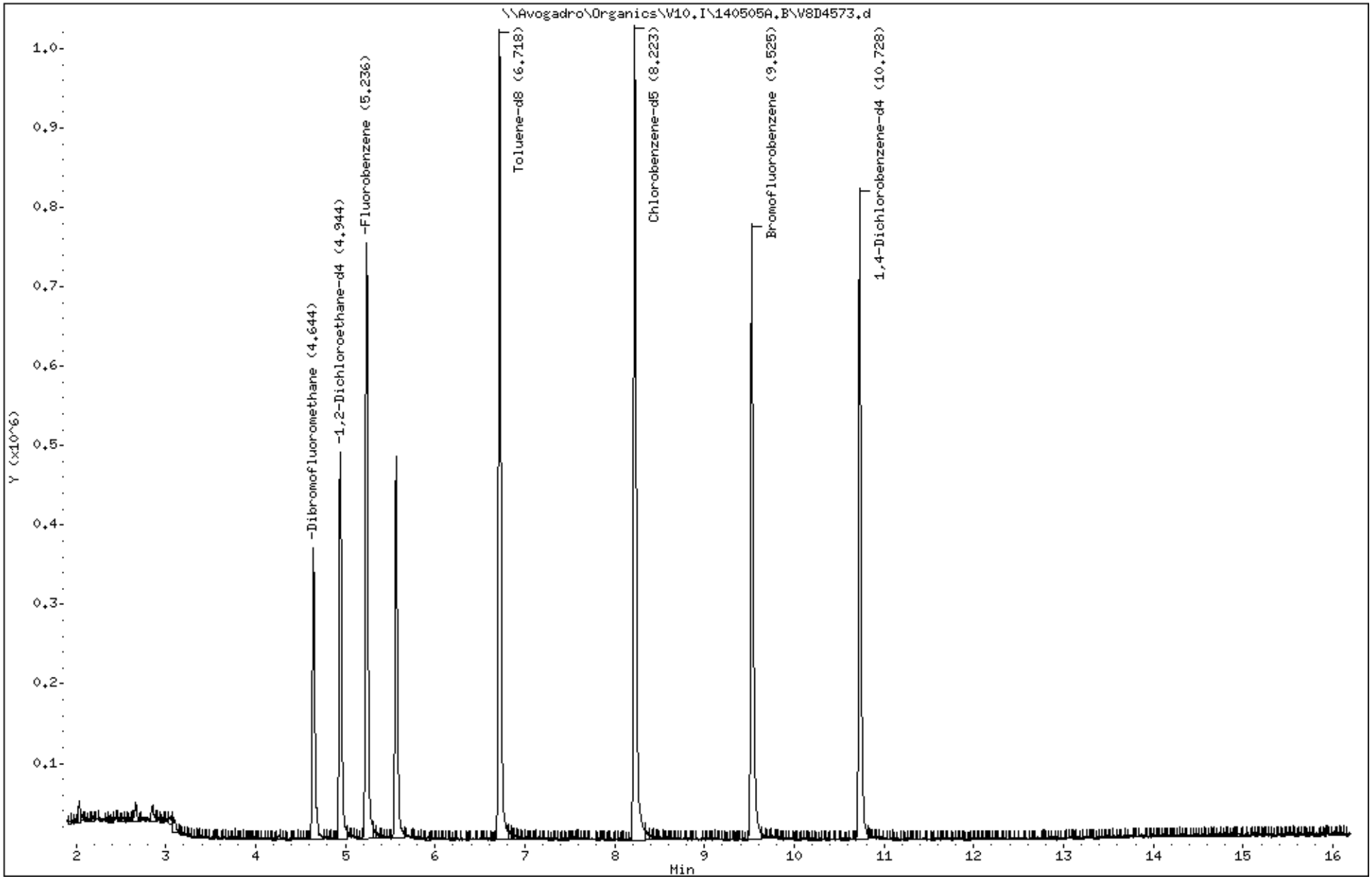
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Lab Smp Id: N0695-09A Client Smp ID: MW-2-050114
Inj Date : 06-MAY-2014 01:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-09A,,76949,
Misc Info :
Comment   :
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Meth Date : 14-May-2014 10:15 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 34
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	4.641	(0.886)	187321	53.1859	53
	37 1,1,1-Trichloroethane	97	4.692	4.683	(0.896)	6182	0.73550	0.74
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	31533	52.3318	52
*	46 Fluorobenzene	96	5.239	5.232	(1.000)	475710	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	121364	35.9387	36
$	58 Toluene-d8	98	6.718	6.718	(0.817)	557195	49.5342	50
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	470228	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.525	(1.159)	261957	45.5706	46
*	92 1,4-Dichlorobenzene-d4	152	10.731	10.727	(1.000)	184095	50.0000	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4573.d
Date : 06-MAY-2014 01:39
Client ID: MW-2-050114
Instrument: V10.i
Sample Info: 5ML,N0695-09A,,76949,
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4573.d

Date : 06-MAY-2014 01:39

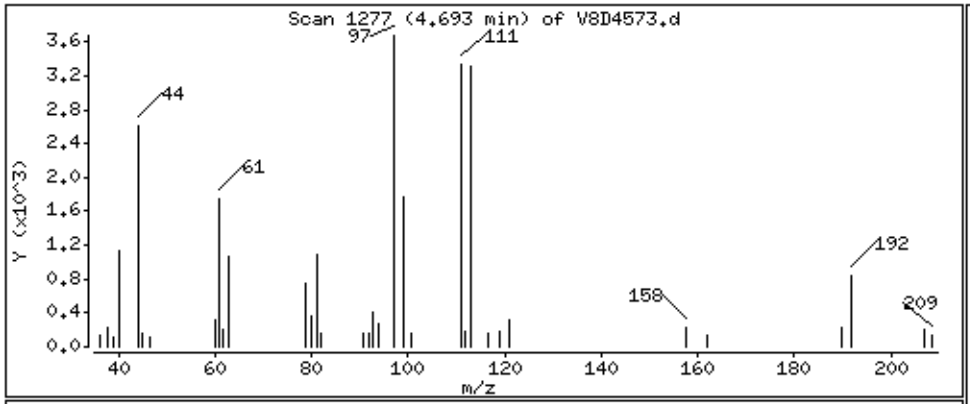
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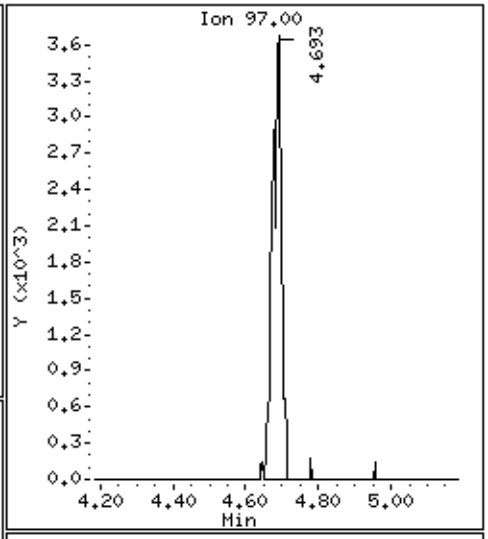
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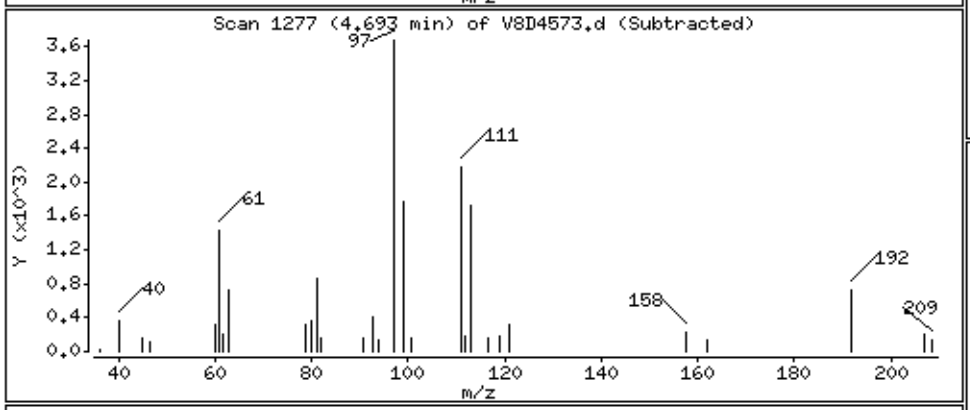
Purge Volume: 5.0 Operator: WL SRC: LIMS

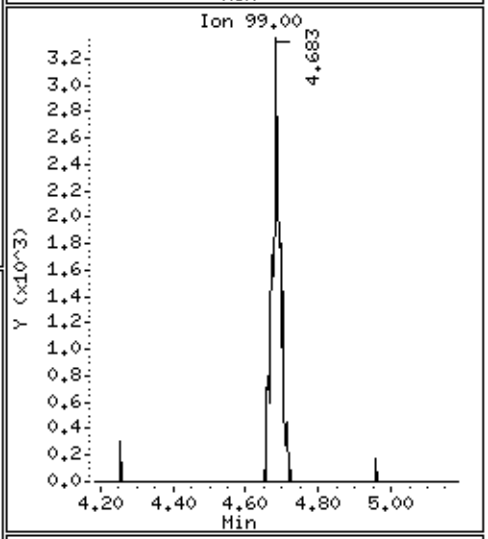
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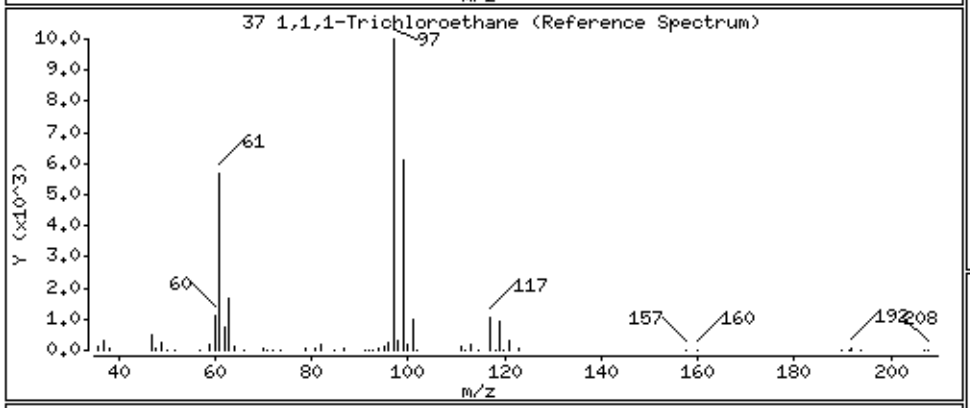
37 1,1,1-Trichloroethane Concentration: 0.74 ug/L

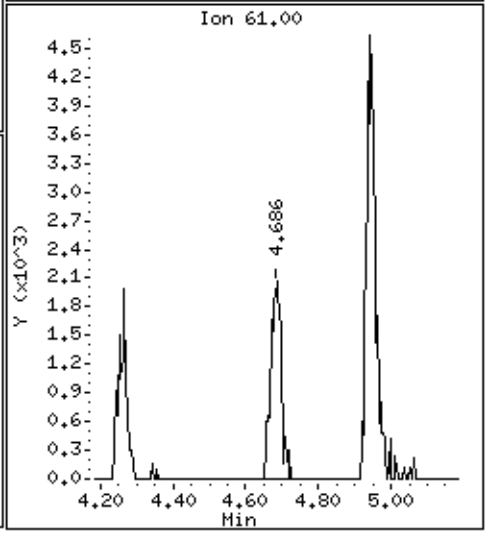


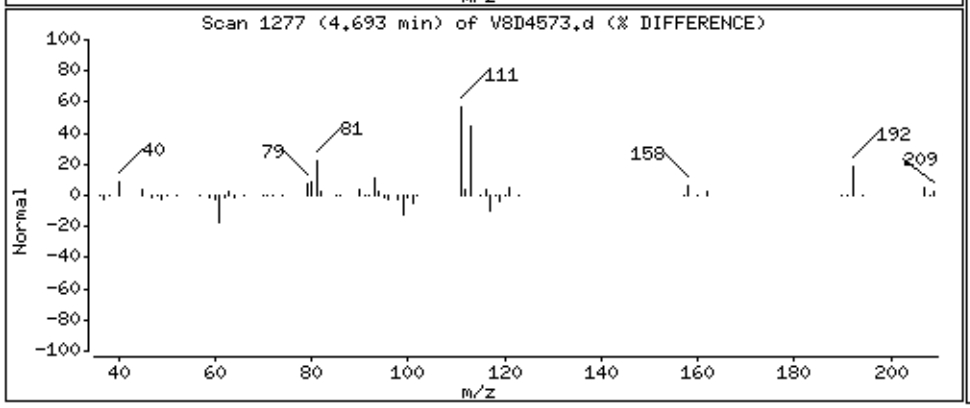












Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4573.d

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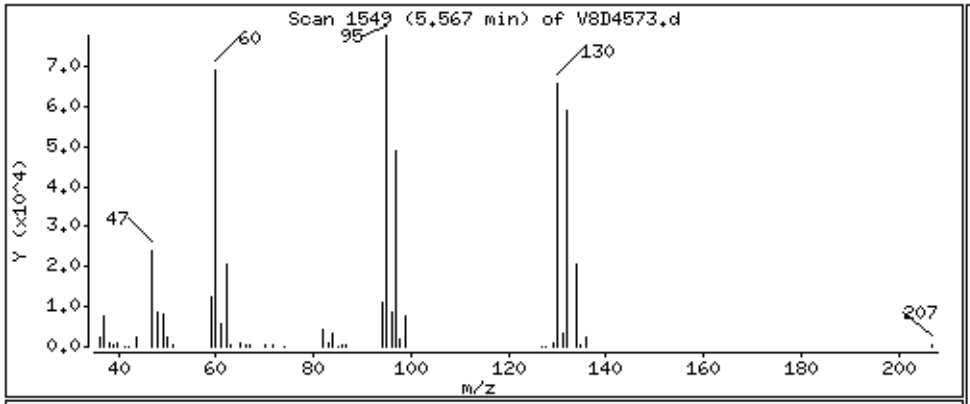
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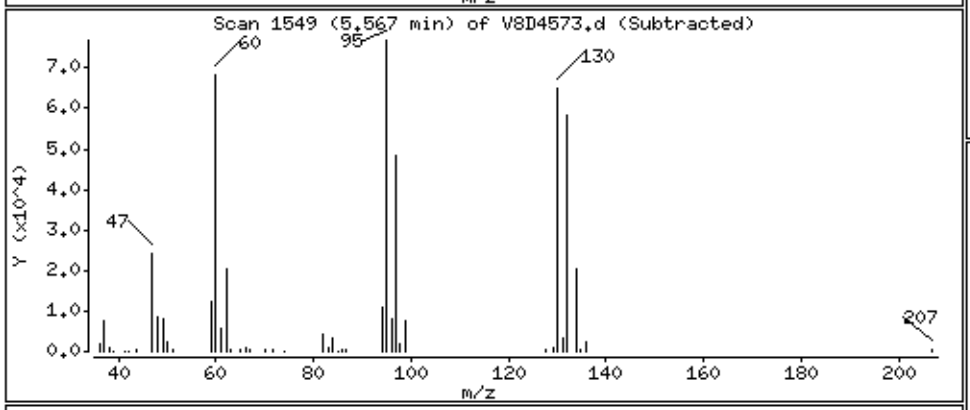
Sample Info: 5ML,N0695-09A,,76949,

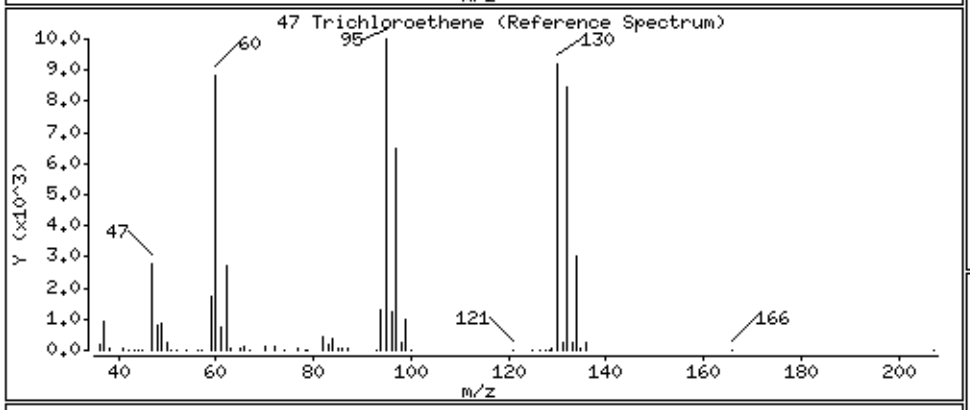
Purge Volume: 5.0 Operator: WL SRC: LIMS

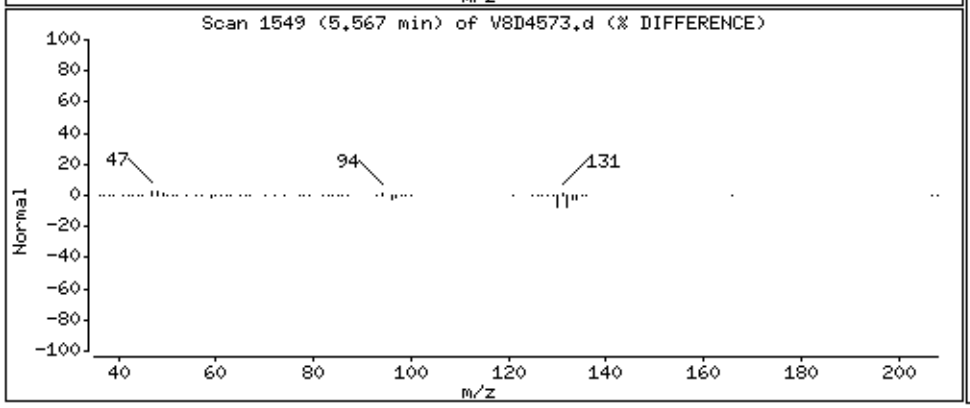
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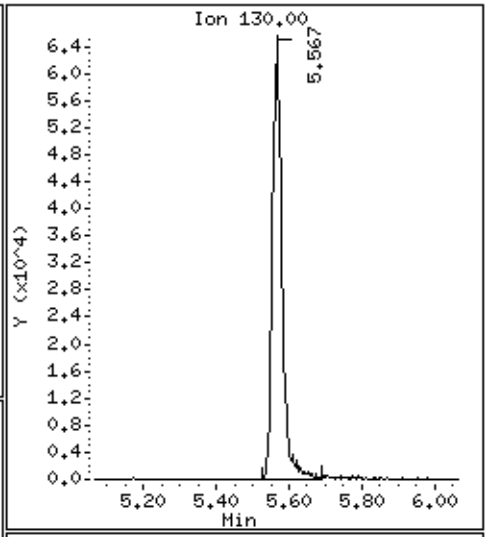
47 Trichloroethene Concentration: 36 ug/L

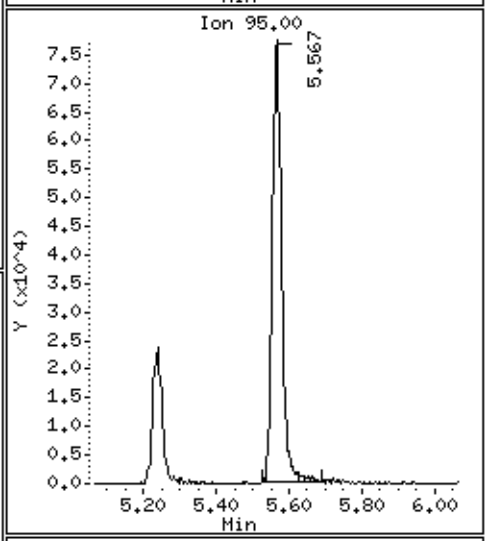


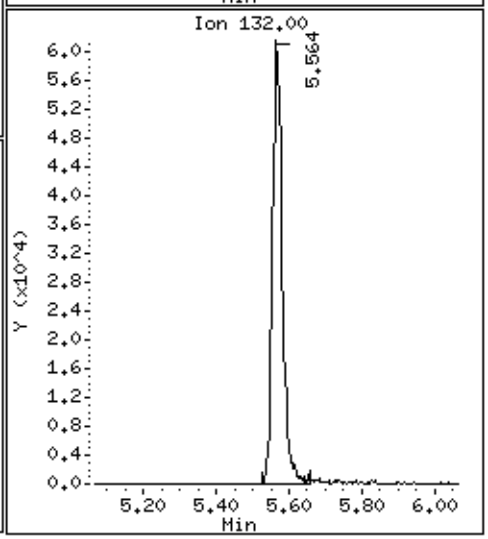












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4574.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	13	
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	3.6	J
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	2.3	J
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.

MW-1-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4574.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4574.d
Report Date: 14-May-2014 10:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

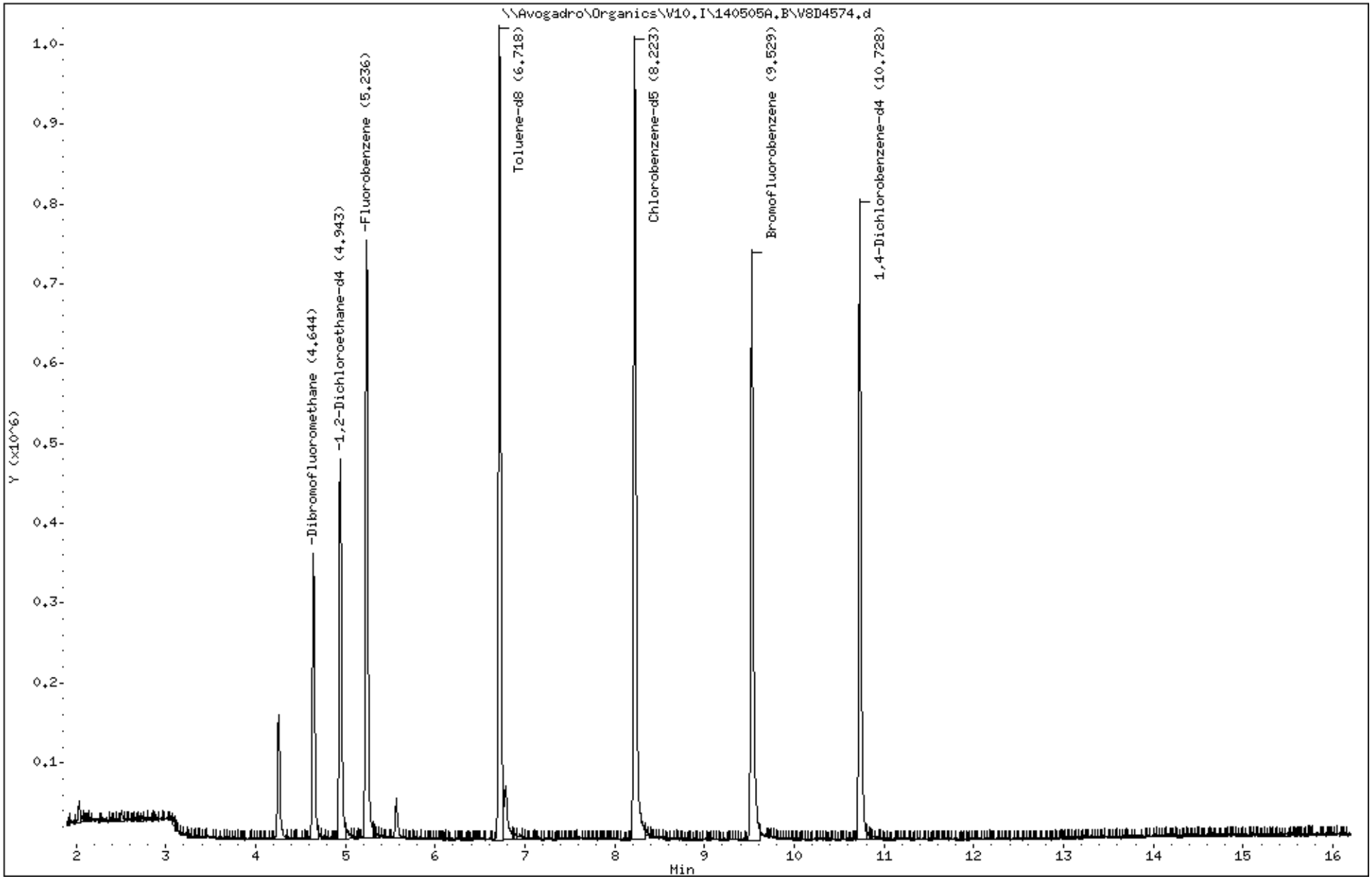
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Inj Date : 06-MAY-2014 02:07
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-10A,,76949,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:15 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 35
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	4.258	4.255	(0.813)	41725	12.6407	13
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	188361	54.7090	55
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	30568	51.8950	52
M	50 1,2-Dichloroethene (Total)	96				41725	12.6407	13
*	46 Fluorobenzene	96	5.236	5.232	(1.000)	465034	50.0000	
	47 Trichloroethene	130	5.570	5.564	(1.064)	12033	3.64505	3.6
$	58 Toluene-d8	98	6.718	6.718	(0.817)	553332	51.6006	52
	59 Toluene	91	6.785	6.782	(1.296)	29780	2.32230	2.3
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	448268	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.525	(1.158)	263116	48.0145	48
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.727	(1.000)	182023	50.0000	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4574.d
Date : 06-MAY-2014 02:07
Client ID: MW-1-050114
Instrument: V10.i
Sample Info: 5ML,N0695-10A,,76949,
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4574.d

Date : 06-MAY-2014 02:07

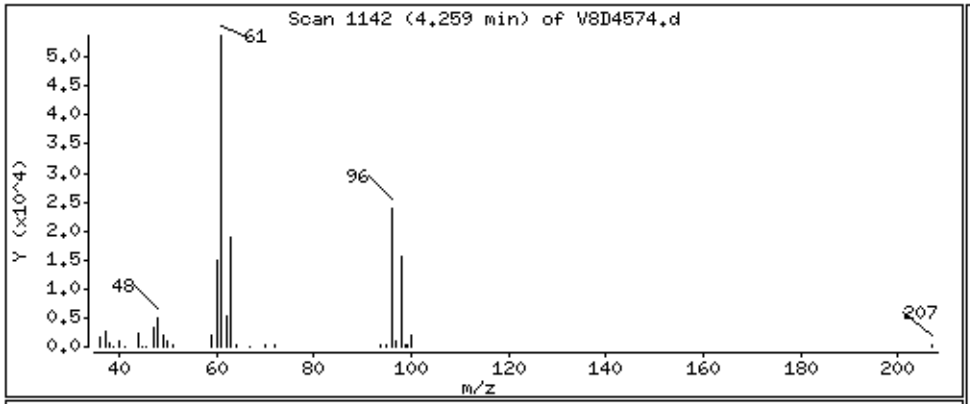
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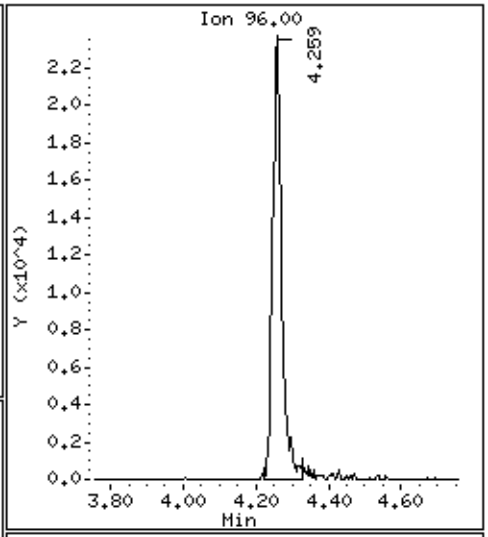
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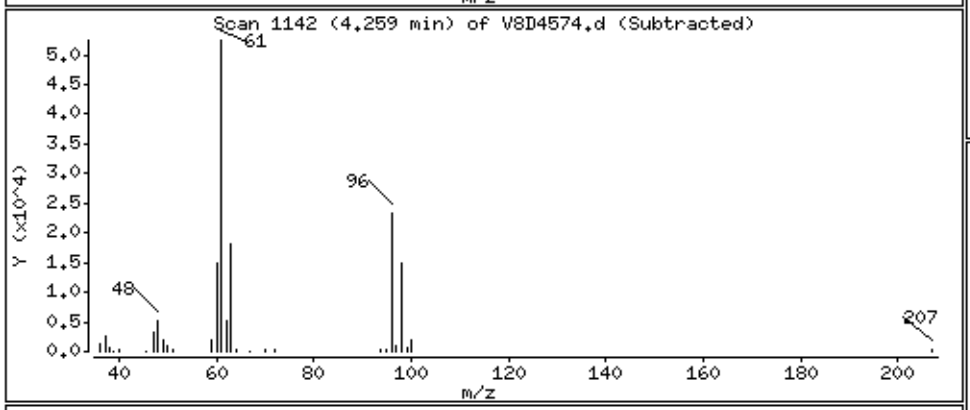
Purge Volume: 5.0 Operator: WL SRC: LIMS

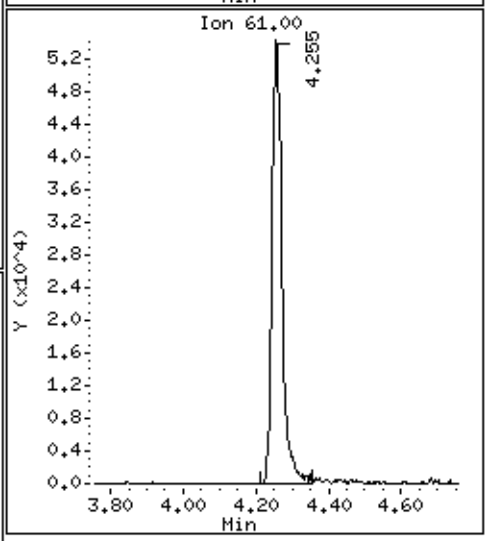
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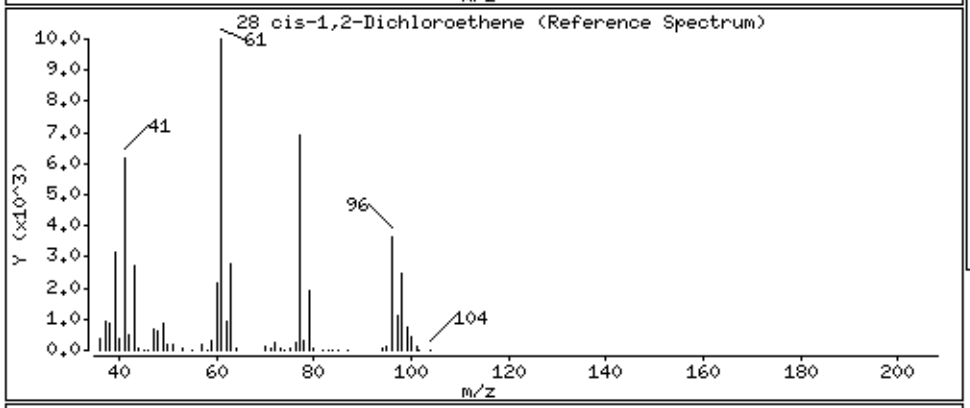
28 cis-1,2-Dichloroethene Concentration: 13 ug/L

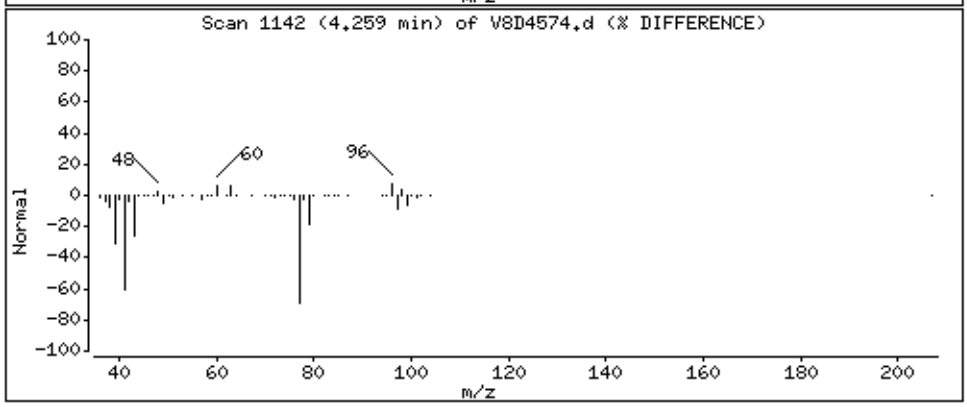












Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4574.d

Date : 06-MAY-2014 02:07

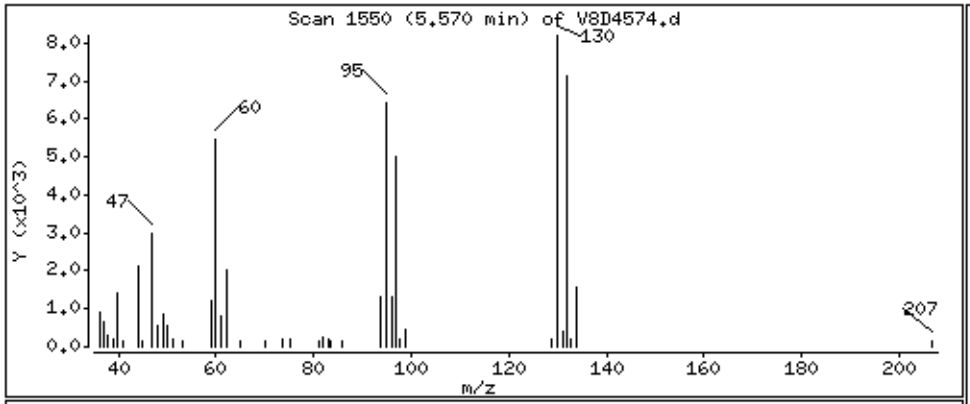
Client ID: MW-1-050114 Instrument: V10.i

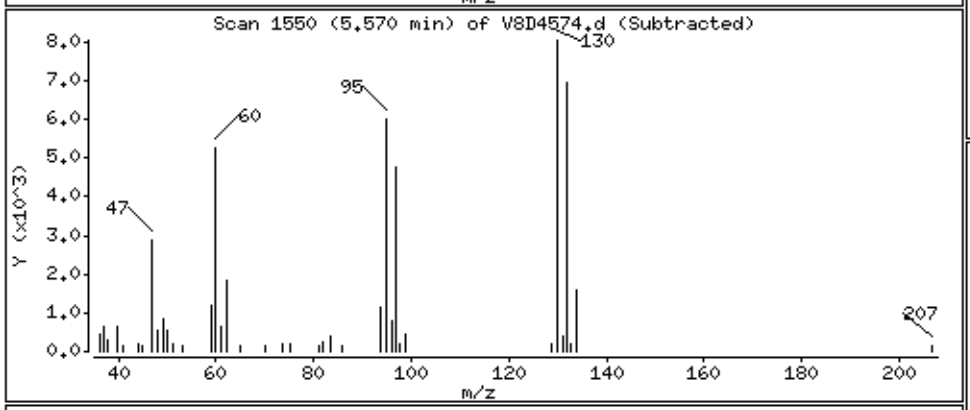
Sample Info: 5ML,N0695-10A,,76949,

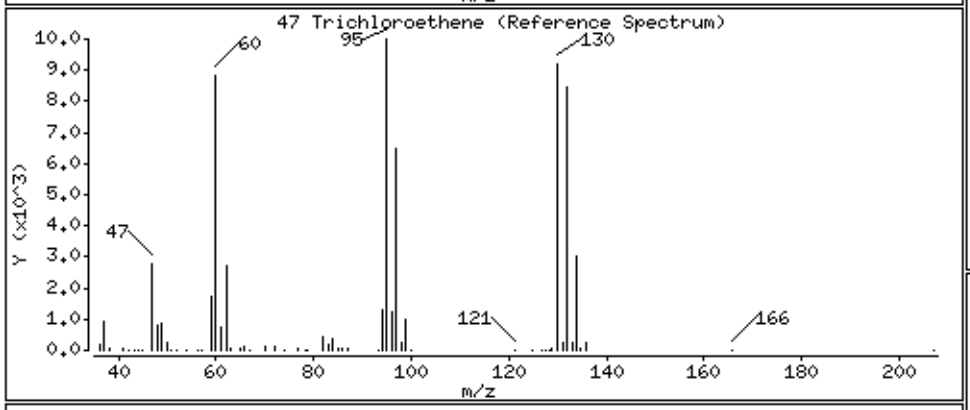
Purge Volume: 5.0 Operator: WL SRC: LIMS

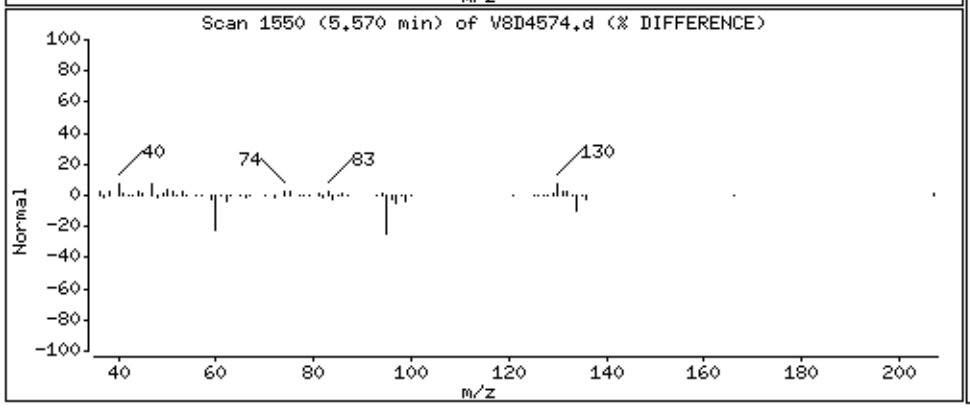
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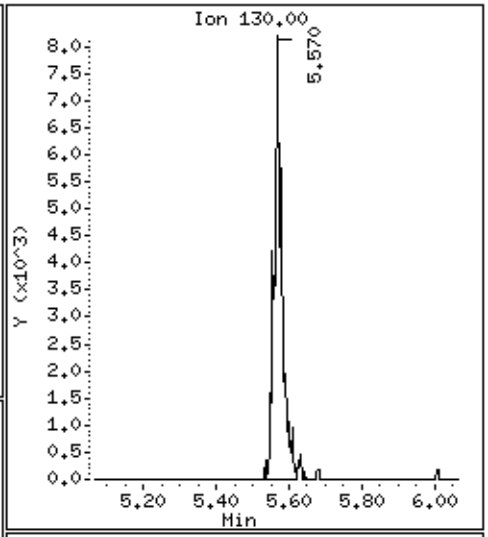
47 Trichloroethene Concentration: 3.6 ug/L

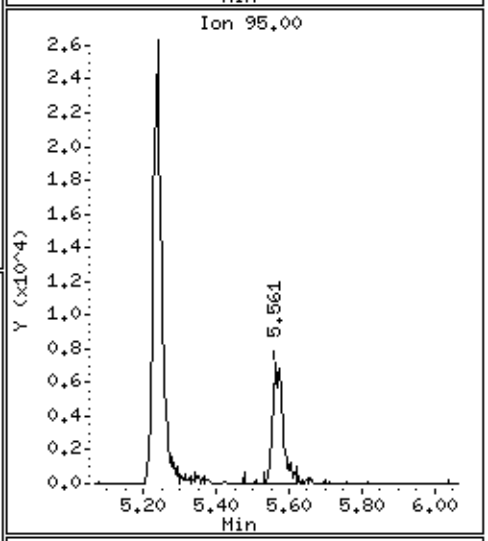


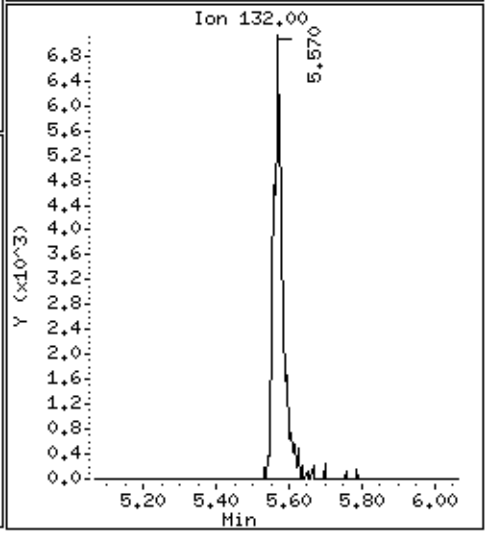












Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4574.d

Date : 06-MAY-2014 02:07

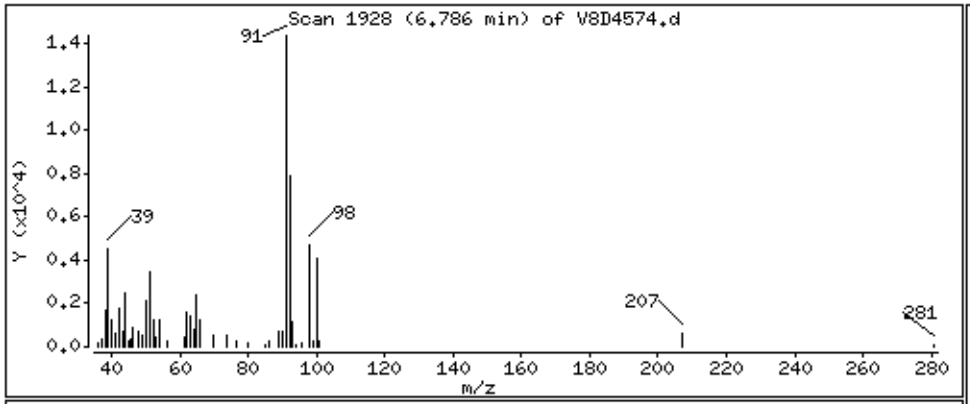
Client ID: MW-1-050114 Instrument: V10.i

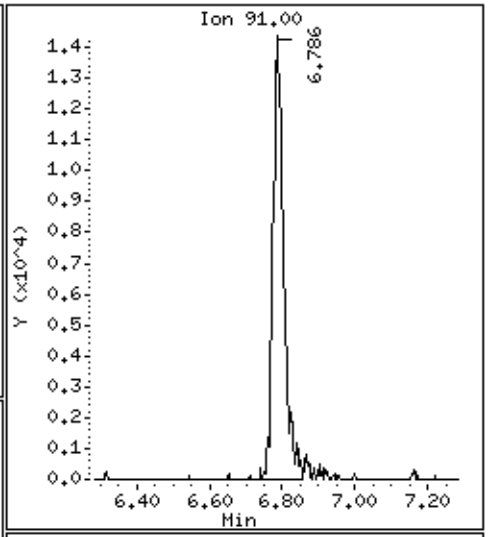
Sample Info: 5ML,N0695-10A,,76949,

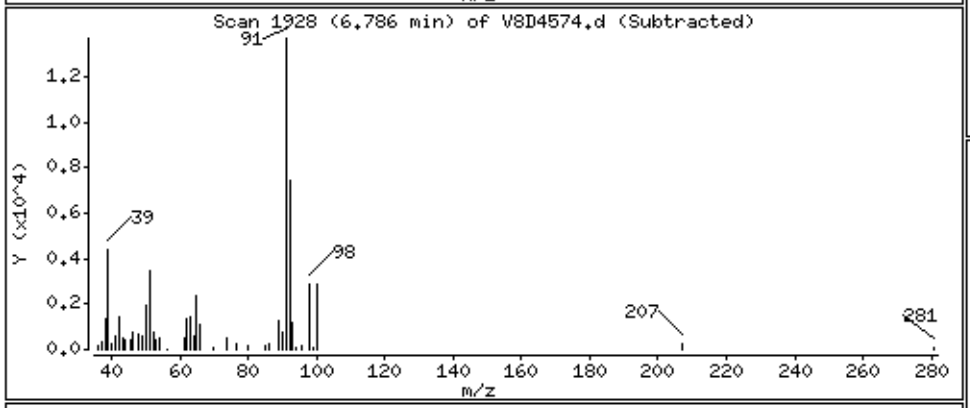
Purge Volume: 5.0 Operator: WL SRC: LIMS

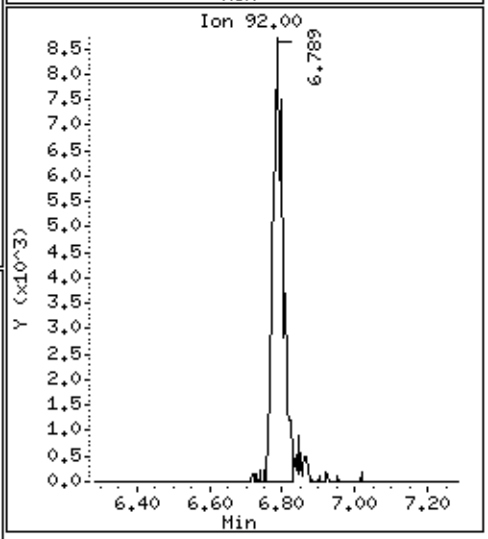
Column phase: DB-624 Column diameter: 0.25

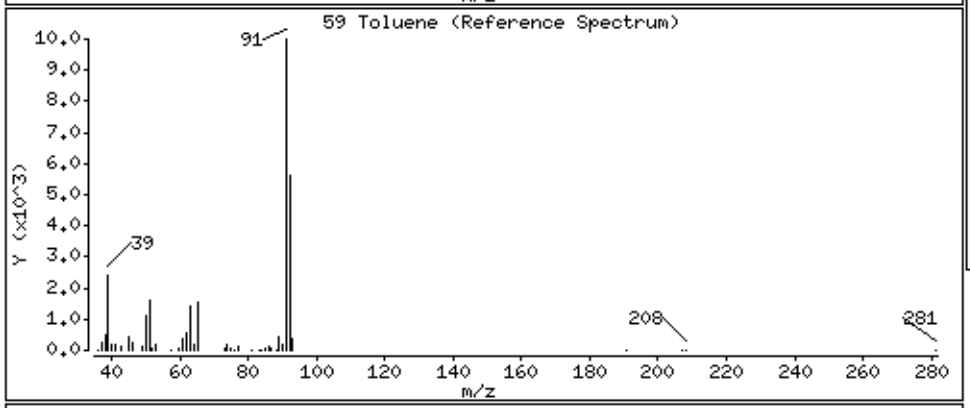
59 Toluene Concentration: 2.3 ug/L

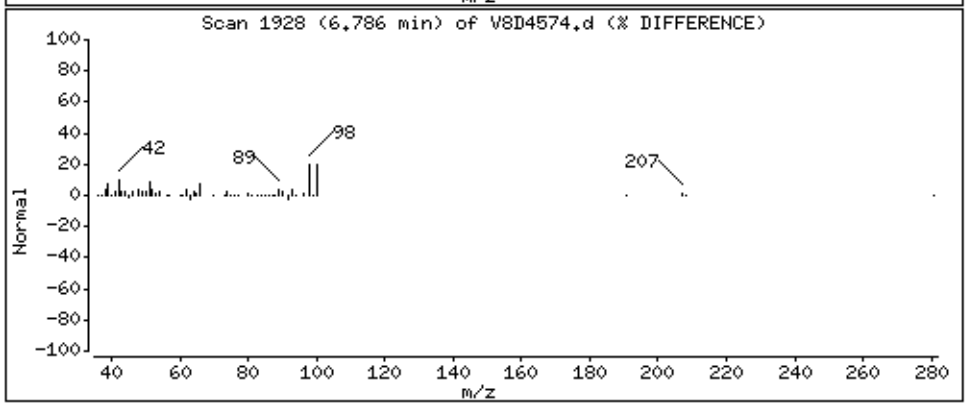












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4558.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/05/2014

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	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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4558.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/05/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4558.d
Report Date: 14-May-2014 10:15

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

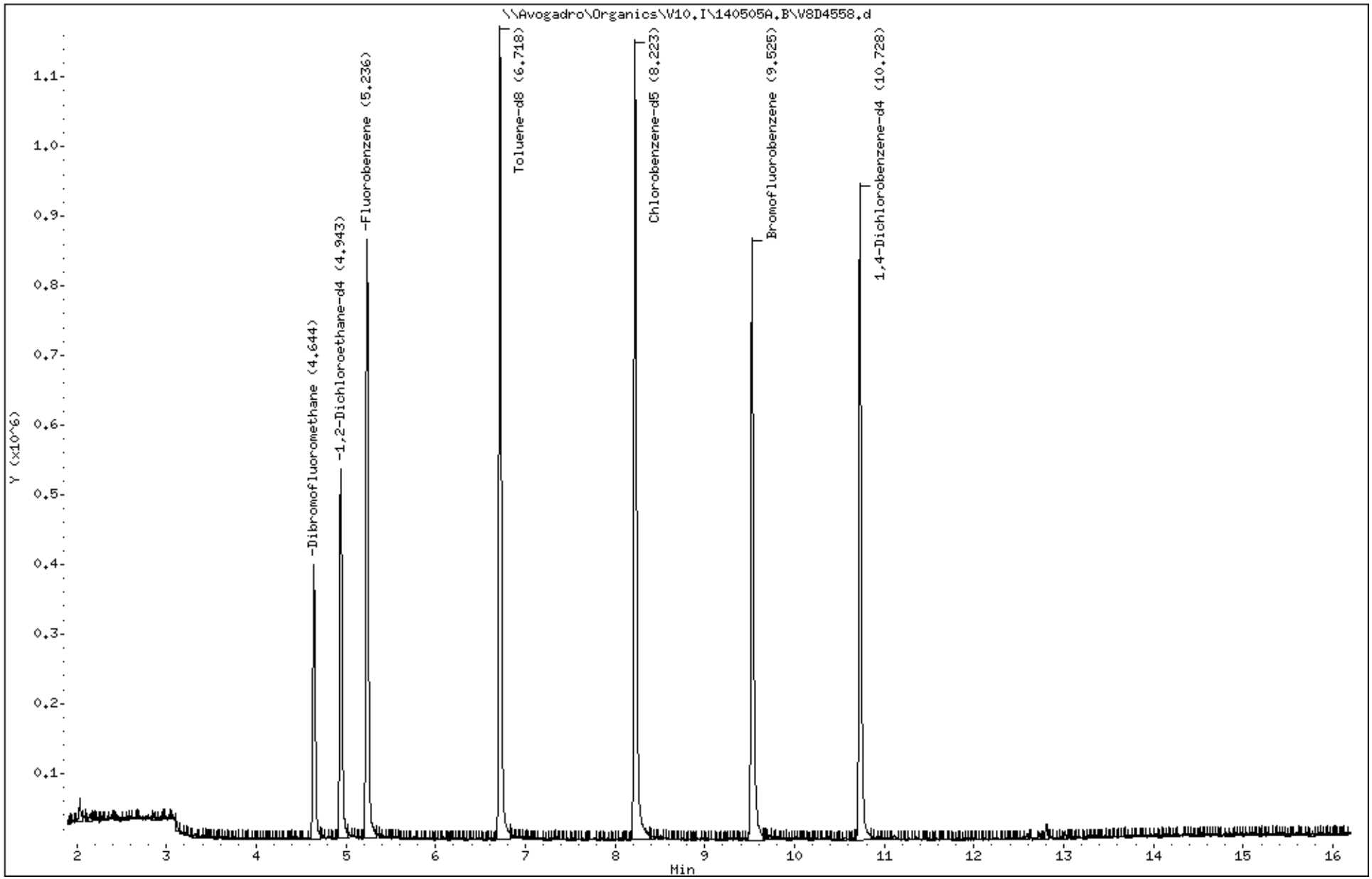
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Lab Smp Id: N0695-11A Client Smp ID: TRIP BLANK
Inj Date : 05-MAY-2014 18:52
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-11A,,76949
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:15 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.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/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)	215423	51.9116	52
$ 42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.944)	36853	51.9081	52
* 46 Fluorobenzene	96	5.239	5.232	(1.000)	560506	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	662731	51.6374	52
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	536512	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.525	(1.159)	302984	46.1959	46
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.727	(1.000)	224536	50.0000	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4558.d
Date : 05-MAY-2014 18:52
Client ID: TRIP BLANK
Instrument: V10.i
Sample Info: 5ML,N0695-11A,,76949
Purge Volume: 5.0
Operator: WL 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.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 04/28/2014 04/28/2014

Heated Purge: (Y/N) N Calibration Times: 9:57 14:13

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4264.D RRF020 = V8D4263.D RRF050 = V8D4272.D RRF100 = V8D4268.D RRF200 = V8D4267.D
RRF001 = V8D4271.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.352	0.468	0.435	0.426	0.446	0.494					0.437	11.1
Chloromethane	0.808	0.884	0.809	0.777	0.818	0.895					0.832	5.6
Vinyl chloride	0.487	0.589	0.545	0.549	0.562	0.636					0.561	8.8
Bromomethane	0.275	0.272	0.237	0.239	0.226	0.369					0.269	19.5
Chloroethane	0.262	0.301	0.279	0.273	0.281	0.368					0.294	13.1
Trichlorofluoromethane	0.467	0.639	0.585	0.578	0.592	0.692					0.592	12.6
1,1-Dichloroethene	0.291	0.327	0.298	0.298	0.304	0.364					0.314	8.7
Acetone	0.059	0.064	0.077	0.053	0.054						0.062	16.0
Iodomethane	0.225	0.240	0.301	0.319	0.379	0.283					0.291	19.2
Carbon disulfide	0.966	1.035	0.996	0.972	0.993	1.481					1.074	18.7
Methylene chloride	0.341	0.332	0.313	0.310	0.315	0.436					0.341	14.1
trans-1,2-Dichloroethene	0.301	0.314	0.301	0.292	0.299	0.393					0.317	12.0
Methyl tert-butyl ether	1.127	1.108	1.092	1.074	1.120	1.213					1.122	4.3
1,1-Dichloroethane	0.831	0.849	0.845	0.808	0.828	0.920					0.847	4.6
Vinyl acetate	1.707	1.801	1.822	1.750	1.871	1.763					1.786	3.3
2-Butanone	0.038	0.039	0.042	0.035	0.037						0.038	6.4
cis-1,2-Dichloroethene	0.350	0.332	0.325	0.319	0.325	0.370					0.337	5.7
2,2-Dichloropropane	0.492	0.614	0.642	0.597	0.630	0.461					0.573	13.4
Bromochloromethane	0.173	0.169	0.157	0.149	0.152	0.176					0.163	7.2
Chloroform	0.692	0.719	0.699	0.680	0.692	0.762					0.707	4.2
1,1,1-Trichloroethane	0.629	0.699	0.673	0.666	0.691	0.780					0.690	7.3
1,1-Dichloropropene	0.134	0.149	0.147	0.146	0.152	0.138					0.144	4.7
Carbon tetrachloride	0.514	0.590	0.568	0.561	0.583	0.593					0.568	5.2
1,2-Dichloroethane	0.759	0.820	0.816	0.787	0.811	0.764					0.793	3.4
Benzene	1.129	1.198	1.160	1.147	1.199	1.216					1.175	2.9
Trichloroethene	0.292	0.321	0.312	0.310	0.313	0.360					0.318	7.1
1,2-Dichloropropane	0.423	0.439	0.416	0.418	0.429	0.494					0.437	6.7

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 04/28/2014 04/28/2014

Heated Purge: (Y/N) N Calibration Times: 9:57 14:13

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4264.D RRF020 = V8D4263.D RRF050 = V8D4272.D RRF100 = V8D4268.D RRF200 = V8D4267.D
RRF001 = V8D4271.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.237	0.226	0.222	0.215	0.225	0.211					0.223	4.1
Bromodichloromethane	0.514	0.552	0.549	0.530	0.561	0.562					0.545	3.5
cis-1,3-Dichloropropene	0.516	0.574	0.548	0.535	0.564	0.549					0.548	3.8
4-Methyl-2-pentanone	0.528	0.551	0.563	0.541	0.571						0.551	3.1
Toluene	1.196	1.303	1.249	1.247	1.307	1.344					1.274	4.2
trans-1,3-Dichloropropene	0.485	0.524	0.529	0.526	0.553	0.490					0.518	5.0
1,1,2-Trichloroethane	0.285	0.298	0.276	0.262	0.280	0.296					0.283	4.7
1,3-Dichloropropane	0.608	0.645	0.599	0.601	0.625	0.646					0.621	3.4
Tetrachloroethene	0.371	0.376	0.359	0.359	0.367	0.463					0.382	10.5
2-Hexanone	0.534	0.518	0.524	0.433	0.467						0.495	8.8
Dibromochloromethane	0.459	0.474	0.453	0.460	0.478	0.375					0.450	8.4
1,2-Dibromoethane	0.372	0.396	0.368	0.370	0.383	0.387					0.379	3.0
Chlorobenzene	0.966	1.029	0.963	0.974	1.012	0.993					0.989	2.7
1,1,1,2-Tetrachloroethane	0.415	0.428	0.400	0.411	0.417	0.402					0.412	2.5
Ethylbenzene	0.500	0.543	0.493	0.527	0.535	0.562					0.527	5.0
m,p-Xylene	0.620	0.675	0.614	0.644	0.664	0.651					0.645	3.7
o-Xylene	0.586	0.641	0.592	0.622	0.631	0.592					0.611	3.9
Xylene (Total)	0.609	0.664	0.607	0.637	0.653	0.632					0.633	3.6
Styrene	0.899	1.031	0.958	1.015	1.046	0.885					0.972	7.1
Bromoform	0.289	0.312	0.292	0.302	0.313	0.244					0.292	8.7
Isopropylbenzene	1.591	1.800	1.644	1.732	1.781	1.721					1.712	4.7
1,1,2,2-Tetrachloroethane	1.053	0.903	0.830	0.810	0.805	1.037					0.906	12.5
Bromobenzene	0.965	0.884	0.829	0.840	0.838	0.985					0.890	7.7
1,2,3-Trichloropropane	1.062	1.147	0.999	1.003	1.029	0.974					1.036	6.0
n-Propylbenzene	0.795	0.845	0.734	0.786	0.778	0.905					0.807	7.4
2-Chlorotoluene	0.796	0.791	0.705	0.701	0.708	0.823					0.754	7.3
1,3,5-Trimethylbenzene	2.963	2.987	2.678	2.788	2.812	3.242					2.912	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.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 04/28/2014 04/28/2014

Heated Purge: (Y/N) N Calibration Times: 9:57 14:13

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4264.D RRF020 = V8D4263.D RRF050 = V8D4272.D RRF100 = V8D4268.D RRF200 = V8D4267.D
RRF001 = V8D4271.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.786	0.776	0.710	0.729	0.730	0.934					0.778	10.6
tert-Butylbenzene	2.878	2.947	2.627	2.672	2.759	3.461					2.891	10.5
1,2,4-Trimethylbenzene	2.824	3.020	2.677	2.794	2.793	3.304					2.902	7.8
sec-Butylbenzene	3.289	3.505	3.137	3.252	3.277	3.877					3.390	7.9
4-Isopropyltoluene	2.712	2.904	2.636	2.724	2.725	3.025					2.787	5.2
1,3-Dichlorobenzene	1.422	1.490	1.339	1.393	1.398	1.539					1.430	5.1
1,4-Dichlorobenzene	1.589	1.528	1.384	1.453	1.456	1.644					1.509	6.4
n-Butylbenzene	2.228	2.574	2.349	2.513	2.527	2.393					2.431	5.4
1,2-Dichlorobenzene	1.508	1.454	1.309	1.352	1.371	1.419					1.402	5.2
1,2-Dibromo-3-chloropropane	0.170	0.170	0.155	0.177	0.184	0.140					0.166	9.7
1,2,4-Trichlorobenzene	0.527	0.731	0.716	0.876	0.914	0.430					0.699	27.2
Hexachlorobutadiene	0.531	0.585	0.550	0.565	0.549	0.792					0.595	16.4
1,2,3-Trichlorobenzene	0.528	0.720	0.669	0.813	0.812	0.467					0.668	21.6
Naphthalene	1.161	1.259	1.138	1.672	1.679	1.306					1.369	17.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 04/28/2014 04/28/2014

Heated Purge: (Y/N) N Calibration Times: 9:57 14:13

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4264.D RRF020 = V8D4263.D RRF050 = V8D4272.D RRF100 = V8D4268.D RRF200 = V8D4267.D
RRF001 = V8D4271.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.308	0.304	0.319	0.312	0.306						0.310	2.0
1,2-Dichloroethane-d4	0.058	0.062	0.061	0.056	0.058						0.059	4.0
Toluene-d8	1.330	1.319	1.299	1.312	1.277						1.307	1.6
Bromofluorobenzene	0.551	0.573	0.574	0.574	0.573						0.569	1.8

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 05/05/2014 05/05/2014

Heated Purge: (Y/N) N Calibration Times: 12:27 15:12

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4546.D RRF020 = V8D4545.D RRF050 = V8D4544.D RRF100 = V8D4550.D RRF200 = V8D4549.D
RRF001 = V8D4547.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.620	0.641	0.554	0.523	0.586	0.644					0.595	8.3
Chloromethane	1.052	1.109	0.953	0.924	1.015	1.247					1.050	11.2
Vinyl chloride	0.643	0.690	0.604	0.599	0.653	0.742					0.655	8.3
Bromomethane	0.322	0.305	0.253	0.266	0.254	0.486					0.314	28.2
Chloroethane	0.353	0.357	0.310	0.297	0.330	0.398					0.341	10.6
Trichlorofluoromethane	0.901	0.901	0.787	0.737	0.848	0.933					0.851	8.9
1,1-Dichloroethene	0.368	0.393	0.339	0.334	0.367	0.519					0.387	17.7
Acetone	0.099	0.098	0.090	0.054	0.062						0.081	26.2
Iodomethane	0.329	0.379	0.387	0.360	0.482	0.377					0.386	13.4
Carbon disulfide	1.152	1.149	1.025	1.022	1.168	1.508					1.171	15.2
Methylene chloride	0.362	0.373	0.324	0.311	0.354	0.476					0.367	15.9
trans-1,2-Dichloroethene	0.344	0.350	0.314	0.304	0.346	0.403					0.343	10.1
Methyl tert-butyl ether	1.238	1.353	1.195	1.141	1.336	1.250					1.252	6.5
1,1-Dichloroethane	1.001	1.043	0.890	0.865	0.994	1.121					0.986	9.7
Vinyl acetate	1.989	2.296	2.112	2.007	2.371	2.123					2.149	7.2
2-Butanone	0.042	0.050	0.047	0.036	0.045						0.044	12.2
cis-1,2-Dichloroethene	0.344	0.364	0.331	0.324	0.369	0.397					0.355	7.6
2,2-Dichloropropane	0.616	0.762	0.737	0.682	0.824	0.585					0.701	13.0
Bromochloromethane	0.184	0.192	0.166	0.160	0.182	0.207					0.182	9.4
Chloroform	0.884	0.942	0.798	0.774	0.907	0.890					0.866	7.6
1,1,1-Trichloroethane	0.864	0.934	0.825	0.789	0.931	0.957					0.883	7.7
1,1-Dichloropropene	0.165	0.176	0.154	0.153	0.178	0.193					0.170	9.0
Carbon tetrachloride	0.719	0.804	0.717	0.700	0.813	0.707					0.743	6.9
1,2-Dichloroethane	1.110	1.191	1.047	0.979	1.162	1.146					1.106	7.2
Benzene	1.246	1.325	1.158	1.138	1.340	1.357					1.261	7.6
Trichloroethene	0.370	0.368	0.313	0.318	0.370	0.392					0.355	9.0
1,2-Dichloropropane	0.449	0.482	0.434	0.413	0.496	0.475					0.458	6.9

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.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 05/05/2014 05/05/2014

Heated Purge: (Y/N) N Calibration Times: 12:27 15:12

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4546.D RRF020 = V8D4545.D RRF050 = V8D4544.D RRF100 = V8D4550.D RRF200 = V8D4549.D
RRF001 = V8D4547.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.273	0.288	0.259	0.248	0.292	0.276					0.272	6.2
Bromodichloromethane	0.614	0.686	0.620	0.598	0.726	0.527					0.628	11.1
cis-1,3-Dichloropropene	0.487	0.584	0.554	0.544	0.657	0.477					0.551	12.1
4-Methyl-2-pentanone	0.653	0.731	0.690	0.647	0.767						0.698	7.4
Toluene	1.404	1.413	1.255	1.257	1.493	1.451					1.379	7.3
trans-1,3-Dichloropropene	0.463	0.586	0.561	0.558	0.682	0.434					0.547	16.3
1,1,2-Trichloroethane	0.321	0.325	0.290	0.281	0.325	0.292					0.306	6.7
1,3-Dichloropropane	0.550	0.643	0.566	0.533	0.608	0.579					0.580	6.9
Tetrachloroethene	0.352	0.381	0.317	0.327	0.365	0.404					0.358	9.2
2-Hexanone	0.468	0.539	0.536	0.434	0.506						0.497	9.1
Dibromochloromethane	0.405	0.475	0.440	0.429	0.499	0.401					0.441	8.8
1,2-Dibromoethane	0.348	0.395	0.354	0.339	0.384	0.311					0.355	8.7
Chlorobenzene	0.952	0.968	0.872	0.852	0.963	0.890					0.916	5.6
1,1,1,2-Tetrachloroethane	0.394	0.435	0.393	0.379	0.436	0.448					0.414	6.9
Ethylbenzene	0.443	0.503	0.437	0.437	0.506	0.478					0.467	7.0
m,p-Xylene	0.581	0.617	0.547	0.553	0.633	0.542					0.579	6.7
o-Xylene	0.520	0.596	0.524	0.535	0.604	0.495					0.546	8.1
Xylene (Total)	0.560	0.610	0.539	0.547	0.623	0.526					0.568	7.0
Styrene	0.759	0.905	0.854	0.853	1.007	0.708					0.847	12.5
Bromoform	0.229	0.277	0.272	0.263	0.316	0.212					0.261	14.2
Isopropylbenzene	1.482	1.715	1.496	1.537	1.768	1.356					1.559	9.9
1,1,2,2-Tetrachloroethane	0.860	0.848	0.722	0.702	0.759	0.823					0.786	8.6
Bromobenzene	0.857	0.824	0.721	0.691	0.768	1.037					0.816	15.3
1,2,3-Trichloropropane	0.947	1.042	0.958	0.881	0.974	1.359					1.027	16.6
n-Propylbenzene	0.737	0.750	0.629	0.638	0.700	0.687					0.690	7.2
2-Chlorotoluene	0.705	0.691	0.595	0.584	0.647	0.797					0.670	11.8
1,3,5-Trimethylbenzene	2.608	2.810	2.373	2.341	2.623	2.743					2.583	7.4

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.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 05/05/2014 05/05/2014

Heated Purge: (Y/N) N Calibration Times: 12:27 15:12

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4546.D RRF020 = V8D4545.D RRF050 = V8D4544.D RRF100 = V8D4550.D RRF200 = V8D4549.D
RRF001 = V8D4547.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.706	0.694	0.620	0.599	0.669	0.700					0.665	6.8
tert-Butylbenzene	2.562	2.936	2.296	2.244	2.487	3.136					2.610	13.6
1,2,4-Trimethylbenzene	2.580	2.795	2.348	2.360	2.635	2.757					2.579	7.4
sec-Butylbenzene	3.103	3.227	2.689	2.762	3.025	3.444					3.042	9.3
4-Isopropyltoluene	2.451	2.701	2.260	2.329	2.534	2.711					2.498	7.5
1,3-Dichlorobenzene	1.250	1.347	1.175	1.171	1.292	1.335					1.261	6.1
1,4-Dichlorobenzene	1.439	1.414	1.228	1.220	1.346	1.834					1.414	15.9
n-Butylbenzene	2.047	2.388	2.069	2.154	2.378	2.224					2.210	6.7
1,2-Dichlorobenzene	1.253	1.338	1.168	1.160	1.276	1.133					1.221	6.6
1,2-Dibromo-3-chloropropane	0.138	0.152	0.160	0.158	0.185	0.110					0.150	16.7
1,2,4-Trichlorobenzene	0.434	0.606	0.572	0.680	0.806	0.772					0.645	21.3
Hexachlorobutadiene	0.544	0.573	0.476	0.469	0.503	0.782					0.558	20.9
1,2,3-Trichlorobenzene	0.444	0.630	0.558	0.640	0.719	0.746					0.623	17.7
Naphthalene	1.381	1.361	1.153	1.452	1.492	1.960					1.466	18.3

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0695 SAS No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date(s): 05/05/2014 05/05/2014

Heated Purge: (Y/N) N Calibration Times: 12:27 15:12

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D4546.D RRF020 = V8D4545.D RRF050 = V8D4544.D RRF100 = V8D4550.D RRF200 = V8D4549.D
RRF001 = V8D4547.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.376	0.372	0.375	0.361	0.367						0.370	1.7
1,2-Dichloroethane-d4	0.065	0.063	0.064	0.062	0.062						0.063	2.3
Toluene-d8	1.208	1.225	1.204	1.184	1.160						1.196	2.1
Bromofluorobenzene	0.587	0.614	0.620	0.617	0.617						0.611	2.2

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4263.d
Report Date: 01-May-2014 13:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140428.B\V8D4263.d
Lab Smp Id: VSTD02010Z Client Smp ID: VSTD02010Z
Inj Date : 28-APR-2014 09:57
Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,VSTD02010Z,VSTD02010Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140428.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 9 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/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	1.587	(0.303)	207808	20.0000	21
2	Freon114	85	1.705	1.706	(0.326)	132166	20.0000	23
3	Chloromethane	50	1.753	1.754	(0.335)	391972	20.0000	21
4	Vinyl Chloride	62	1.856	1.857	(0.355)	261065	20.0000	21
5	Bromomethane	94	2.143	2.142	(0.409)	120686	20.0000	22
6	Chloroethane	64	2.229	2.230	(0.426)	133688	20.0000	22
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	283655	20.0000	22
126	Ethanol	46	2.567	2.564	(0.490)	108068	2000.00	2000(A)
8	Ether	59	2.667	2.667	(0.509)	186463	20.0000	20
9	Acrolein	56	2.770	2.770	(0.529)	237553	100.000	96
10	1,1-Dichloroethene	96	2.860	2.857	(0.546)	145082	20.0000	21
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	154854	20.0000	22
12	Acetone	58	2.885	2.886	(0.551)	28375	20.0000	21(QM)M3 AM 05/01
13	Iodomethane	142	2.982	2.985	(0.570)	106375	20.0000	16
14	Carbon Disulfide	76	3.046	3.046	(0.582)	459271	20.0000	21
15	Acetonitrile	41	3.136	3.136	(0.599)	560445	200.000	210(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	347217	20.0000	20
17	Methyl Acetate	43	3.146	3.143	(0.601)	319315	20.0000	22
18	Methylene Chloride	84	3.229	3.230	(0.617)	147319	20.0000	21
19	tert-Butanol	59	3.297	3.294	(0.630)	47501	40.0000	41
20	Acrylonitrile	53	3.422	3.419	(0.654)	106291	20.0000	20
21	trans-1,2-Dichloroethene	96	3.454	3.452	(0.660)	139484	20.0000	21

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4263.d
Report Date: 01-May-2014 13:45

	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)	491576	20.0000	20
	23 1,1-Dichloroethane	63	3.786	3.783	(0.723)	376563	20.0000	20
	24 Vinyl acetate	43	3.821	3.818	(0.730)	799041	20.0000	20
	25 Diisopropyl Ether	45	3.824	3.825	(0.730)	983149	20.0000	20
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	414064	20.0000	20
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	750058	20.0000	20
	29 2,2-Dichloropropane	77	4.258	4.259	(0.813)	272300	20.0000	21
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	147481	20.0000	20
	30 2-Butanone	72	4.255	4.252	(0.813)	17159	20.0000	20(Q)
	32 Propionitrile	54	4.306	4.304	(0.823)	328053	200.000	200
	33 Methacrylonitrile	41	4.435	4.432	(0.847)	314578	40.0000	40
	34 Bromochloromethane	128	4.454	4.455	(0.851)	74836	20.0000	21
	31 Tetrahydrofuran	72	4.503	4.497	(0.860)	32647	40.0000	41
	35 Chloroform	83	4.509	4.506	(0.861)	318898	20.0000	20
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	337197	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	310069	20.0000	20
	38 Cyclohexane	56	4.737	4.738	(0.905)	401996	20.0000	21
	39 1,1-Dichloropropene	110	4.818	4.821	(0.920)	66220	20.0000	21
	40 Carbon Tetrachloride	117	4.831	4.828	(0.923)	261926	20.0000	21
	41 Isobutyl Alcohol	43	4.876	4.744	(0.931)	193473	400.000	440(TA)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	68256	50.0000	52
	43 Benzene	78	5.004	5.001	(0.956)	531518	20.0000	20
	44 1,2-Dichloroethane	62	5.007	5.008	(0.956)	363906	20.0000	21
	45 tert-Amyl methyl ether	73	5.075	5.079	(0.969)	442257	20.0000	20
M	50 1,2-Dichloroethene (Total)	96				286965	40.0000	41
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	1108980	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	142268	20.0000	20
	48 Methylcyclohexane	83	5.750	5.751	(1.098)	223823	20.0000	21
	49 1,2-Dichloropropane	63	5.769	5.770	(1.102)	194817	20.0000	21
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	112095	20.0000	24(Q)
	52 Dibromomethane	93	5.879	5.882	(1.123)	100456	20.0000	20
	53 1,4-Dioxane	88	5.885	5.882	(1.124)	26080	400.000	400(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	245060	20.0000	20
	55 2-Chloroethyl vinyl ether	63	6.445	6.442	(1.231)	2862	20.0000	27(TQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.442	(1.231)	254642	20.0000	21
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	244269	20.0000	20
$	58 Toluene-d8	98	6.718	6.718	(0.817)	1161611	50.0000	50
	59 Toluene	91	6.785	6.783	(1.296)	578129	20.0000	20
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	232437	20.0000	20
	61 Ethyl Methacrylate	69	7.072	7.069	(1.351)	136965	20.0000	20
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	132058	20.0000	21
	63 Tetrachloroethene	164	7.348	7.342	(0.894)	132480	20.0000	20
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	227202	20.0000	21
	65 2-Hexanone	43	7.438	7.432	(0.905)	182455	20.0000	21
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	167168	20.0000	21
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	139604	20.0000	21
	69 1-Chlorohexane	91	8.216	8.212	(0.999)	189877	20.0000	21(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	880833	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	362505	20.0000	21
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	150720	20.0000	21
	72 Ethylbenzene	106	8.367	8.371	(1.018)	191446	20.0000	21
	73 m,p-Xylene	106	8.499	8.496	(1.034)	475455	40.0000	42
	74 o-Xylene	106	8.943	8.943	(1.088)	225896	20.0000	21
	75 Styrene	104	8.959	8.956	(1.090)	363214	20.0000	21

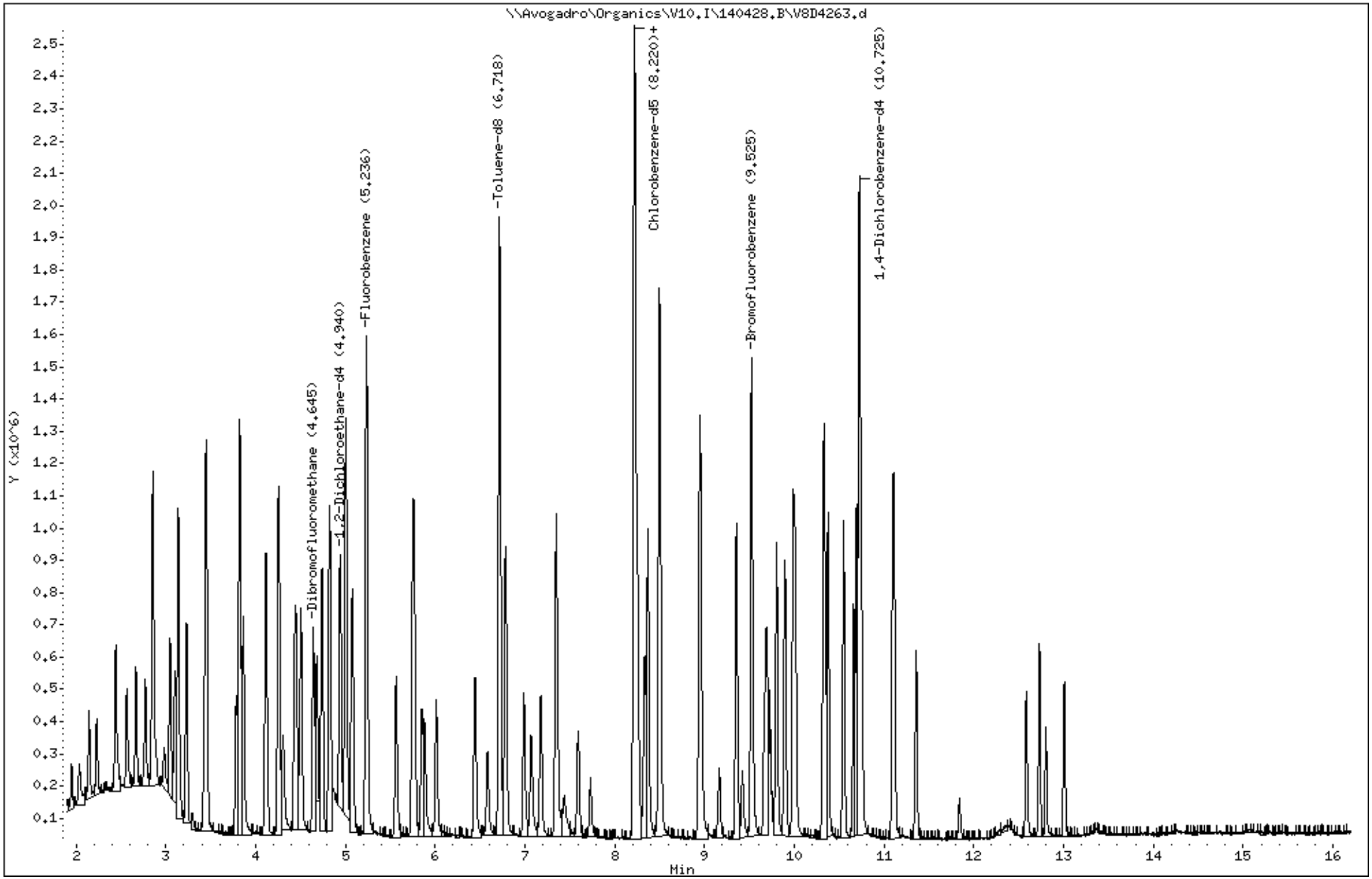
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Report Date: 01-May-2014 13:45

		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)	109908	20.0000	21
	77	Isopropylbenzene	105	9.358	9.355	(1.138)	634274	20.0000	21
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.426	(1.145)	34689	20.0000	19
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	505075	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.670	(0.901)	158685	20.0000	20
	81	Bromobenzene	156	9.695	9.692	(0.904)	155283	20.0000	20
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	201534	20.0000	22
	83	n-Propylbenzene	120	9.805	9.802	(0.914)	148464	20.0000	21
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	138858	20.0000	21
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	524726	20.0000	21
	86	4-Chlorotoluene	126	10.007	10.011	(0.933)	136369	20.0000	20
M	94	Xylene (Total)	106				701351	60.0000	63
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	517707	20.0000	20
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	530512	20.0000	21
	89	sec-Butylbenzene	105	10.551	10.548	(0.984)	615590	20.0000	21
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	261664	20.0000	21
	91	4-Isopropyltoluene	119	10.695	10.696	(0.997)	510085	20.0000	21
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.725	(1.000)	439142	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	268330	20.0000	20
	95	n-Butylbenzene	91	11.097	11.098	(1.035)	452077	20.0000	21
	96	1,2-Dichlorobenzene	146	11.113	11.114	(1.036)	255488	20.0000	21
	97	Hexachloroethane	117	11.358	11.358	(1.059)	99948	20.0000	21
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	29905	20.0000	20
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	117683	20.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	128322	20.0000	20
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	102813	20.0000	21
	101	Naphthalene	128	12.801	12.801	(1.194)	221183	20.0000	20
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	126413	20.0000	20

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

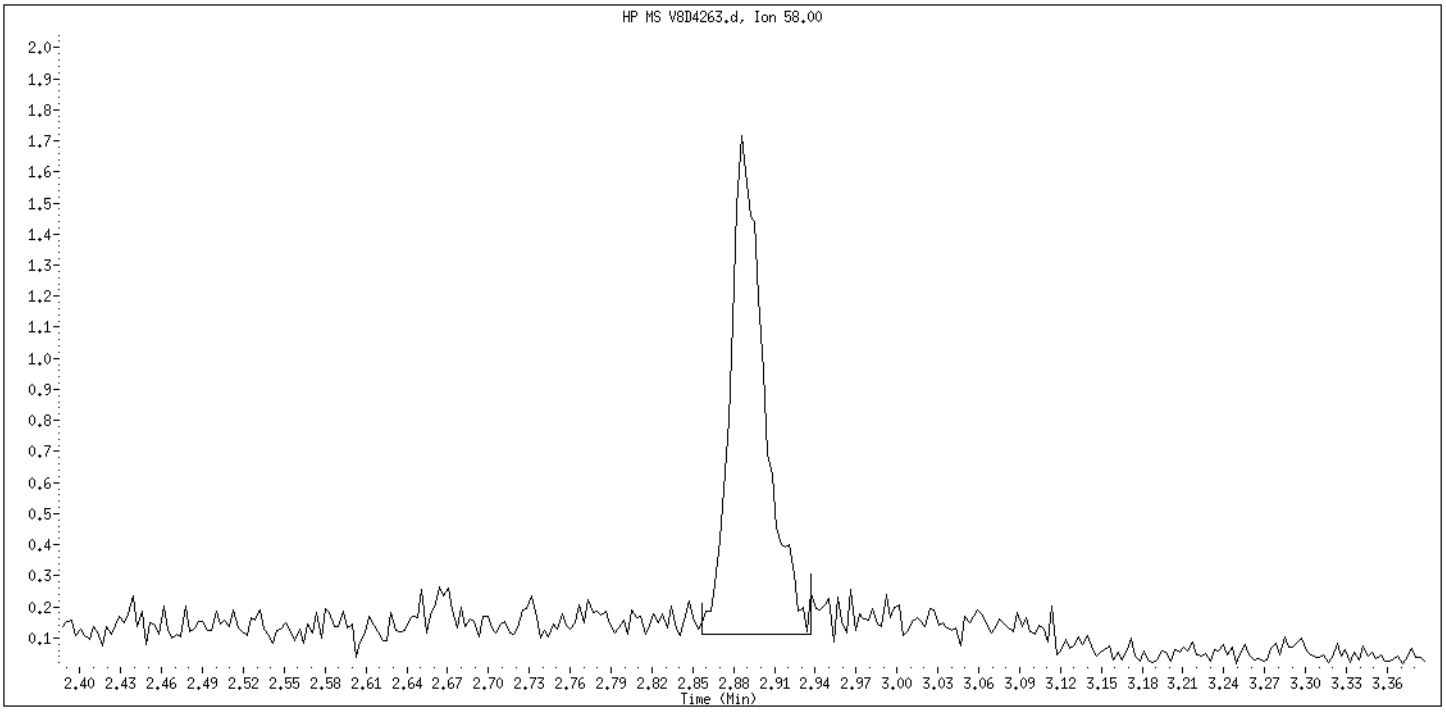
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Date : 28-APR-2014 09:57
Client ID: VSTD02010Z
Instrument: V10.i
Sample Info: 5ML,VSTD02010Z,VSTD02010Z
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



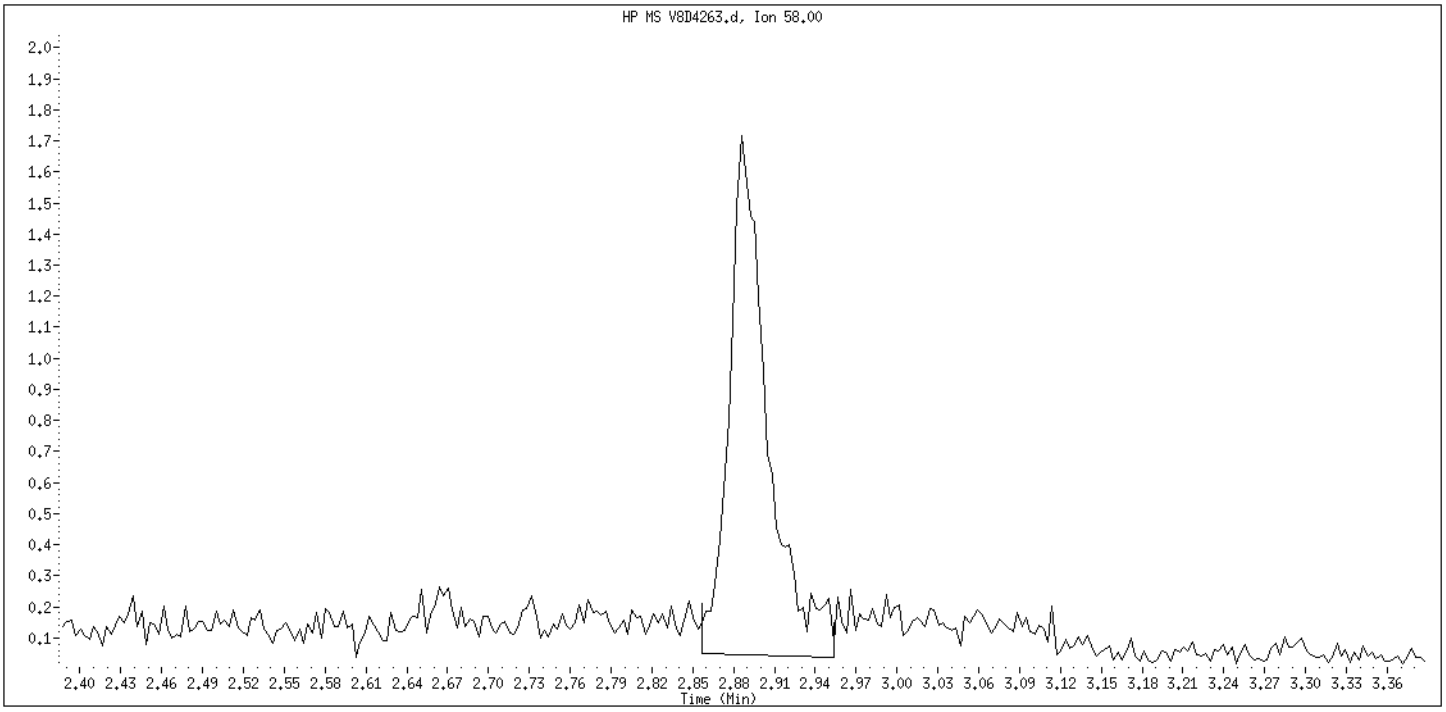
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4263.d

Lab ID: VSTD02010Z Client ID: VSTD02010Z
Inj Date: 28-APR-2014 09:57 Operator: ALM SRC: ALM

Manual Integration Acetone Ret Time: 2.886 min, Range: 2.857 to 2.937 min Response: 28375



Original Integration Acetone Ret Time: 2.886 min, Range: 2.857 to 2.953 min Response: 33130



Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4264.d
Report Date: 01-May-2014 13:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140428.B\V8D4264.d
Lab Smp Id: VSTD00510Z Client Smp ID: VSTD00510Z
Inj Date : 28-APR-2014 10:24
Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,VSTD00510Z,VSTD00510Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140428.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 10 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/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	1.587	(0.303)	37404	5.00000	4.0
2	Freon114	85	1.705	1.706	(0.326)	23211	5.00000	4.2
3	Chloromethane	50	1.754	1.754	(0.335)	85951	5.00000	4.8
4	Vinyl Chloride	62	1.853	1.857	(0.354)	51864	5.00000	4.3
5	Bromomethane	94	2.143	2.142	(0.409)	29211	5.00000	3.6
6	Chloroethane	64	2.229	2.230	(0.426)	27861	5.00000	4.7
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	49712	5.00000	3.9
126	Ethanol	46	2.567	2.564	(0.490)	26968	500.000	530(A)
8	Ether	59	2.670	2.667	(0.510)	46352	5.00000	5.1
9	Acrolein	56	2.773	2.770	(0.530)	63854	25.0000	27(Q)
10	1,1-Dichloroethene	96	2.860	2.857	(0.546)	31013	5.00000	4.6
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	26615	5.00000	3.9
12	Acetone	58	2.892	2.886	(0.552)	6313	5.00000	4.8(M)M3 AM 05/01
13	Iodomethane	142	2.982	2.985	(0.570)	23923	5.00000	3.9
14	Carbon Disulfide	76	3.046	3.046	(0.582)	102837	5.00000	4.7
15	Acetonitrile	41	3.139	3.136	(0.600)	143834	50.0000	57
16	Allyl Chloride	39	3.139	3.136	(0.600)	89696	5.00000	5.5
17	Methyl Acetate	43	3.146	3.143	(0.601)	73125	5.00000	4.7
18	Methylene Chloride	84	3.233	3.230	(0.617)	36284	5.00000	5.1(Q)
19	tert-Butanol	59	3.290	3.294	(0.628)	12057	10.0000	11
20	Acrylonitrile	53	3.429	3.419	(0.655)	26356	5.00000	5.2
21	trans-1,2-Dichloroethene	96	3.454	3.452	(0.660)	31996	5.00000	4.8

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4264.d
Report Date: 01-May-2014 13:45

	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	3.442	3.445	(0.657)	119890	5.00000	5.0
	23 1,1-Dichloroethane	63	3.782	3.783	(0.722)	88425	5.00000	4.9
	24 Vinyl acetate	43	3.824	3.818	(0.730)	181670	5.00000	4.8
	25 Diisopropyl Ether	45	3.824	3.825	(0.730)	234805	5.00000	5.0
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	83691	5.00000	4.3
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	169909	5.00000	4.8
	29 2,2-Dichloropropane	77	4.261	4.259	(0.814)	52356	5.00000	4.3
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	37236	5.00000	5.2(Q)
	30 2-Butanone	72	4.268	4.252	(0.815)	4058	5.00000	5.0(TQ)
	32 Propionitrile	54	4.310	4.304	(0.823)	82835	50.0000	52
	33 Methacrylonitrile	41	4.435	4.432	(0.847)	68362	10.0000	9.0
	34 Bromochloromethane	128	4.458	4.455	(0.851)	18419	5.00000	5.3(Q)
	31 Tetrahydrofuran	72	4.496	4.497	(0.859)	8347	10.0000	11
	35 Chloroform	83	4.506	4.506	(0.861)	73618	5.00000	4.9
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	327395	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	66957	5.00000	4.6
	38 Cyclohexane	56	4.737	4.738	(0.905)	74038	5.00000	4.7
	39 1,1-Dichloropropene	110	4.818	4.821	(0.920)	14305	5.00000	4.6
	40 Carbon Tetrachloride	117	4.831	4.828	(0.923)	54656	5.00000	4.5
	41 Isobutyl Alcohol	43	4.879	4.744	(0.932)	51586	100.000	120(T)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	61740	50.0000	49
	43 Benzene	78	5.004	5.001	(0.956)	120085	5.00000	4.8
	44 1,2-Dichloroethane	62	5.011	5.008	(0.957)	80758	5.00000	4.8
	45 tert-Amyl methyl ether	73	5.078	5.079	(0.970)	104897	5.00000	4.9
M	50 1,2-Dichloroethene (Total)	96				69232	10.0000	10
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	1064025	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	31095	5.00000	4.6
	48 Methylcyclohexane	83	5.750	5.751	(1.098)	40818	5.00000	4.0
	49 1,2-Dichloropropane	63	5.769	5.770	(1.102)	44970	5.00000	5.0
	51 Methyl Methacrylate	69	5.856	5.850	(1.119)	24218	5.00000	5.3
	52 Dibromomethane	93	5.879	5.882	(1.123)	25234	5.00000	5.3
	53 1,4-Dioxane	88	5.901	5.882	(1.127)	4833	100.000	77(Q)
	54 Bromodichloromethane	83	6.011	6.014	(1.148)	54738	5.00000	4.7
	55 2-Chloroethyl vinyl ether	63	6.429	6.442	(1.228)	570	5.00000	5.7(TQ)
	56 cis-1,3-Dichloropropene	75	6.441	6.442	(1.230)	54882	5.00000	4.7
	57 4-Methyl-2-pentanone	43	6.586	6.580	(1.258)	56155	5.00000	4.8
$	58 Toluene-d8	98	6.715	6.718	(0.817)	1120624	50.0000	51
	59 Toluene	91	6.785	6.783	(1.296)	127254	5.00000	4.7
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	51634	5.00000	4.7
	61 Ethyl Methacrylate	69	7.075	7.069	(1.351)	31368	5.00000	4.9
	62 1,1,2-Trichloroethane	97	7.181	7.175	(1.372)	30320	5.00000	5.0
	63 Tetrachloroethene	164	7.342	7.342	(0.893)	31242	5.00000	4.8
	64 1,3-Dichloropropane	76	7.358	7.355	(0.895)	51278	5.00000	4.9
	65 2-Hexanone	43	7.454	7.432	(0.907)	44988	5.00000	5.4
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	38674	5.00000	5.1
	67 1,2-Dibromoethane	107	7.731	7.728	(0.940)	31326	5.00000	4.9
	69 1-Chlorohexane	91	8.216	8.212	(0.999)	38056	5.00000	4.3(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	842805	50.0000	
	70 Chlorobenzene	112	8.258	8.255	(1.004)	81373	5.00000	4.9
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	34955	5.00000	5.0
	72 Ethylbenzene	106	8.371	8.371	(1.018)	42169	5.00000	4.7
	73 m,p-Xylene	106	8.502	8.496	(1.034)	104544	10.0000	9.6
	74 o-Xylene	106	8.946	8.943	(1.088)	49351	5.00000	4.8
	75 Styrene	104	8.965	8.956	(1.090)	75766	5.00000	4.5

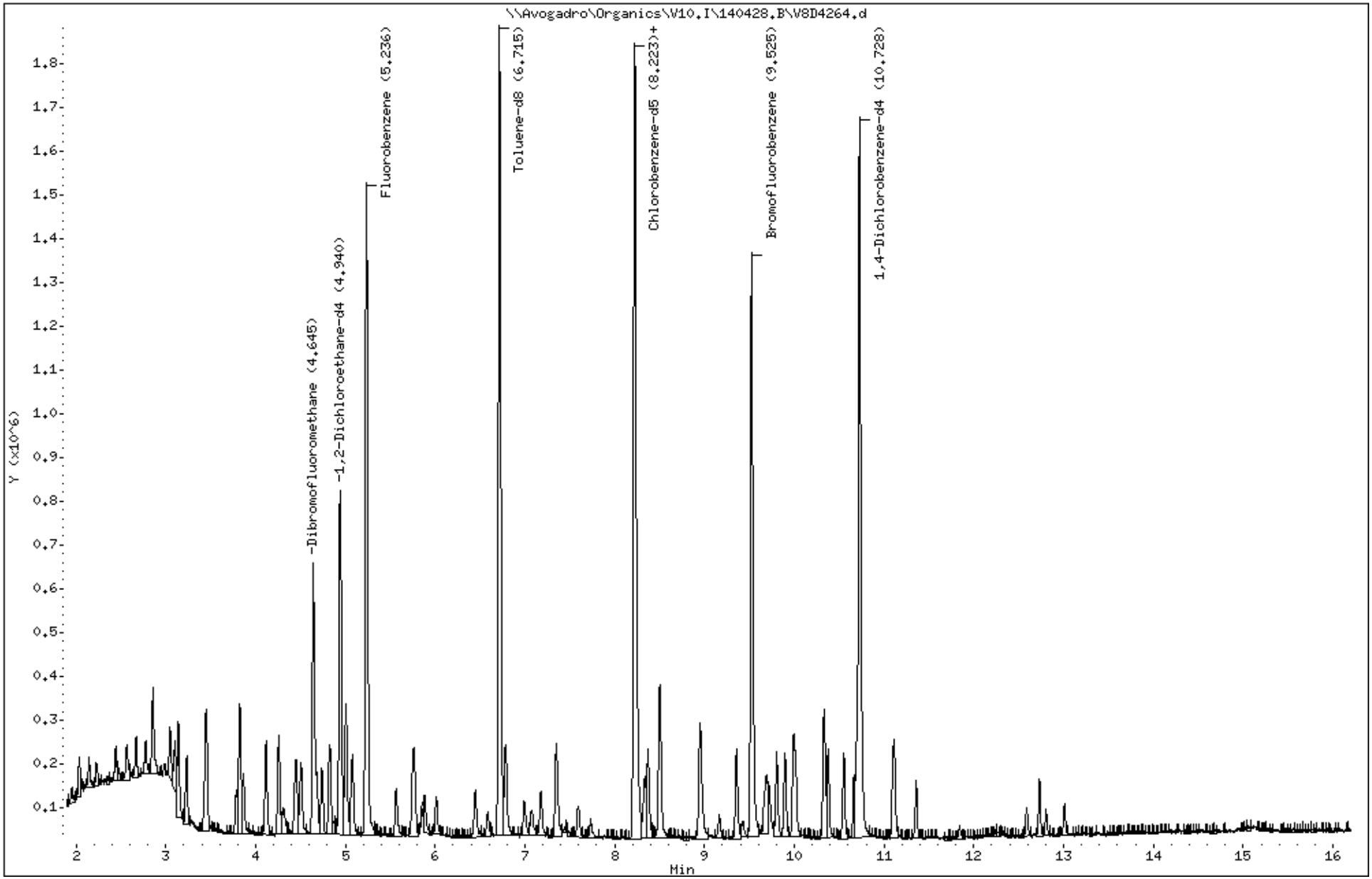
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Report Date: 01-May-2014 13:45

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	24334	5.00000	4.9
	77	Isopropylbenzene	105	9.358	9.355	(1.138)	134094	5.00000	4.6
	78	trans-1,4-Dichloro-2-butene	75	9.432	9.426	(1.147)	8135	5.00000	4.6(Q)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	464419	50.0000	48
	80	1,1,2,2-Tetrachloroethane	83	9.673	9.670	(0.902)	40932	5.00000	5.8
	81	Bromobenzene	156	9.692	9.692	(0.903)	37502	5.00000	5.4
	82	1,2,3-Trichloropropane	75	9.718	9.721	(0.906)	41265	5.00000	5.1
	83	n-Propylbenzene	120	9.801	9.802	(0.914)	30895	5.00000	4.9
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	30954	5.00000	5.3
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	115151	5.00000	5.2
	86	4-Chlorotoluene	126	10.010	10.011	(0.933)	30552	5.00000	5.0
M	94	Xylene (Total)	106				153895	15.0000	14
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	111857	5.00000	5.0
	88	1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	109776	5.00000	4.9
	89	sec-Butylbenzene	105	10.554	10.548	(0.984)	127840	5.00000	4.8
	90	1,3-Dichlorobenzene	146	10.670	10.660	(0.995)	55250	5.00000	5.0
	91	4-Isopropyltoluene	119	10.695	10.696	(0.997)	105386	5.00000	4.9
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.725	(1.000)	388662	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	61759	5.00000	5.3
	95	n-Butylbenzene	91	11.094	11.098	(1.034)	86608	5.00000	4.6
	96	1,2-Dichlorobenzene	146	11.116	11.114	(1.036)	58621	5.00000	5.4
	97	Hexachloroethane	117	11.358	11.358	(1.059)	21942	5.00000	5.2
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	6597	5.00000	5.1
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	17245	5.00000	(a)
	99	1,2,4-Trichlorobenzene	180	12.592	12.586	(1.174)	20467	5.00000	7.2
	100	Hexachlorobutadiene	225	12.734	12.731	(1.187)	20634	5.00000	4.1
	101	Naphthalene	128	12.805	12.801	(1.194)	45135	5.00000	8.6
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.212)	20536	5.00000	6.2

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.

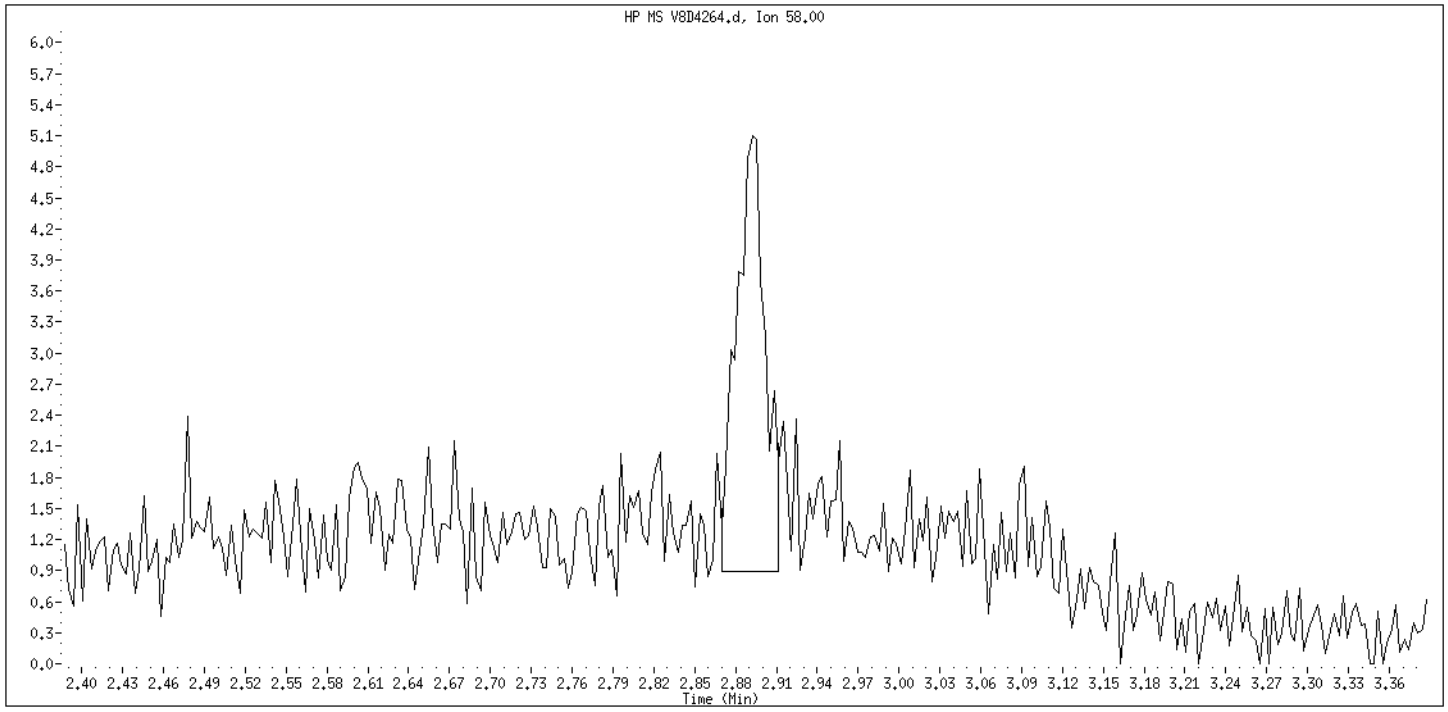
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Date : 28-APR-2014 10:24
Client ID: VSTD00510Z
Instrument: V10.i
Sample Info: 5ML,VSTD00510Z,VSTD00510Z
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



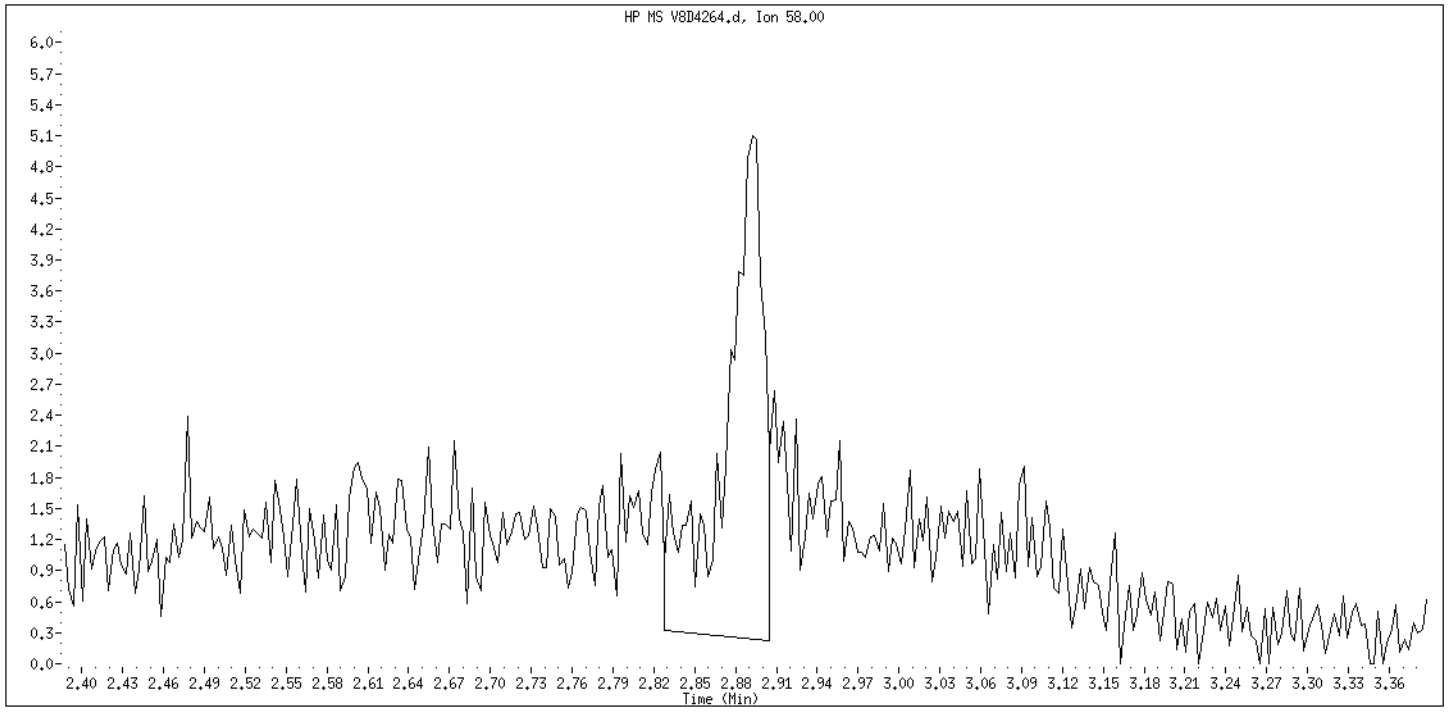
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4264.d

Lab ID: VSTD00510Z Client ID: VSTD00510Z
Inj Date: 28-APR-2014 10:24 Operator: ALM SRC: ALM

Manual Integration Acetone Ret Time: 2.892 min, Range: 2.870 to 2.912 min Response: 6313



Original Integration Acetone Ret Time: 2.892 min, Range: 2.828 to 2.905 min Response: 9735



Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4267.d
Report Date: 01-May-2014 13:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140428.B\V8D4267.d
Lab Smp Id: VSTD20010Z Client Smp ID: VSTD20010Z
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Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,VSTD20010Z,VSTD20010Z
Misc Info :
Comment   :
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Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 13 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/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	1.587	(0.303)	1859531	200.000	200
2	Freon114	85	1.705	1.706	(0.326)	1134107	200.000	210(A)
3	Chloromethane	50	1.753	1.754	(0.335)	3412773	200.000	200
4	Vinyl Chloride	62	1.856	1.857	(0.355)	2343834	200.000	200
5	Bromomethane	94	2.139	2.142	(0.409)	942049	200.000	200
6	Chloroethane	64	2.226	2.230	(0.425)	1173103	200.000	200
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	2470920	200.000	200
126	Ethanol	46	2.570	2.564	(0.491)	974003	20000.0	20000(A)
8	Ether	59	2.667	2.667	(0.509)	1696041	200.000	190
9	Acrolein	56	2.766	2.770	(0.528)	2226554	1000.00	960
10	1,1-Dichloroethene	96	2.856	2.857	(0.546)	1266755	200.000	190
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	1326965	200.000	200
12	Acetone	58	2.888	2.886	(0.552)	227087	200.000	180(Q)
13	Iodomethane	142	2.982	2.985	(0.570)	1580174	200.000	260(A)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	4140738	200.000	200
15	Acetonitrile	41	3.136	3.136	(0.599)	4328087	2000.00	1800(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	2949978	200.000	180
17	Methyl Acetate	43	3.142	3.143	(0.600)	2589455	200.000	200
18	Methylene Chloride	84	3.229	3.230	(0.617)	1314249	200.000	200
19	tert-Butanol	59	3.300	3.294	(0.630)	438464	400.000	400(A)
20	Acrylonitrile	53	3.419	3.419	(0.653)	954571	200.000	190
21	trans-1,2-Dichloroethene	96	3.451	3.452	(0.659)	1248932	200.000	200

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4267.d
Report Date: 01-May-2014 13:45

	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)	4672515	200.000	200
	23 1,1-Dichloroethane	63	3.782	3.783	(0.722)	3455099	200.000	200
	24 Vinyl acetate	43	3.818	3.818	(0.729)	7805512	200.000	210(A)
	25 Diisopropyl Ether	45	3.824	3.825	(0.730)	9341842	200.000	200
	26 2-Chloro-1,3-Butadiene	53	3.859	3.860	(0.737)	4003284	200.000	210(A)
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	7029679	200.000	200
	29 2,2-Dichloropropane	77	4.258	4.259	(0.813)	2628848	200.000	220(A)
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	1356548	200.000	190
	30 2-Butanone	72	4.255	4.252	(0.813)	155849	200.000	200(Q)
	32 Propionitrile	54	4.300	4.304	(0.821)	3204683	2000.00	2000(A)
	33 Methacrylonitrile	41	4.432	4.432	(0.846)	3195837	400.000	430(A)
	34 Bromochloromethane	128	4.454	4.455	(0.851)	632658	200.000	190
	31 Tetrahydrofuran	72	4.499	4.497	(0.859)	299278	400.000	400(A)
	35 Chloroform	83	4.506	4.506	(0.861)	2886277	200.000	200
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	319126	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	2880309	200.000	200
	38 Cyclohexane	56	4.740	4.738	(0.905)	3673997	200.000	200
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	632617	200.000	210(A)
	40 Carbon Tetrachloride	117	4.827	4.828	(0.922)	2430900	200.000	200(A)
	41 Isobutyl Alcohol	43	4.869	4.744	(0.930)	2018899	4000.00	4900(TA)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	59967	50.0000	49
	43 Benzene	78	5.001	5.001	(0.955)	5000429	200.000	200
	44 1,2-Dichloroethane	62	5.007	5.008	(0.956)	3384128	200.000	200(A)
	45 tert-Amyl methyl ether	73	5.078	5.079	(0.970)	4239026	200.000	200
M	50 1,2-Dichloroethene (Total)	96				2605480	400.000	390
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	1042713	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	1306743	200.000	200
	48 Methylcyclohexane	83	5.753	5.751	(1.099)	2012378	200.000	200
	49 1,2-Dichloropropane	63	5.769	5.770	(1.102)	1789320	200.000	200
	51 Methyl Methacrylate	69	5.846	5.850	(1.117)	1077574	200.000	240(A)
	52 Dibromomethane	93	5.879	5.882	(1.123)	939116	200.000	200
	53 1,4-Dioxane	88	5.885	5.882	(1.124)	274228	4000.00	4500(A)
	54 Bromodichloromethane	83	6.010	6.014	(1.148)	2341459	200.000	210(A)
	55 2-Chloroethyl vinyl ether	63	6.445	6.442	(1.231)	16510	200.000	170(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.442	(1.230)	2352381	200.000	200(A)
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	2380974	200.000	210(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	1100305	50.0000	49
	59 Toluene	91	6.782	6.783	(1.295)	5450745	200.000	200(A)
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	2306888	200.000	210(A)
	61 Ethyl Methacrylate	69	7.065	7.069	(1.349)	1325498	200.000	210(A)
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	1168644	200.000	200
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	1263472	200.000	190
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	2155736	200.000	200
	65 2-Hexanone	43	7.428	7.432	(0.903)	1608748	200.000	190
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	1646630	200.000	210(A)
	67 1,2-Dibromoethane	107	7.724	7.728	(0.939)	1320672	200.000	200
	69 1-Chlorohexane	91	8.213	8.212	(0.999)	1781945	200.000	200(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	861826	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	3487914	200.000	200(A)
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	1435989	200.000	200
	72 Ethylbenzene	106	8.367	8.371	(1.018)	1845268	200.000	200
	73 m,p-Xylene	106	8.499	8.496	(1.034)	4574929	400.000	410(A)
	74 o-Xylene	106	8.946	8.943	(1.088)	2176598	200.000	210(A)
	75 Styrene	104	8.956	8.956	(1.089)	3606742	200.000	210(A)

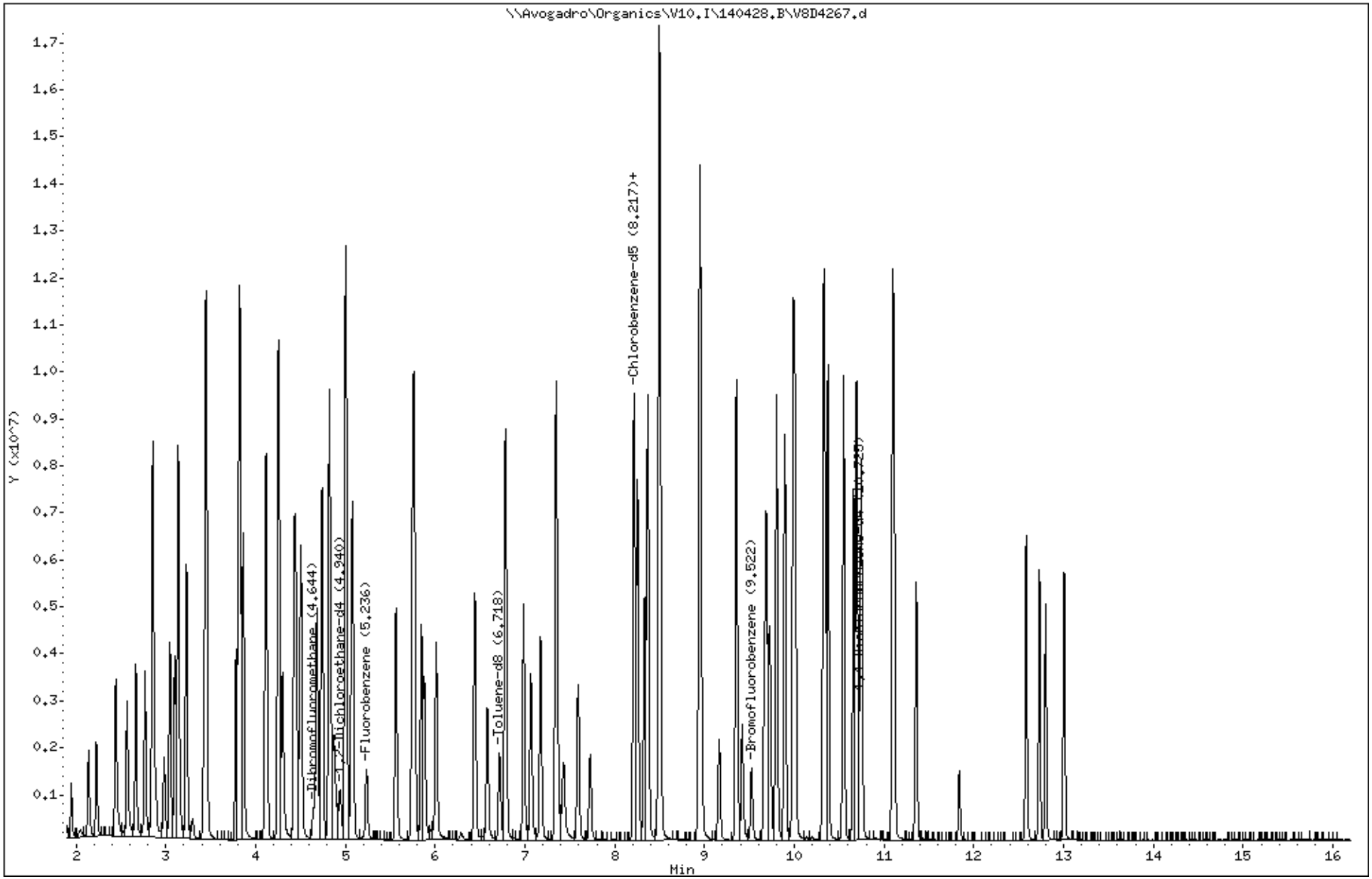
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Report Date: 01-May-2014 13:45

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	1078340	200.000	210(A)
	77	Isopropylbenzene	105	9.354	9.355	(1.138)	6138313	200.000	210(A)
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.426	(1.146)	402584	200.000	220(A)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	493955	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.670	(0.901)	1486130	200.000	180
	81	Bromobenzene	156	9.689	9.692	(0.903)	1548714	200.000	190
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	1901073	200.000	200
	83	n-Propylbenzene	120	9.801	9.802	(0.914)	1437093	200.000	190
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	1308582	200.000	190
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	5195350	200.000	200
	86	4-Chlorotoluene	126	10.010	10.011	(0.933)	1348748	200.000	190
M	94	Xylene (Total)	106				6751527	600.000	620
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	5096562	200.000	190
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	5159217	200.000	190
	89	sec-Butylbenzene	105	10.550	10.548	(0.984)	6053744	200.000	190
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	2582151	200.000	200
	91	4-Isopropyltoluene	119	10.695	10.696	(0.997)	5033242	200.000	200
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.725	(1.000)	461813	50.0000	(Q)
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	2690077	200.000	190
	95	n-Butylbenzene	91	11.094	11.098	(1.034)	4668607	200.000	210(A)
	96	1,2-Dichlorobenzene	146	11.110	11.114	(1.036)	2533024	200.000	200
	97	Hexachloroethane	117	11.357	11.358	(1.059)	979906	200.000	190
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	339720	200.000	220(A)
	141	1,3,5-Trichlorobenzene	182	12.583	12.586	(2.403)	1604068	200.000	(a)
	99	1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	1689288	200.000	200
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	1013763	200.000	200
	101	Naphthalene	128	12.798	12.801	(1.193)	3101715	200.000	200
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	1499723	200.000	200

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\140428.B\V8D4267.d
Date : 28-APR-2014 11:46
Client ID: VSTD20010Z
Instrument: V10.i
Sample Info: 5ML,VSTD20010Z,VSTD20010Z
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4268.d
Report Date: 01-May-2014 13:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140428.B\V8D4268.d
Lab Smp Id: VSTD10010Z Client Smp ID: VSTD10010Z
Inj Date : 28-APR-2014 12:14
Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,VSTD10010Z,VSTD10010Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140428.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 14 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/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	1.587	(0.303)	900277	100.000	98
2	Freon114	85	1.705	1.706	(0.326)	544583	100.000	98
3	Chloromethane	50	1.753	1.754	(0.335)	1640648	100.000	93
4	Vinyl Chloride	62	1.856	1.857	(0.355)	1158875	100.000	98
5	Bromomethane	94	2.143	2.142	(0.409)	504542	100.000	100
6	Chloroethane	64	2.229	2.230	(0.426)	576681	100.000	98
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	1220489	100.000	98
126	Ethanol	46	2.567	2.564	(0.490)	484569	10000.0	9600(A)
8	Ether	59	2.667	2.667	(0.509)	840476	100.000	94
9	Acrolein	56	2.770	2.770	(0.529)	1080170	500.000	460
10	1,1-Dichloroethene	96	2.856	2.857	(0.546)	629812	100.000	95
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	669803	100.000	99
12	Acetone	58	2.885	2.886	(0.551)	111718	100.000	86
13	Iodomethane	142	2.982	2.985	(0.570)	673403	100.000	110
14	Carbon Disulfide	76	3.046	3.046	(0.582)	2051022	100.000	98
15	Acetonitrile	41	3.136	3.136	(0.599)	2278279	1000.00	920(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	1470416	100.000	91
17	Methyl Acetate	43	3.142	3.143	(0.600)	1278475	100.000	98
18	Methylene Chloride	84	3.229	3.230	(0.617)	655440	100.000	99
19	tert-Butanol	59	3.297	3.294	(0.630)	206770	200.000	190
20	Acrylonitrile	53	3.419	3.419	(0.653)	466280	100.000	92
21	trans-1,2-Dichloroethene	96	3.451	3.452	(0.659)	616522	100.000	98

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4268.d
Report Date: 01-May-2014 13:45

	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)	2267464	100.000	96
	23 1,1-Dichloroethane	63	3.782	3.783	(0.722)	1705159	100.000	95
	24 Vinyl acetate	43	3.818	3.818	(0.729)	3693652	100.000	98
	25 Diisopropyl Ether	45	3.824	3.825	(0.730)	4528613	100.000	97
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	1949215	100.000	100
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	3421711	100.000	98
	29 2,2-Dichloropropane	77	4.258	4.259	(0.813)	1259727	100.000	100
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	672798	100.000	95
	30 2-Butanone	72	4.255	4.252	(0.813)	73923	100.000	92(Q)
	32 Propionitrile	54	4.300	4.304	(0.821)	1564400	1000.00	980(A)
	33 Methacrylonitrile	41	4.432	4.432	(0.846)	1527564	200.000	200
	34 Bromochloromethane	128	4.454	4.455	(0.851)	314383	100.000	92
	31 Tetrahydrofuran	72	4.499	4.497	(0.859)	146408	200.000	190
	35 Chloroform	83	4.506	4.506	(0.861)	1435379	100.000	96
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	329268	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	1406203	100.000	96
	38 Cyclohexane	56	4.740	4.738	(0.905)	1808437	100.000	98
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	307750	100.000	100
	40 Carbon Tetrachloride	117	4.827	4.828	(0.922)	1183774	100.000	99
	41 Isobutyl Alcohol	43	4.872	4.744	(0.931)	960129	2000.00	2300(TA)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	58991	50.0000	48
	43 Benzene	78	5.001	5.001	(0.955)	2420702	100.000	98
	44 1,2-Dichloroethane	62	5.007	5.008	(0.956)	1660446	100.000	99
	45 tert-Amyl methyl ether	73	5.075	5.079	(0.969)	2045959	100.000	97
M	50 1,2-Dichloroethene (Total)	96				1289320	200.000	190
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	1055490	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	654943	100.000	98
	48 Methylcyclohexane	83	5.753	5.751	(1.099)	1001517	100.000	99
	49 1,2-Dichloropropane	63	5.769	5.770	(1.102)	882049	100.000	98
	51 Methyl Methacrylate	69	5.750	5.850	(1.098)	205705	100.000	46(Q)
	52 Dibromomethane	93	5.879	5.882	(1.123)	453314	100.000	96
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	131109	2000.00	2100(A)
	54 Bromodichloromethane	83	6.011	6.014	(1.148)	1118711	100.000	97
	55 2-Chloroethyl vinyl ether	63	6.448	6.442	(1.231)	7761	100.000	78
	56 cis-1,3-Dichloropropene	75	6.441	6.442	(1.230)	1130321	100.000	98
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	1142423	100.000	98
$	58 Toluene-d8	98	6.715	6.718	(0.817)	1125890	50.0000	50
	59 Toluene	91	6.782	6.783	(1.295)	2633308	100.000	98
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	1110855	100.000	100
	61 Ethyl Methacrylate	69	7.068	7.069	(1.350)	634173	100.000	99
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	553901	100.000	93
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	615316	100.000	94
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	1031668	100.000	97
	65 2-Hexanone	43	7.432	7.432	(0.904)	742419	100.000	87
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	789503	100.000	100
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	635206	100.000	98
	69 1-Chlorohexane	91	8.213	8.212	(0.999)	849760	100.000	95(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	858084	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	1671875	100.000	98
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	705404	100.000	100
	72 Ethylbenzene	106	8.371	8.371	(1.018)	904000	100.000	100
	73 m,p-Xylene	106	8.496	8.496	(1.033)	2210689	200.000	200
	74 o-Xylene	106	8.943	8.943	(1.088)	1067038	100.000	100
	75 Styrene	104	8.956	8.956	(1.089)	1741648	100.000	100

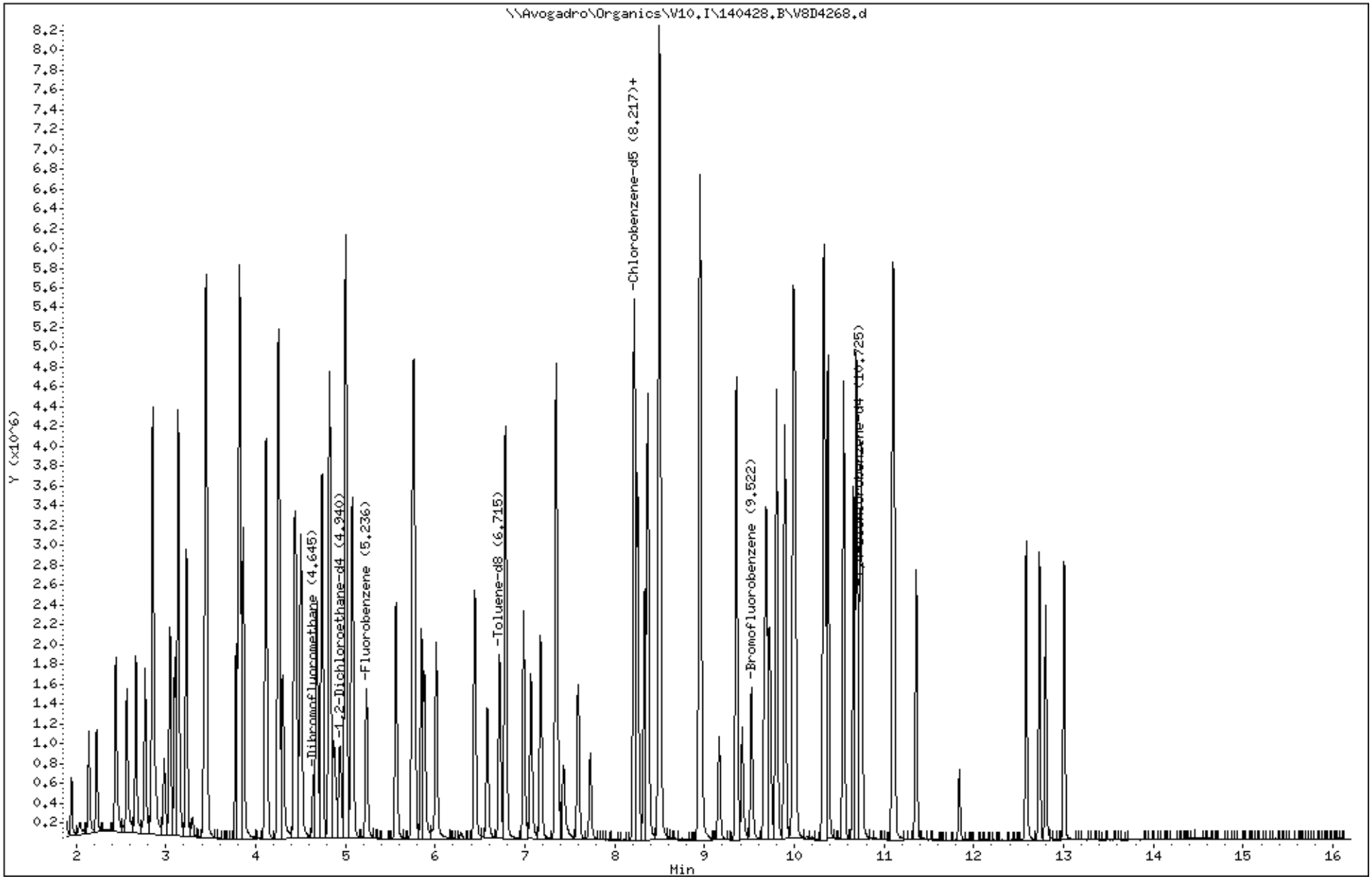
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Report Date: 01-May-2014 13:45

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	76	Bromoform	173	9.162	9.165	(1.114)	517871	100.000	100	
	77	Isopropylbenzene	105	9.354	9.355	(1.138)	2972827	100.000	100	
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.426	(1.146)	184874	100.000	100	
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	492703	50.0000	50	
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.670	(0.901)	728661	100.000	89	
	81	Bromobenzene	156	9.689	9.692	(0.903)	755502	100.000	94	
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	901378	100.000	97	
	83	n-Propylbenzene	120	9.801	9.802	(0.914)	706912	100.000	97	
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	630364	100.000	93	
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	2506822	100.000	98	
	86	4-Chlorotoluene	126	10.010	10.011	(0.933)	655063	100.000	94	
M	94	Xylene (Total)	106				3277727	300.000	300	
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	2402718	100.000	92	
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	2512244	100.000	96	
	89	sec-Butylbenzene	105	10.551	10.548	(0.984)	2923822	100.000	96	
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	1252512	100.000	97	
	91	4-Isopropyltoluene	119	10.692	10.696	(0.997)	2448881	100.000	98	
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.725	(1.000)	449562	50.0000		
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	1306037	100.000	96	
	95	n-Butylbenzene	91	11.097	11.098	(1.035)	2259358	100.000	100	
	96	1,2-Dichlorobenzene	146	11.113	11.114	(1.036)	1215503	100.000	96	
	97	Hexachloroethane	117	11.358	11.358	(1.059)	472222	100.000	96	
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	159220	100.000	110	
	141	1,3,5-Trichlorobenzene	182	12.583	12.586	(2.403)	757141	100.000	(a)	
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	787912	100.000	99	
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	508310	100.000	100	
	101	Naphthalene	128	12.801	12.801	(1.194)	1503272	100.000	100	
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	731130	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.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4268.d
Date : 28-APR-2014 12:14
Client ID: VSTD10010Z
Instrument: V10.i
Sample Info: 5ML,VSTD10010Z,VSTD10010Z
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4271.d
Report Date: 01-May-2014 13:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140428.B\V8D4271.d
Lab Smp Id: VSTD00110Z Client Smp ID: VSTD00110Z
Inj Date : 28-APR-2014 13:36
Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,VSTD00110Z,VSTD00110Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140428.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 17 Calibration Sample, Level: 6
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)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.587	(0.303)	10184	1.00000	1.1
2	Freon114	85	1.705	1.706	(0.326)	6339	1.00000	1.2
3	Chloromethane	50	1.753	1.754	(0.335)	18447	1.00000	1.1
4	Vinyl Chloride	62	1.856	1.857	(0.355)	13109	1.00000	1.1(Q)
5	Bromomethane	94	2.149	2.142	(0.411)	7600	1.00000	(a)
6	Chloroethane	64	2.229	2.230	(0.426)	7598	1.00000	1.3
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	14265	1.00000	1.2
126	Ethanol	46	2.567	2.564	(0.490)	5846	500.000	120
8	Ether	59	2.670	2.667	(0.510)	10109	1.00000	1.2(Q)
9	Acrolein	56	2.776	2.770	(0.530)	13160	5.00000	5.8
10	1,1-Dichloroethene	96	2.860	2.857	(0.546)	7500	1.00000	1.2(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	7615	1.00000	1.2
12	Acetone	58	2.898	2.886	(0.554)	3884	1.00000	3.0(Q)
13	Iodomethane	142	2.982	2.985	(0.570)	5827	1.00000	0.97
14	Carbon Disulfide	76	3.043	3.046	(0.581)	30530	1.00000	1.3
15	Acetonitrile	41	3.136	3.136	(0.599)	33634	1.00000	14
16	Allyl Chloride	39	3.139	3.136	(0.600)	23601	1.00000	1.5
17	Methyl Acetate	43	3.152	3.143	(0.602)	17930	1.00000	0.56
18	Methylene Chloride	84	3.229	3.230	(0.617)	8995	1.00000	1.1(Q)
19	tert-Butanol	59	3.297	3.294	(0.630)	3233	1.00000	3.0
20	Acrylonitrile	53	3.432	3.419	(0.656)	5380	1.00000	1.1(Q)
21	trans-1,2-Dichloroethene	96	3.454	3.452	(0.660)	8097	1.00000	1.1(Q)

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4271.d
Report Date: 01-May-2014 13:45

	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)	25004	1.00000	1.1
	23 1,1-Dichloroethane	63	3.779	3.783	(0.722)	18973	1.00000	1.1
	24 Vinyl acetate	43	3.827	3.818	(0.731)	36350	1.00000	0.99
	25 Diisopropyl Ether	45	3.824	3.825	(0.730)	45325	1.00000	1.00
	26 2-Chloro-1,3-Butadiene	53	3.866	3.860	(0.738)	19032	1.00000	1.0
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	34981	1.00000	1.0
	29 2,2-Dichloropropane	77	4.252	4.259	(0.812)	9505	1.00000	0.80
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	7619	1.00000	1.1
	30 2-Butanone	72	4.271	4.252	(0.816)	689	1.00000	0.87(Q)
	32 Propionitrile	54	4.313	4.304	(0.824)	3676	1.00000	2.4(Q)
	33 Methacrylonitrile	41	4.438	4.432	(0.848)	13678	1.00000	1.9
	34 Bromochloromethane	128	4.461	4.455	(0.852)	3637	1.00000	1.1(Q)
	31 Tetrahydrofuran	72	4.493	4.497	(0.858)	1497	1.00000	2.0
	35 Chloroform	83	4.509	4.506	(0.861)	15716	1.00000	1.1
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	318654	1.00000	50
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	16079	1.00000	1.1
	38 Cyclohexane	56	4.740	4.738	(0.905)	22218	1.00000	2.0
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	2844	1.00000	0.96(Q)
	40 Carbon Tetrachloride	117	4.827	4.828	(0.922)	12236	1.00000	1.0
	41 Isobutyl Alcohol	43	5.075	4.744	(0.969)	16339	1.00000	40(T)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	62836	1.00000	52
	43 Benzene	78	5.001	5.001	(0.955)	25080	1.00000	1.0
	44 1,2-Dichloroethane	62	5.017	5.008	(0.958)	15751	1.00000	0.96
	45 tert-Amyl methyl ether	73	5.075	5.079	(0.969)	21256	1.00000	1.0
M	50 1,2-Dichloroethene (Total)	96				15716	2.00000	2.2
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	1030966	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	7420	1.00000	1.1
	48 Methylcyclohexane	83	5.753	5.751	(1.099)	11566	1.00000	1.2
	49 1,2-Dichloropropane	63	5.773	5.770	(1.103)	10187	1.00000	1.2
	51 Methyl Methacrylate	69	5.869	5.850	(1.121)	6211	1.00000	1.4(Q)
	52 Dibromomethane	93	5.885	5.882	(1.124)	4358	1.00000	0.95(Q)
	53 1,4-Dioxane	88	5.908	5.882	(1.128)	1219	1.00000	20
	54 Bromodichloromethane	83	6.020	6.014	(1.150)	11580	1.00000	1.0
	55 2-Chloroethyl vinyl ether	63	6.448	6.442	(1.232)	168	1.00000	1.7(TQ)
	56 cis-1,3-Dichloropropene	75	6.448	6.442	(1.232)	11323	1.00000	1.0
	57 4-Methyl-2-pentanone	43	6.592	6.580	(1.259)	13439	1.00000	1.2
$	58 Toluene-d8	98	6.718	6.718	(0.817)	1100140	1.00000	50
	59 Toluene	91	6.789	6.783	(1.297)	27721	1.00000	1.0
	60 trans-1,3-Dichloropropene	75	7.001	6.985	(1.337)	10106	1.00000	0.95
	61 Ethyl Methacrylate	69	7.101	7.069	(1.356)	6345	1.00000	1.0
	62 1,1,2-Trichloroethane	97	7.184	7.175	(1.372)	6101	1.00000	1.0
	63 Tetrachloroethene	164	7.348	7.342	(0.894)	7771	1.00000	1.2
	64 1,3-Dichloropropane	76	7.361	7.355	(0.895)	10836	1.00000	1.0
	65 2-Hexanone	43	7.425	7.432	(0.903)	2858	1.00000	0.34(TaQ)
	66 Dibromochloromethane	129	7.599	7.596	(0.924)	6284	1.00000	0.83(T)
	67 1,2-Dibromoethane	107	7.737	7.728	(0.941)	6483	1.00000	1.0(T)
	69 1-Chlorohexane	91	8.216	8.212	(0.999)	10932	1.00000	1.2(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	838528	50.0000	
	70 Chlorobenzene	112	8.258	8.255	(1.004)	16656	1.00000	1.0(Q)
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	6749	1.00000	0.98(Q)
	72 Ethylbenzene	106	8.377	8.371	(1.019)	9428	1.00000	1.1(Q)
	73 m,p-Xylene	106	8.509	8.496	(1.035)	21838	2.00000	2.0
	74 o-Xylene	106	8.949	8.943	(1.088)	9934	1.00000	0.97
	75 Styrene	104	8.969	8.956	(1.091)	14848	1.00000	0.89

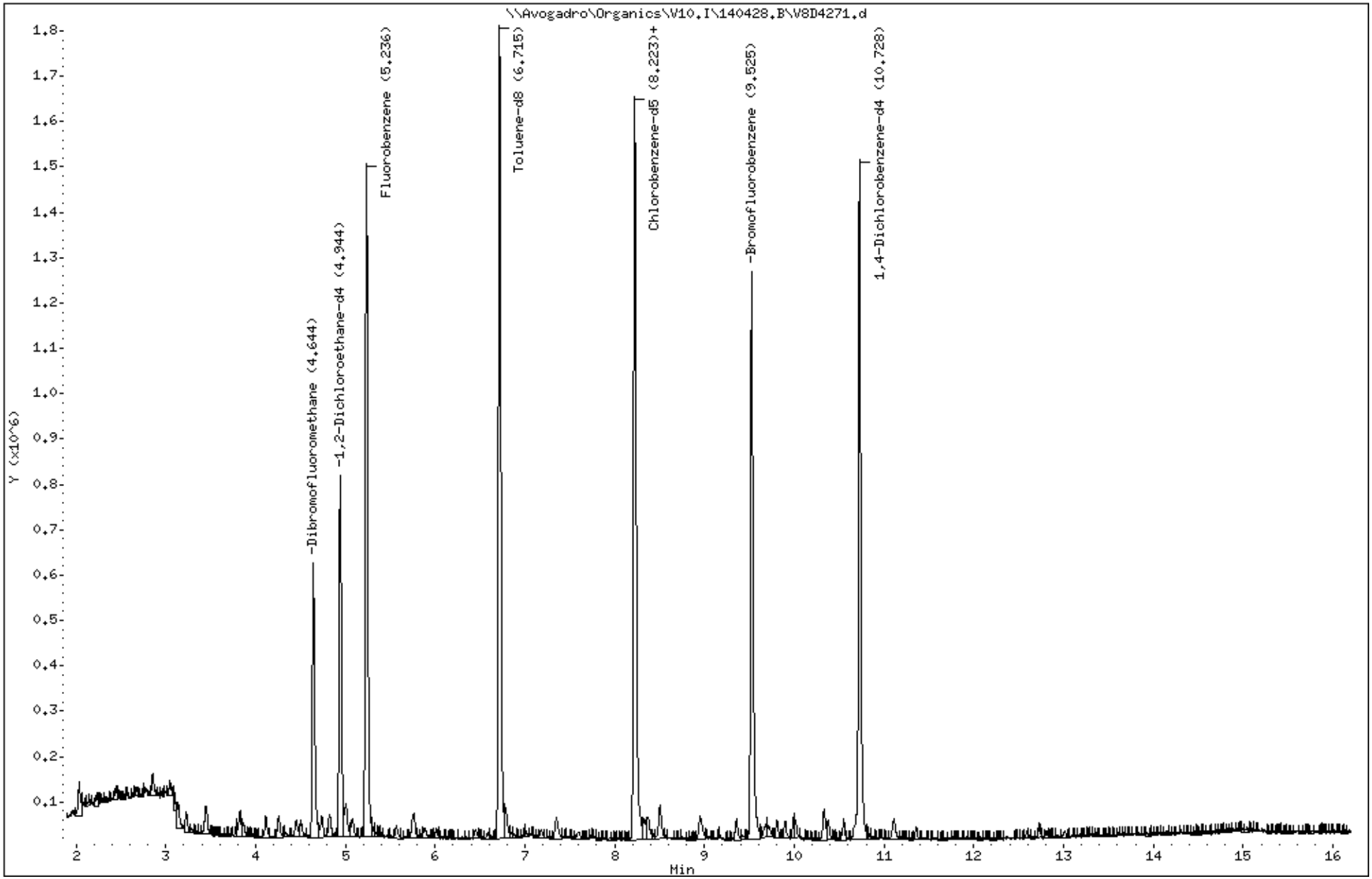
Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4271.d
Report Date: 01-May-2014 13:45

			QUANT SIG					AMOUNTS	
								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)	4096	1.00000	0.84
	77	Isopropylbenzene	105	9.361	9.355	(1.138)	28857	1.00000	1.0
	78	trans-1,4-Dichloro-2-butene	75	9.432	9.426	(1.147)	1354	1.00000	0.78(Q)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	440583	1.00000	46
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.670	(0.901)	7451	1.00000	1.1
	81	Bromobenzene	156	9.692	9.692	(0.903)	7078	1.00000	1.1(Q)
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	6997	1.00000	0.94(Q)
	83	n-Propylbenzene	120	9.798	9.802	(0.913)	6498	1.00000	1.1
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	5912	1.00000	1.1(Q)
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	23285	1.00000	1.1
	86	4-Chlorotoluene	126	10.020	10.011	(0.934)	6710	1.00000	1.2
M	94	Xylene (Total)	106				31772	3.00000	3.0
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	24859	1.00000	1.2
	88	1,2,4-Trimethylbenzene	105	10.383	10.377	(0.968)	23730	1.00000	1.1
	89	sec-Butylbenzene	105	10.554	10.548	(0.984)	27852	1.00000	1.1
	90	1,3-Dichlorobenzene	146	10.676	10.660	(0.995)	11053	1.00000	1.1
	91	4-Isopropyltoluene	119	10.692	10.696	(0.997)	21732	1.00000	1.1
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.725	(1.000)	359149	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	11811	1.00000	1.1(Q)
	95	n-Butylbenzene	91	11.100	11.098	(1.035)	17188	1.00000	0.98
	96	1,2-Dichlorobenzene	146	11.126	11.114	(1.037)	10196	1.00000	1.0
	97	Hexachloroethane	117	11.354	11.358	(1.058)	4376	1.00000	1.1
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	1004	1.00000	0.84(Q)
	141	1,3,5-Trichlorobenzene	182	12.592	12.586	(2.405)	2506	1.00000	(a)
	99	1,2,4-Trichlorobenzene	180	12.589	12.586	(1.174)	3088	1.00000	4.8
	100	Hexachlorobutadiene	225	12.724	12.731	(1.186)	5686	1.00000	0.74
	101	Naphthalene	128	12.811	12.801	(1.194)	9380	1.00000	6.0
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.212)	3355	1.00000	3.6

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\140428.B\V8D4271.d
Date : 28-APR-2014 13:36
Client ID: VSTD00110Z
Instrument: V10.i
Sample Info: 5ML,VSTD00110Z,VSTD00110Z
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4272.d
Report Date: 01-May-2014 13:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140428.B\V8D4272.d
Lab Smp Id: VSTD05010Z Client Smp ID: VSTD05010Z
Inj Date : 28-APR-2014 14:13
Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,VSTD05010Z,VSTD05010Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140428.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 18 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/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	1.587	(0.303)	445573	50.0000	50
2	Freon114	85	1.705	1.706	(0.326)	270112	50.0000	50
3	Chloromethane	50	1.753	1.754	(0.335)	829115	50.0000	49
4	Vinyl Chloride	62	1.856	1.857	(0.355)	559315	50.0000	48
5	Bromomethane	94	2.142	2.142	(0.409)	242543	50.0000	50
6	Chloroethane	64	2.229	2.230	(0.426)	286231	50.0000	50
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	600009	50.0000	49
126	Ethanol	46	2.564	2.564	(0.490)	237139	5000.00	4800(A)
8	Ether	59	2.667	2.667	(0.509)	410823	50.0000	47
9	Acrolein	56	2.769	2.770	(0.529)	520807	250.000	230
10	1,1-Dichloroethene	96	2.856	2.857	(0.546)	305348	50.0000	47
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	321270	50.0000	49
12	Acetone	58	2.885	2.886	(0.551)	79425	50.0000	63
13	Iodomethane	142	2.985	2.985	(0.570)	308700	50.0000	52
14	Carbon Disulfide	76	3.046	3.046	(0.582)	1021001	50.0000	50
15	Acetonitrile	41	3.136	3.136	(0.599)	1174803	500.000	490(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	814504	50.0000	52
17	Methyl Acetate	43	3.142	3.143	(0.600)	635663	50.0000	50
18	Methylene Chloride	84	3.229	3.230	(0.617)	321058	50.0000	50
19	tert-Butanol	59	3.294	3.294	(0.629)	101696	100.000	95
20	Acrylonitrile	53	3.419	3.419	(0.653)	240726	50.0000	49
21	trans-1,2-Dichloroethene	96	3.451	3.452	(0.659)	309139	50.0000	50

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4272.d
Report Date: 01-May-2014 13:45

	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)	1120050	50.0000	49
	23 1,1-Dichloroethane	63	3.782	3.783	(0.722)	866838	50.0000	50
	24 Vinyl acetate	43	3.818	3.818	(0.729)	1868239	50.0000	51
	25 Diisopropyl Ether	45	3.824	3.825	(0.730)	2268668	50.0000	50
	26 2-Chloro-1,3-Butadiene	53	3.859	3.860	(0.737)	960068	50.0000	52
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1701902	50.0000	50
	29 2,2-Dichloropropane	77	4.258	4.259	(0.813)	658614	50.0000	56
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	333406	50.0000	48
	30 2-Butanone	72	4.252	4.252	(0.812)	42815	50.0000	55
	32 Propionitrile	54	4.303	4.304	(0.822)	764122	500.000	490(A)
	33 Methacrylonitrile	41	4.432	4.432	(0.846)	740399	100.000	100
	34 Bromochloromethane	128	4.454	4.455	(0.851)	160474	50.0000	48
	31 Tetrahydrofuran	72	4.496	4.497	(0.859)	69140	100.000	94
	35 Chloroform	83	4.506	4.506	(0.861)	716942	50.0000	49
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	327450	50.0000	52
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	689762	50.0000	49
	38 Cyclohexane	56	4.737	4.738	(0.905)	861786	50.0000	48
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	150751	50.0000	51
	40 Carbon Tetrachloride	117	4.827	4.828	(0.922)	581987	50.0000	50
	41 Isobutyl Alcohol	43	4.744	4.744	(0.906)	108239	1000.00	270(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	62177	50.0000	52
	43 Benzene	78	5.001	5.001	(0.955)	1189875	50.0000	49
	44 1,2-Dichloroethane	62	5.007	5.008	(0.956)	836890	50.0000	51
	45 tert-Amyl methyl ether	73	5.078	5.079	(0.970)	1004801	50.0000	49
M	50 1,2-Dichloroethene (Total)	96				642545	100.000	99
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	1025341	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	319764	50.0000	49
	48 Methylcyclohexane	83	5.750	5.751	(1.098)	476050	50.0000	48
	49 1,2-Dichloropropane	63	5.769	5.770	(1.102)	427025	50.0000	49
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	240341	50.0000	55
	52 Dibromomethane	93	5.882	5.882	(1.123)	228101	50.0000	50
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	63482	1000.00	1000(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	562845	50.0000	50
	55 2-Chloroethyl vinyl ether	63	6.441	6.442	(1.230)	4299	50.0000	44(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.442	(1.230)	561844	50.0000	50
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	577212	50.0000	51
$	58 Toluene-d8	98	6.718	6.718	(0.817)	1102239	50.0000	50
	59 Toluene	91	6.782	6.783	(1.295)	1280637	50.0000	49
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	542786	50.0000	51
	61 Ethyl Methacrylate	69	7.068	7.069	(1.350)	301352	50.0000	48
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	282487	50.0000	49
	63 Tetrachloroethene	164	7.342	7.342	(0.893)	304656	50.0000	47
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	508133	50.0000	48
	65 2-Hexanone	43	7.432	7.432	(0.904)	444958	50.0000	53
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	384688	50.0000	50
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	311929	50.0000	48
	69 1-Chlorohexane	91	8.213	8.212	(0.999)	403019	50.0000	46
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	848565	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	816790	50.0000	49
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	339428	50.0000	48
	72 Ethylbenzene	106	8.370	8.371	(1.018)	417975	50.0000	47
	73 m,p-Xylene	106	8.496	8.496	(1.033)	1042469	100.000	95
	74 o-Xylene	106	8.943	8.943	(1.088)	502329	50.0000	48
	75 Styrene	104	8.956	8.956	(1.089)	812948	50.0000	48

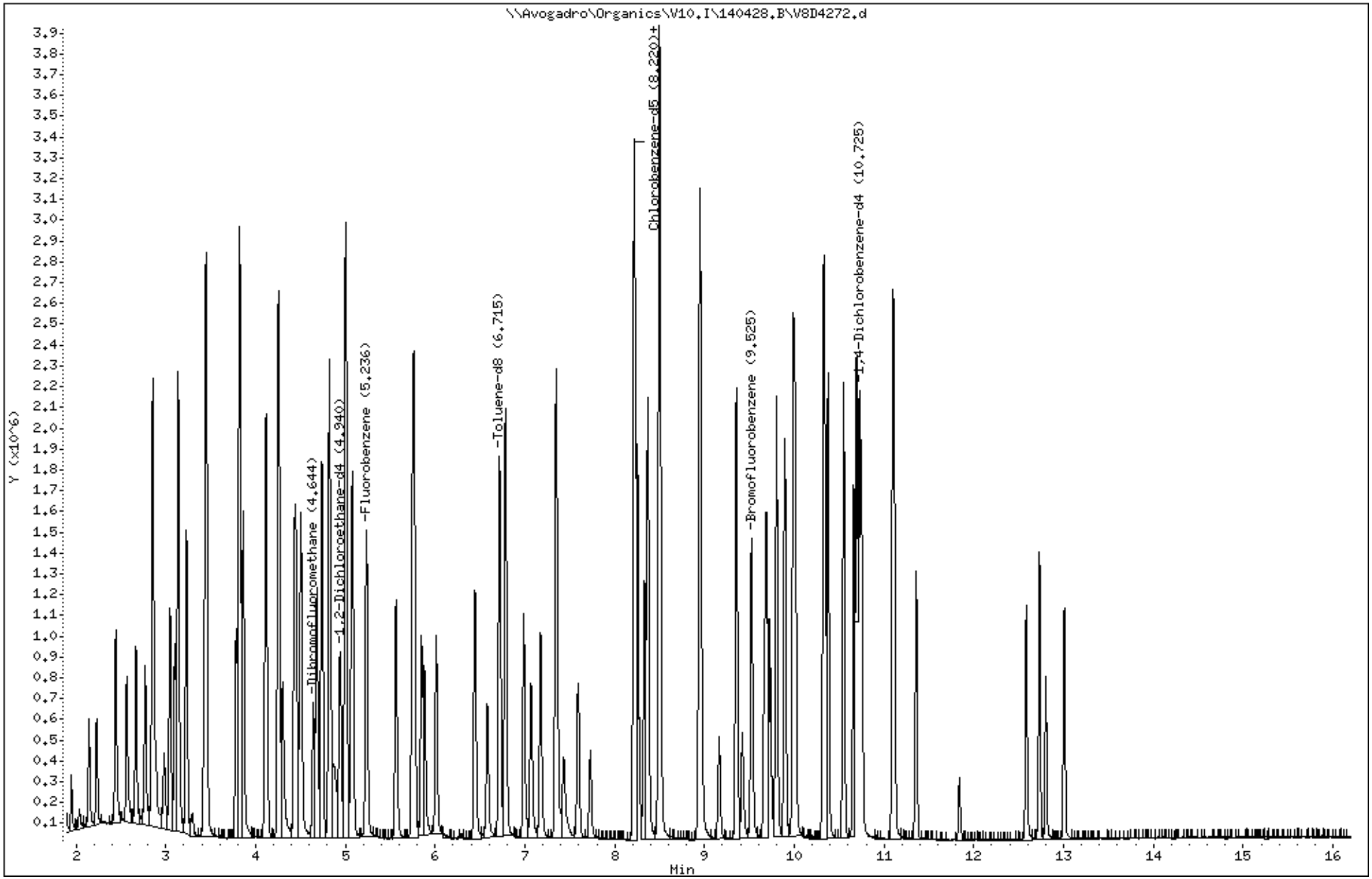
Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4272.d
Report Date: 01-May-2014 13:45

		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)	247881	50.0000	50	
	77	Isopropylbenzene	105	9.354	9.355	(1.138)	1395331	50.0000	48	
	78	trans-1,4-Dichloro-2-butene	75	9.425	9.426	(1.146)	85167	50.0000	48	
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	487473	50.0000	50	
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.670	(0.902)	360902	50.0000	46	
	81	Bromobenzene	156	9.692	9.692	(0.904)	360633	50.0000	46	
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	434717	50.0000	48	
	83	n-Propylbenzene	120	9.801	9.802	(0.914)	319475	50.0000	45	
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	306690	50.0000	47	
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	1165216	50.0000	47	
	86	4-Chlorotoluene	126	10.010	10.011	(0.933)	309005	50.0000	46	
M	94	Xylene (Total)	106				1544798	150.000	140	
	87	tert-Butylbenzene	119	10.325	10.326	(0.963)	1142848	50.0000	45	
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	1164402	50.0000	46	
	89	sec-Butylbenzene	105	10.547	10.548	(0.984)	1364682	50.0000	46	
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	582405	50.0000	47	
	91	4-Isopropyltoluene	119	10.695	10.696	(0.997)	1146577	50.0000	47	
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.725	(1.000)	435029	50.0000		
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	602227	50.0000	46	
	95	n-Butylbenzene	91	11.097	11.098	(1.035)	1021702	50.0000	48	
	96	1,2-Dichlorobenzene	146	11.113	11.114	(1.036)	569410	50.0000	47	
	97	Hexachloroethane	117	11.357	11.358	(1.059)	212772	50.0000	45	
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	67458	50.0000	47	
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	290214	50.0000	(a)	
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	311495	50.0000	43	
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	239374	50.0000	49	
	101	Naphthalene	128	12.801	12.801	(1.194)	494915	50.0000	38	
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	290821	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).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4272.d
Date : 28-APR-2014 14:13
Client ID: VSTD05010Z
Instrument: V10.i
Sample Info: 5ML,VSTD05010Z,VSTD05010Z
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4544.d
Report Date: 07-May-2014 09:54

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4544.d
Lab Smp Id: VSTD05010I Client Smp ID: VSTD05010I
Inj Date : 05-MAY-2014 12:27
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010I,VSTD05010I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 08:41 mscarpaci Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 5 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)	328667	50.0000	47
2	Freon114	85	1.705	1.705	(0.326)	183841	50.0000	47
3	Chloromethane	50	1.754	1.754	(0.335)	565227	50.0000	46
4	Vinyl Chloride	62	1.856	1.853	(0.355)	357972	50.0000	47(Q)
5	Bromomethane	94	2.143	2.143	(0.409)	150006	50.0000	41
6	Chloroethane	64	2.229	2.229	(0.426)	184091	50.0000	46
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	466879	50.0000	46
126	Ethanol	46	2.567	2.567	(0.490)	185050	5000.00	4700(A)
8	Ether	59	2.667	2.667	(0.509)	276440	50.0000	46(Q)
9	Acrolein	56	2.770	2.770	(0.529)	364034	250.000	250
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	200965	50.0000	47(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	235516	50.0000	46
12	Acetone	58	2.889	2.889	(0.552)	53399	50.0000	56(Q)
13	Iodomethane	142	2.982	2.982	(0.570)	229722	50.0000	51
14	Carbon Disulfide	76	3.046	3.043	(0.582)	608023	50.0000	44
15	Acetonitrile	41	3.136	3.136	(0.599)	811087	500.000	490(AQ)
16	Allyl Chloride	39	3.136	3.136	(0.599)	583754	50.0000	49(Q)
17	Methyl Acetate	43	3.146	3.143	(0.601)	484869	50.0000	47
18	Methylene Chloride	84	3.229	3.229	(0.617)	191851	50.0000	45(Q)
19	tert-Butanol	59	3.294	3.297	(0.629)	70077	100.000	98
20	Acrylonitrile	53	3.422	3.422	(0.654)	160698	50.0000	46
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	185947	50.0000	47
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	708498	50.0000	48

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4544.d
Report Date: 07-May-2014 09:54

	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	3.786	(0.722)	527594	50.0000	46
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1252053	50.0000	49
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1511231	50.0000	48
	26 2-Chloro-1,3-Butadiene	53	3.860	3.860	(0.737)	651526	50.0000	47
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1051119	50.0000	49
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	436796	50.0000	54
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	196432	50.0000	48
	30 2-Butanone	72	4.261	4.258	(0.814)	27578	50.0000	53(Q)
	32 Propionitrile	54	4.300	4.303	(0.821)	538861	500.000	500(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	548113	100.000	100
	34 Bromochloromethane	128	4.451	4.454	(0.850)	98508	50.0000	47
	31 Tetrahydrofuran	72	4.499	4.503	(0.859)	42787	100.000	89
	35 Chloroform	83	4.509	4.506	(0.861)	473410	50.0000	46
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	222522	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	489331	50.0000	47
	38 Cyclohexane	56	4.741	4.741	(0.905)	537853	50.0000	46
	39 1,1-Dichloropropene	110	4.818	4.821	(0.920)	91482	50.0000	47
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	424956	50.0000	49
	41 Isobutyl Alcohol	43	4.737	4.882	(0.905)	69417	1000.00	500(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	38111	50.0000	51
	43 Benzene	78	5.001	5.001	(0.955)	686560	50.0000	46
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	621062	50.0000	48
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	604778	50.0000	49
M	50 1,2-Dichloroethene (Total)	96				382379	100.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	592948	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	185817	50.0000	44
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	278300	50.0000	47
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	257576	50.0000	48
	51 Methyl Methacrylate	69	5.850	5.847	(1.117)	150323	50.0000	48(Q)
	52 Dibromomethane	93	5.882	5.882	(1.123)	153481	50.0000	47
	53 1,4-Dioxane	88	5.888	5.885	(1.125)	41695	1000.00	980(AQ)
	54 Bromodichloromethane	83	6.011	6.014	(1.148)	367364	50.0000	48
	55 2-Chloroethyl vinyl ether	63	6.441	6.445	(1.230)	2812	50.0000	36(TQM)M6 AM 05/07
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	328682	50.0000	51
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	409106	50.0000	49(Q)
$	58 Toluene-d8	98	6.718	6.715	(0.817)	677817	50.0000	50
	59 Toluene	91	6.782	6.782	(1.295)	743889	50.0000	46
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	332365	50.0000	62(Q)
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	173226	50.0000	49(Q)
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	171700	50.0000	47
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	178448	50.0000	45
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	318816	50.0000	49
	65 2-Hexanone	43	7.435	7.435	(0.904)	302021	50.0000	54
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	247543	50.0000	51(H)
	67 1,2-Dibromoethane	107	7.724	7.728	(0.939)	199373	50.0000	50
	69 1-Chlorohexane	91	8.213	8.216	(0.999)	231069	50.0000	45(Q)
*	68 Chlorobenzene-d5	117	8.223	8.220	(1.000)	563054	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	490858	50.0000	47(Q)
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	221275	50.0000	49
	72 Ethylbenzene	106	8.367	8.367	(1.018)	246010	50.0000	47(Q)
	73 m,p-Xylene	106	8.499	8.496	(1.034)	615551	100.000	96
	74 o-Xylene	106	8.946	8.943	(1.088)	295020	50.0000	48
	75 Styrene	104	8.959	8.959	(1.090)	481063	50.0000	49
	76 Bromoform	173	9.168	9.165	(1.115)	152976	50.0000	53

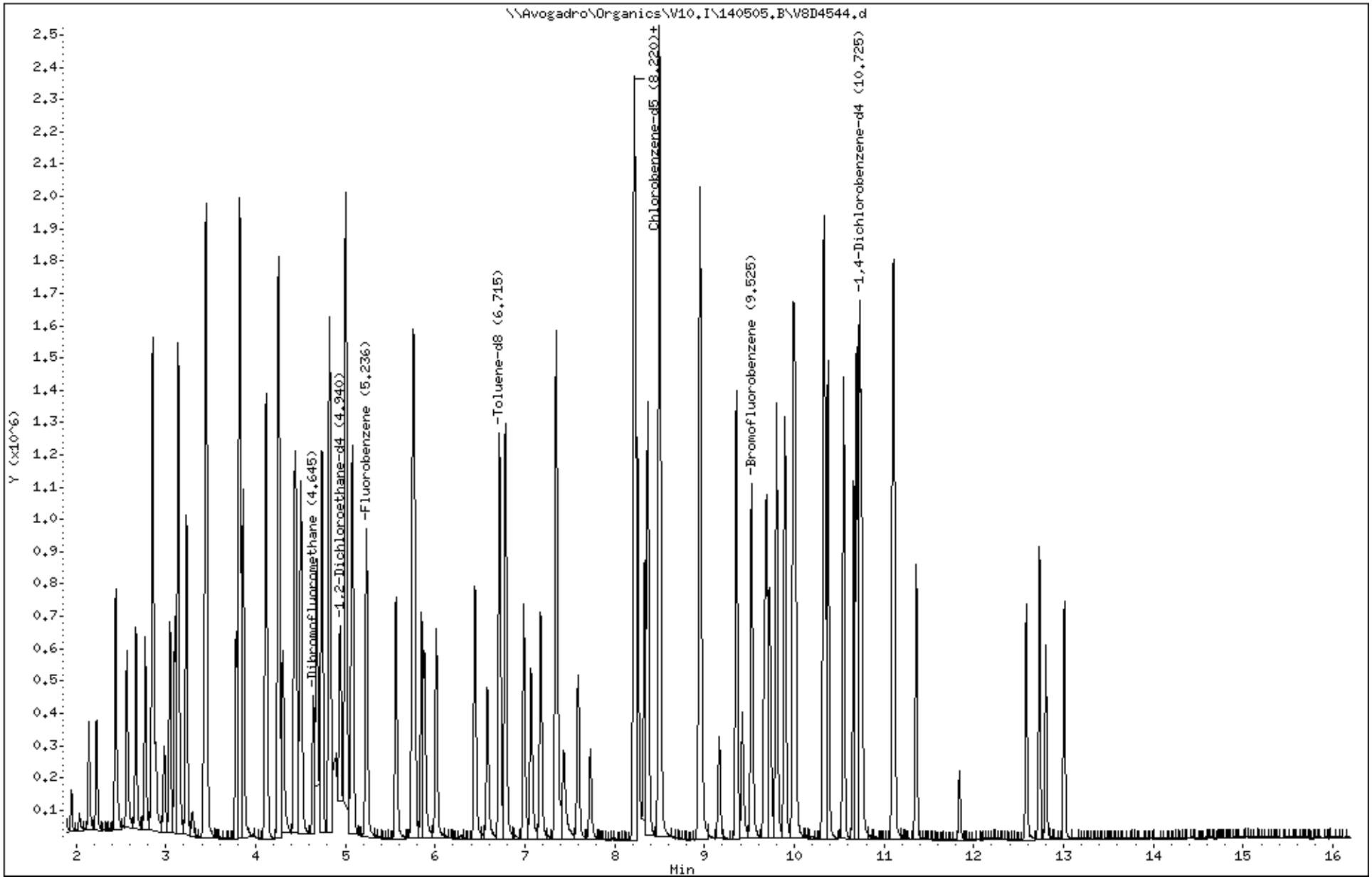
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Report Date: 07-May-2014 09:54

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77	Isopropylbenzene	105	9.355	9.355	(1.138)	842258	50.0000	48
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	50263	50.0000	51(Q)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	349271	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	225196	50.0000	46
	81	Bromobenzene	156	9.692	9.692	(0.904)	224750	50.0000	46
	82	1,2,3-Trichloropropane	75	9.721	9.718	(0.906)	298912	50.0000	51(Q)
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	196227	50.0000	45
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	185692	50.0000	46(Q)
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	740149	50.0000	46
	86	4-Chlorotoluene	126	10.014	10.010	(0.934)	193510	50.0000	46(Q)
M	94	Xylene (Total)	106				910571	150.000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	716000	50.0000	46
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	732192	50.0000	47
	89	sec-Butylbenzene	105	10.547	10.551	(0.984)	838562	50.0000	46
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	366368	50.0000	47
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	704751	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	311900	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	383155	50.0000	46(Q)
	95	n-Butylbenzene	91	11.097	11.094	(1.035)	645463	50.0000	48
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	364189	50.0000	48
	97	Hexachloroethane	117	11.361	11.358	(1.059)	129208	50.0000	49(Q)
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.837	(1.104)	49841	50.0000	54(Q)
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	168369	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	178531	50.0000	47
	100	Hexachlorobutadiene	225	12.734	12.731	(1.187)	148587	50.0000	47
	101	Naphthalene	128	12.801	12.801	(1.194)	359472	50.0000	39
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	173932	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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

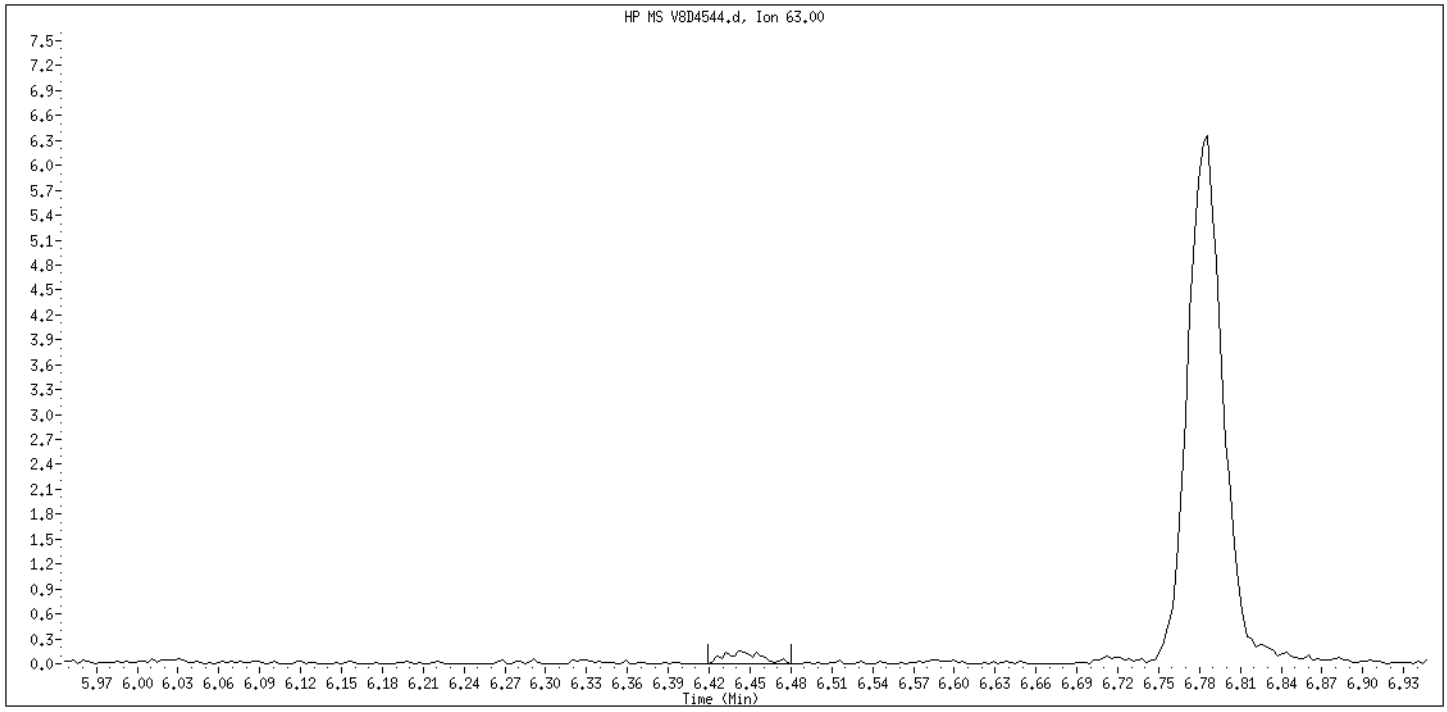
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Instrument: V10.i
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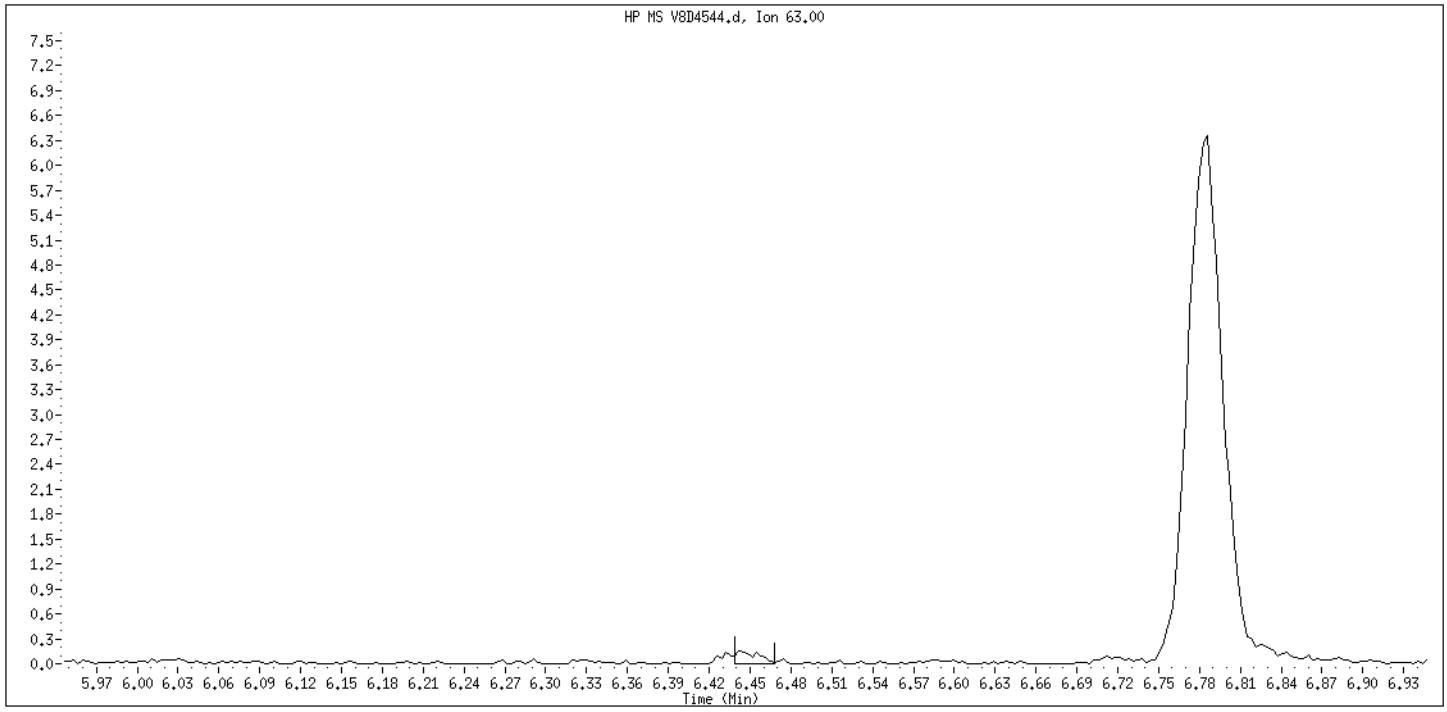
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Lab ID: VSTD05010I Client ID: VSTD05010I
Inj Date: 05-MAY-2014 12:27 Operator: WL SRC: WL

Manual Integration 2-Chloroethyl vinyl ether Ret Time: 6.442 min, Range: 6.419 to 6.481 min Response: 2812



Original Integration 2-Chloroethyl vinyl ether Ret Time: 6.442 min, Range: 6.439 to 6.468 min Response: 1812



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4545.d
Report Date: 07-May-2014 09:54

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4545.d
Lab Smp Id: VSTD02010I Client Smp ID: VSTD02010I
Inj Date : 05-MAY-2014 12:55
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD02010I,VSTD02010I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 08:41 mscarpaci Quant Type: ISTD
Cal Date : 05-MAY-2014 12:55 Cal File: V8D4545.d
Als bottle: 6 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)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.590	1.586	(0.304)	149933	20.0000	22
2	Freon114	85	1.702	1.705	(0.325)	86873	20.0000	22
3	Chloromethane	50	1.754	1.754	(0.335)	259243	20.0000	21
4	Vinyl Chloride	62	1.856	1.853	(0.355)	161360	20.0000	21
5	Bromomethane	94	2.143	2.143	(0.409)	71359	20.0000	20
6	Chloroethane	64	2.229	2.229	(0.426)	83411	20.0000	21
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	210677	20.0000	21
126	Ethanol	46	2.567	2.567	(0.490)	81814	2000.00	2100(A)
8	Ether	59	2.670	2.667	(0.510)	125462	20.0000	21
9	Acrolein	56	2.770	2.770	(0.529)	166664	100.000	110
10	1,1-Dichloroethene	96	2.853	2.856	(0.545)	91958	20.0000	22
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	109055	20.0000	21
12	Acetone	58	2.889	2.889	(0.552)	22827	20.0000	24(Q)
13	Iodomethane	142	2.982	2.982	(0.570)	88723	20.0000	20
14	Carbon Disulfide	76	3.046	3.043	(0.582)	268715	20.0000	20
15	Acetonitrile	41	3.136	3.136	(0.599)	366799	200.000	230(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	245425	20.0000	21
17	Methyl Acetate	43	3.146	3.143	(0.601)	217973	20.0000	21
18	Methylene Chloride	84	3.233	3.229	(0.617)	87177	20.0000	20
19	tert-Butanol	59	3.297	3.297	(0.630)	29225	40.0000	41
20	Acrylonitrile	53	3.422	3.422	(0.654)	71814	20.0000	21
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	81875	20.0000	21
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	316526	20.0000	22

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4545.d
Report Date: 07-May-2014 09:54

							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	3.786	(0.722)	244035	20.0000	22
	24 Vinyl acetate	43	3.824	3.821	(0.730)	536876	20.0000	22
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	661852	20.0000	21
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	284104	20.0000	21
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	453283	20.0000	22
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	178249	20.0000	22
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	85185	20.0000	21
	30 2-Butanone	72	4.265	4.258	(0.815)	11615	20.0000	23(Q)
	32 Propionitrile	54	4.310	4.303	(0.823)	239664	200.000	220(A)
	33 Methacrylonitrile	41	4.438	4.435	(0.848)	225079	40.0000	42
	34 Bromochloromethane	128	4.458	4.454	(0.851)	44924	20.0000	22
	31 Tetrahydrofuran	72	4.499	4.503	(0.859)	19155	40.0000	40
	35 Chloroform	83	4.506	4.506	(0.861)	220400	20.0000	22
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	217658	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	218525	20.0000	21
	38 Cyclohexane	56	4.741	4.741	(0.905)	255882	20.0000	22
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	41148	20.0000	21
	40 Carbon Tetrachloride	117	4.831	4.827	(0.923)	188082	20.0000	22
	41 Isobutyl Alcohol	43	4.737	4.882	(0.905)	30818	400.000	220(TAM)M6 AM 05/07
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	36674	50.0000	50
	43 Benzene	78	5.001	5.001	(0.955)	309971	20.0000	21
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	278543	20.0000	22
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	257889	20.0000	21
M	50 1,2-Dichloroethene (Total)	96				167060	40.0000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	584665	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	85981	20.0000	21
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	130830	20.0000	22
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	112797	20.0000	21
	51 Methyl Methacrylate	69	5.853	5.847	(1.118)	62870	20.0000	20
	52 Dibromomethane	93	5.879	5.882	(1.123)	67340	20.0000	21
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	17868	400.000	420(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	160454	20.0000	21
	55 2-Chloroethyl vinyl ether	63	6.445	6.445	(1.231)	1123	20.0000	15(T)
	56 cis-1,3-Dichloropropene	75	6.445	6.441	(1.231)	136630	20.0000	21
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	170988	20.0000	21
$	58 Toluene-d8	98	6.715	6.715	(0.817)	684057	50.0000	51
	59 Toluene	91	6.782	6.782	(1.295)	330377	20.0000	21
	60 trans-1,3-Dichloropropene	75	6.991	6.988	(1.335)	137017	20.0000	26
	61 Ethyl Methacrylate	69	7.072	7.068	(1.351)	72885	20.0000	21
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	76121	20.0000	21
	63 Tetrachloroethene	164	7.342	7.345	(0.893)	85026	20.0000	22
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	143595	20.0000	22
	65 2-Hexanone	43	7.438	7.435	(0.905)	120407	20.0000	22
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	106111	20.0000	22
	67 1,2-Dibromoethane	107	7.731	7.728	(0.940)	88278	20.0000	22
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	107390	20.0000	21(Q)
*	68 Chlorobenzene-d5	117	8.223	8.220	(1.000)	558399	50.0000	
	70 Chlorobenzene	112	8.258	8.255	(1.004)	216289	20.0000	21
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	97128	20.0000	22
	72 Ethylbenzene	106	8.371	8.367	(1.018)	112417	20.0000	22
	73 m,p-Xylene	106	8.496	8.496	(1.033)	275541	40.0000	43
	74 o-Xylene	106	8.943	8.943	(1.088)	133135	20.0000	22
	75 Styrene	104	8.959	8.959	(1.090)	202051	20.0000	21
	76 Bromoform	173	9.168	9.165	(1.115)	61875	20.0000	22

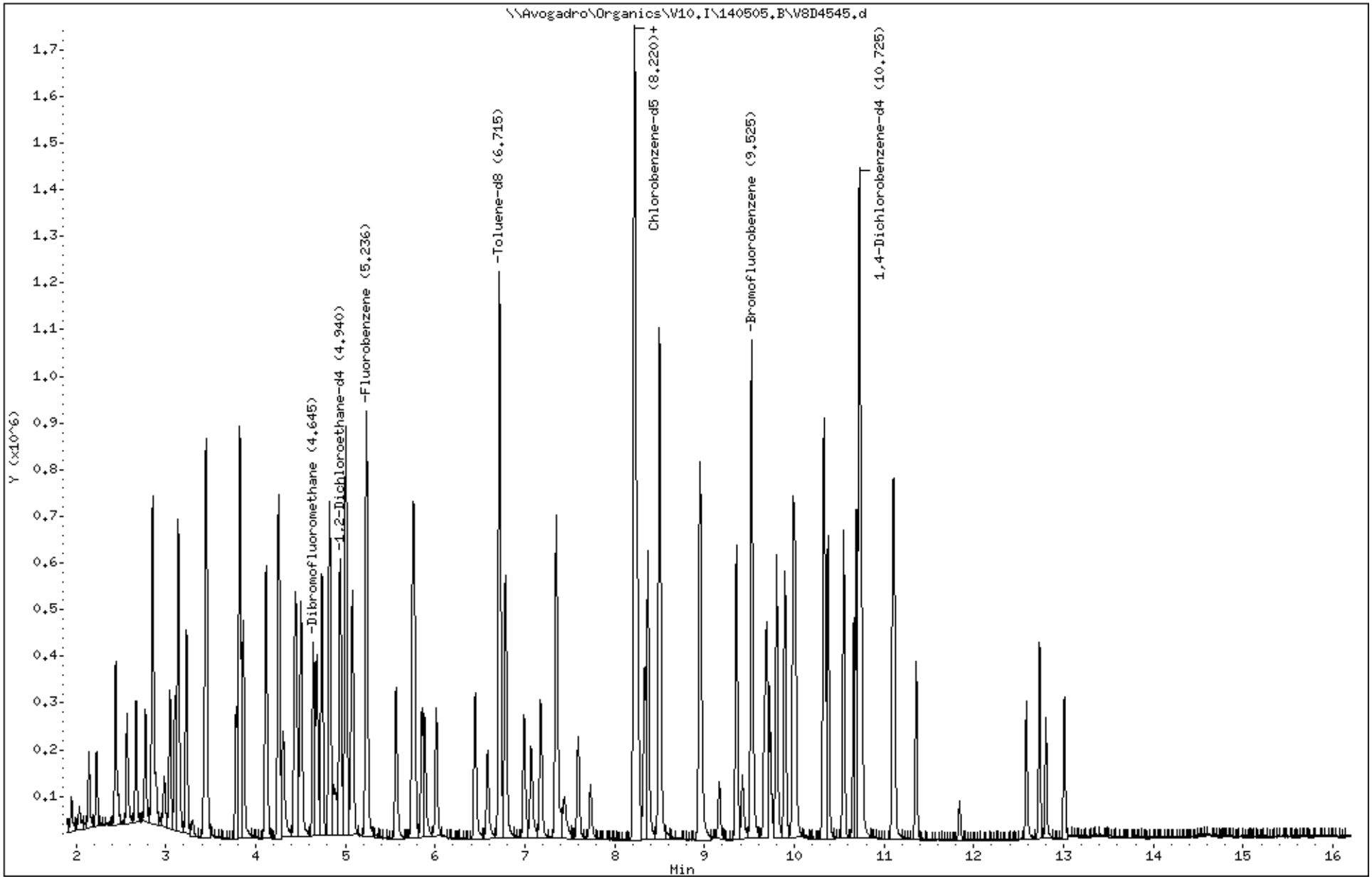
Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4545.d
Report Date: 07-May-2014 09:54

	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	9.355	(1.138)	382979	20.0000	22
78	trans-1,4-Dichloro-2-butene	75	9.425	9.422	(1.146)	17555	20.0000	18(Q)
$ 79	Bromofluorobenzene	95	9.525	9.525	(1.158)	343083	50.0000	50
80	1,1,2,2-Tetrachloroethane	83	9.670	9.666	(0.902)	101095	20.0000	22
81	Bromobenzene	156	9.692	9.692	(0.904)	98191	20.0000	21
82	1,2,3-Trichloropropane	75	9.718	9.718	(0.906)	124262	20.0000	22
83	n-Propylbenzene	120	9.801	9.801	(0.914)	89375	20.0000	22
84	2-Chlorotoluene	126	9.895	9.895	(0.923)	82403	20.0000	21
85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	334917	20.0000	22
86	4-Chlorotoluene	126	10.010	10.010	(0.933)	82782	20.0000	21
M 94	Xylene (Total)	106				408676	60.0000	(a)
87	tert-Butylbenzene	119	10.326	10.329	(0.963)	349978	20.0000	23
88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	333201	20.0000	22
89	sec-Butylbenzene	105	10.551	10.551	(0.984)	384642	20.0000	22
90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	160558	20.0000	21
91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	322006	20.0000	22
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	298020	50.0000	
93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	168605	20.0000	21
95	n-Butylbenzene	91	11.097	11.094	(1.035)	284648	20.0000	22
96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	159503	20.0000	22
97	Hexachloroethane	117	11.358	11.358	(1.059)	52542	20.0000	21
98	1,2-Dibromo-3-chloropropane	75	11.843	11.837	(1.104)	18129	20.0000	20
141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	69605	20.0000	(a)
99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	72227	20.0000	20
100	Hexachlorobutadiene	225	12.727	12.731	(1.187)	68254	20.0000	22
101	Naphthalene	128	12.801	12.801	(1.194)	162201	20.0000	18
102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	75138	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.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

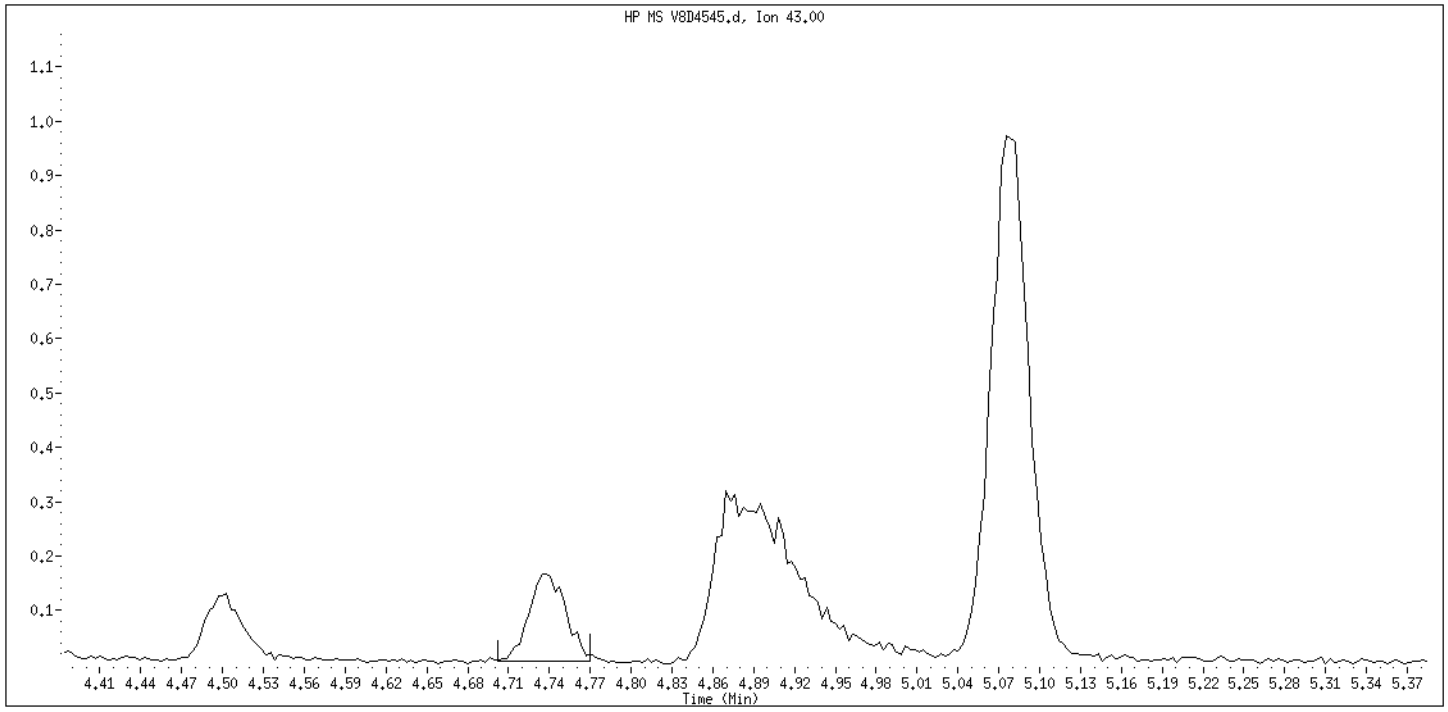
Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4545.d
Date : 05-MAY-2014 12:55
Client ID: VSTD02010I
Instrument: V10.i
Sample Info: 5ML,VSTD02010I,VSTD02010I
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



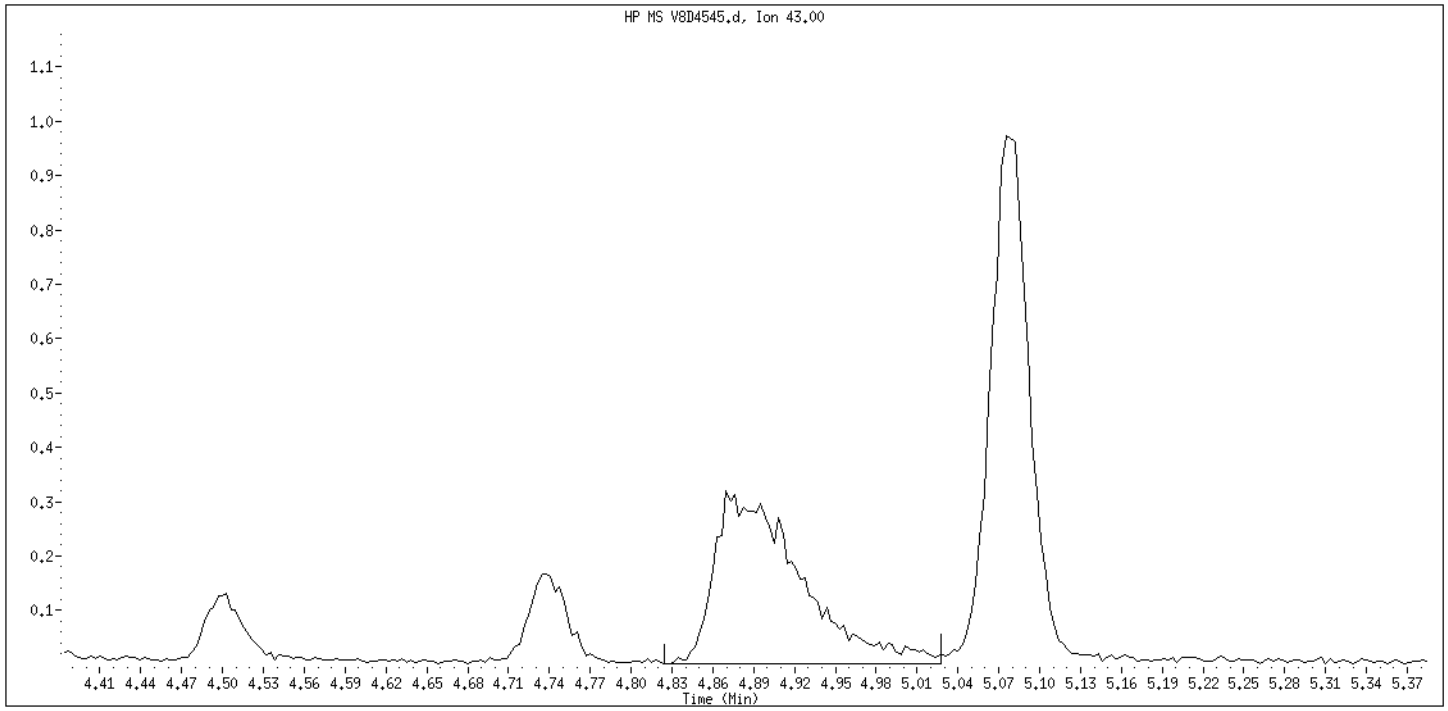
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4545.d

Lab ID: VSTD02010I Client ID: VSTD02010I
Inj Date: 05-MAY-2014 12:55 Operator: WL SRC: WL

Manual Integration Isobutyl Alcohol Ret Time: 4.738 min, Range: 4.702 to 4.770 min Response: 30818



Original Integration Isobutyl Alcohol Ret Time: 4.870 min, Range: 4.825 to 5.027 min Response: 138812



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4546.d
Report Date: 07-May-2014 09:54

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4546.d
Lab Smp Id: VSTD00510I Client Smp ID: VSTD00510I
Inj Date : 05-MAY-2014 13:22
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00510I,VSTD00510I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 08:41 mscarpaci Quant Type: ISTD
Cal Date : 05-MAY-2014 13:22 Cal File: V8D4546.d
Als bottle: 7 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)	35671	5.00000	5.3
2	Freon114	85	1.705	1.705	(0.326)	20501	5.00000	5.4
3	Chloromethane	50	1.753	1.754	(0.335)	60512	5.00000	5.0
4	Vinyl Chloride	62	1.853	1.853	(0.354)	36980	5.00000	5.0
5	Bromomethane	94	2.142	2.143	(0.409)	18533	5.00000	5.2
6	Chloroethane	64	2.229	2.229	(0.426)	20336	5.00000	5.3
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	51845	5.00000	5.3
126	Ethanol	46	2.570	2.567	(0.491)	21920	500.000	580(A)
8	Ether	59	2.667	2.667	(0.509)	29600	5.00000	5.1
9	Acrolein	56	2.773	2.770	(0.529)	35433	25.0000	25
10	1,1-Dichloroethene	96	2.853	2.856	(0.545)	21191	5.00000	5.1
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	26361	5.00000	5.2
12	Acetone	58	2.885	2.889	(0.551)	5725	5.00000	6.2
13	Iodomethane	142	2.985	2.982	(0.570)	18911	5.00000	4.3
14	Carbon Disulfide	76	3.046	3.043	(0.581)	66289	5.00000	5.0
15	Acetonitrile	41	3.139	3.136	(0.599)	80345	50.0000	50
16	Allyl Chloride	39	3.139	3.136	(0.599)	60619	5.00000	5.3
17	Methyl Acetate	43	3.149	3.143	(0.601)	50034	5.00000	5.0
18	Methylene Chloride	84	3.232	3.229	(0.617)	20826	5.00000	5.0
19	tert-Butanol	59	3.297	3.297	(0.629)	7357	10.0000	10
20	Acrylonitrile	53	3.425	3.422	(0.654)	16526	5.00000	4.9
21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.659)	19813	5.00000	5.1
22	Methyl tert-butyl ether	73	3.451	3.445	(0.659)	71208	5.00000	5.0

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4546.d
Report Date: 07-May-2014 09:54

	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)	57623	5.00000	5.2	
	24 Vinyl acetate	43	3.821	3.821	(0.729)	114431	5.00000	4.6	
	25 Diisopropyl Ether	45	3.827	3.824	(0.731)	146684	5.00000	4.8	
	26 2-Chloro-1,3-Butadiene	53	3.859	3.860	(0.737)	64892	5.00000	4.9	
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	102199	5.00000	4.9	
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	35464	5.00000	4.5	
	28 cis-1,2-Dichloroethene	96	4.261	4.255	(0.813)	19792	5.00000	5.0	
	30 2-Butanone	72	4.284	4.258	(0.818)	2419	5.00000	4.8	
	32 Propionitrile	54	4.310	4.303	(0.823)	43660	50.0000	42	
	33 Methacrylonitrile	41	4.441	4.435	(0.848)	44253	10.0000	8.3	
	34 Bromochloromethane	128	4.454	4.454	(0.850)	10580	5.00000	5.2	
	31 Tetrahydrofuran	72	4.506	4.503	(0.860)	5079	10.0000	11	
	35 Chloroform	83	4.509	4.506	(0.861)	50883	5.00000	5.1	
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	216073	50.0000	51	
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	49698	5.00000	5.0	
	38 Cyclohexane	56	4.737	4.741	(0.904)	59144	5.00000	5.2	
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	9518	5.00000	5.0	
	40 Carbon Tetrachloride	117	4.827	4.827	(0.921)	41346	5.00000	4.9	
	41 Isobutyl Alcohol	43	4.737	4.882	(0.904)	8576	100.000	110(TM)M6 AM 05/07	
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	37613	50.0000	52	
	43 Benzene	78	5.004	5.001	(0.955)	71681	5.00000	5.0	
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	63880	5.00000	5.1	
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.969)	58859	5.00000	4.9	
M	50 1,2-Dichloroethene (Total)	96				39605	10.0000	(a)	
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	575406	50.0000		
	47 Trichloroethene	130	5.567	5.564	(1.063)	21264	5.00000	5.2	
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	29987	5.00000	5.2	
	49 1,2-Dichloropropane	63	5.776	5.769	(1.102)	25844	5.00000	4.9	
	51 Methyl Methacrylate	69	5.853	5.847	(1.117)	13966	5.00000	4.6	
	52 Dibromomethane	93	5.888	5.882	(1.124)	15695	5.00000	5.0	
	53 1,4-Dioxane	88	5.891	5.885	(1.125)	4063	100.000	98	
	54 Bromodichloromethane	83	6.017	6.014	(1.149)	35313	5.00000	4.7	
	55 2-Chloroethyl vinyl ether	63	6.464	6.445	(1.234)	204	5.00000	4.0(TM)M6 AM 05/07	
	56 cis-1,3-Dichloropropene	75	6.451	6.441	(1.231)	28001	5.00000	4.4	
	57 4-Methyl-2-pentanone	43	6.589	6.580	(1.258)	37553	5.00000	4.7	
$	58 Toluene-d8	98	6.715	6.715	(0.817)	664489	50.0000	50	
	59 Toluene	91	6.785	6.782	(1.295)	80794	5.00000	5.2	
	60 trans-1,3-Dichloropropene	75	6.994	6.988	(1.335)	26670	5.00000	4.8(M)M7 AM 05/07	
	61 Ethyl Methacrylate	69	7.071	7.068	(1.350)	13355	5.00000	3.9	
	62 1,1,2-Trichloroethane	97	7.178	7.175	(1.370)	18457	5.00000	5.2	
	63 Tetrachloroethene	164	7.348	7.345	(0.894)	19360	5.00000	5.0	
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	30274	5.00000	4.8	
	65 2-Hexanone	43	7.441	7.435	(0.905)	25745	5.00000	4.7	
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	22268	5.00000	4.7	
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	19138	5.00000	4.9	
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	25440	5.00000	5.1	
*	68 Chlorobenzene-d5	117	8.223	8.220	(1.000)	550093	50.0000		
	70 Chlorobenzene	112	8.258	8.255	(1.004)	52381	5.00000	5.1	
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	21701	5.00000	5.0	
	72 Ethylbenzene	106	8.374	8.367	(1.018)	24355	5.00000	4.7	
	73 m,p-Xylene	106	8.502	8.496	(1.034)	63875	10.0000	10	
	74 o-Xylene	106	8.949	8.943	(1.088)	28583	5.00000	4.8	
	75 Styrene	104	8.965	8.959	(1.090)	41750	5.00000	4.3	
	76 Bromoform	173	9.161	9.165	(1.114)	12597	5.00000	4.4	

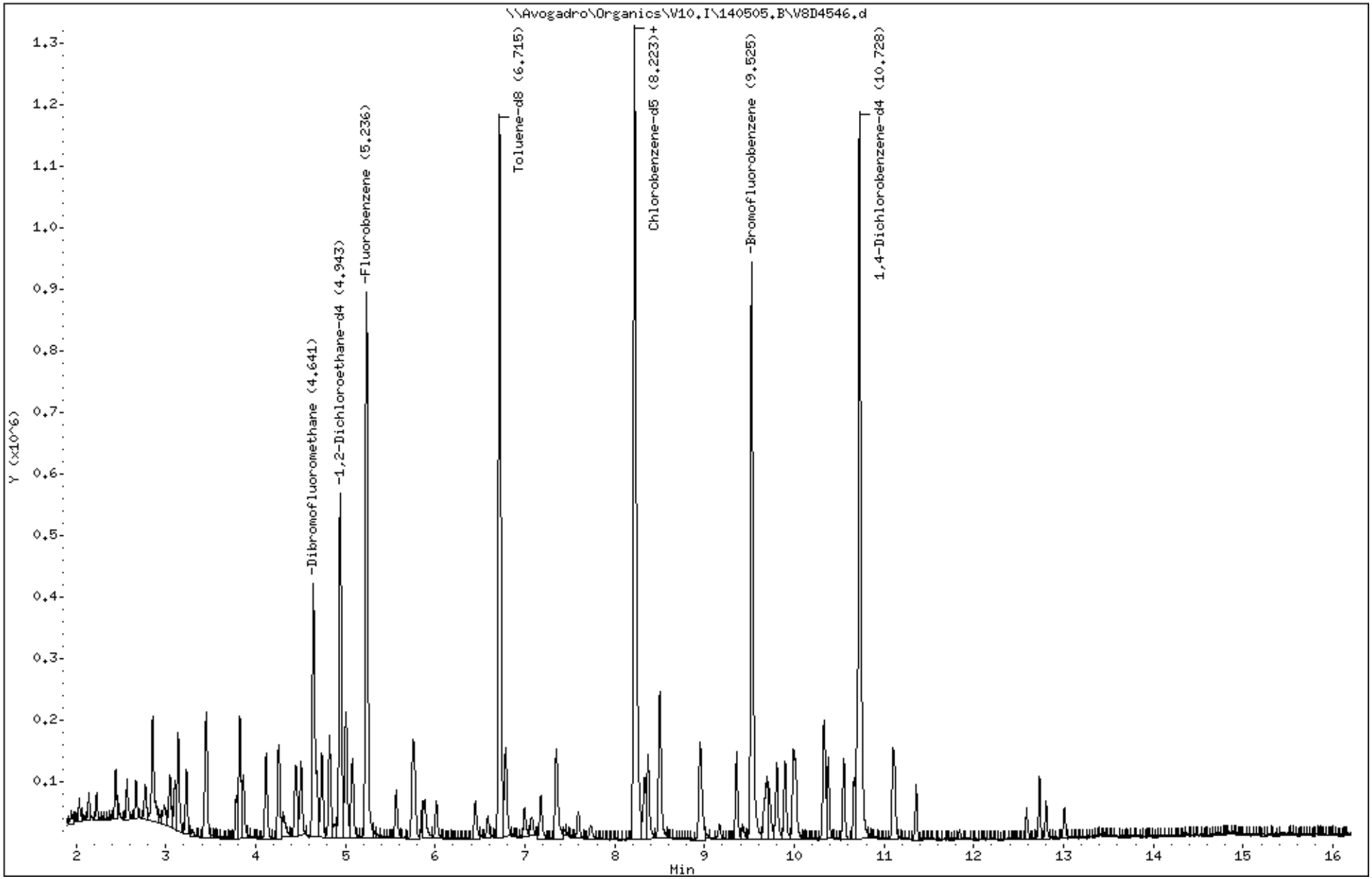
Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4546.d
Report Date: 07-May-2014 09:54

		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	9.355	(1.138)	81550	5.00000	4.8	
	78	trans-1,4-Dichloro-2-butene	75	9.428	9.422	(1.147)	3255	5.00000	3.4	
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	323082	50.0000	48	
	80	1,1,2,2-Tetrachloroethane	83	9.663	9.666	(0.901)	22863	5.00000	5.5	
	81	Bromobenzene	156	9.692	9.692	(0.904)	22789	5.00000	5.5	
	82	1,2,3-Trichloropropane	75	9.721	9.718	(0.906)	25176	5.00000	5.0	
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	19598	5.00000	5.3	
	84	2-Chlorotoluene	126	9.901	9.895	(0.923)	18738	5.00000	5.5	
	85	1,3,5-Trimethylbenzene	105	9.985	9.988	(0.931)	69343	5.00000	5.1	
	86	4-Chlorotoluene	126	10.013	10.010	(0.934)	18762	5.00000	5.2	
M	94	Xylene (Total)	106				92458	15.0000	(a)	
	87	tert-Butylbenzene	119	10.332	10.329	(0.963)	68121	5.00000	5.1	
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	68610	5.00000	5.1	
	89	sec-Butylbenzene	105	10.547	10.551	(0.984)	82516	5.00000	5.3	
	90	1,3-Dichlorobenzene	146	10.666	10.660	(0.995)	33241	5.00000	5.0	
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	65182	5.00000	5.1	
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	265925	50.0000		
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	38277	5.00000	5.4	
	95	n-Butylbenzene	91	11.100	11.094	(1.035)	54448	5.00000	4.8	
	96	1,2-Dichlorobenzene	146	11.116	11.113	(1.037)	33327	5.00000	5.1	
	97	Hexachloroethane	117	11.361	11.358	(1.059)	11816	5.00000	5.3	
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.837	(1.104)	3667	5.00000	4.6	
	141	1,3,5-Trichlorobenzene	182	12.589	12.586	(2.403)	11226	5.00000	(a)	
	99	1,2,4-Trichlorobenzene	180	12.589	12.586	(1.174)	11540	5.00000	3.6	
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	14478	5.00000	5.3	
	101	Naphthalene	128	12.804	12.801	(1.194)	36720	5.00000	4.7	
	102	1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	11817	5.00000	3.7	

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.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4546.d
Date : 05-MAY-2014 13:22
Client ID: VSTD00510I
Instrument: V10.i
Sample Info: 5ML,VSTD00510I,VSTD00510I
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4547.d
Report Date: 07-May-2014 09:54

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4547.d
Lab Smp Id: VSTD00110I Client Smp ID: VSTD00110I
Inj Date : 05-MAY-2014 13:50
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00110I,VSTD00110I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 08:41 mscarpaci Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 8 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	1.586	1.586	(0.303)	7169	1.00000	1.1
2	Freon114	85	1.705	1.705	(0.326)	3746	1.00000	1.0
3	Chloromethane	50	1.754	1.754	(0.335)	13878	1.00000	1.2
4	Vinyl Chloride	62	1.856	1.853	(0.355)	8257	1.00000	1.1
5	Bromomethane	94	2.143	2.143	(0.409)	5408	1.00000	(a)
6	Chloroethane	64	2.226	2.229	(0.425)	4426	1.00000	1.2
7	Trichlorofluoromethane	101	2.445	2.442	(0.467)	10382	1.00000	1.1
126	Ethanol	46	2.567	2.567	(0.490)	4635	500.000	130
8	Ether	59	2.670	2.667	(0.510)	5951	1.00000	1.1
9	Acrolein	56	2.770	2.770	(0.529)	7369	5.00000	5.1
10	1,1-Dichloroethene	96	2.853	2.856	(0.545)	5777	1.00000	1.3
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.856	2.853	(0.546)	5700	1.00000	1.2
12	Acetone	58	2.892	2.889	(0.552)	1176	1.00000	1.3
13	Iodomethane	142	2.979	2.982	(0.569)	4191	1.00000	0.98
14	Carbon Disulfide	76	3.049	3.043	(0.582)	16789	1.00000	1.3
15	Acetonitrile	41	3.136	3.136	(0.599)	19412	1.00000	12
16	Allyl Chloride	39	3.143	3.136	(0.600)	12099	1.00000	1.1
17	Methyl Acetate	43	3.152	3.143	(0.602)	9471	1.00000	1.0
18	Methylene Chloride	84	3.226	3.229	(0.616)	5297	1.00000	1.3
19	tert-Butanol	59	3.297	3.297	(0.630)	1518	1.00000	2.2
20	Acrylonitrile	53	3.426	3.422	(0.654)	3937	1.00000	1.2
21	trans-1,2-Dichloroethene	96	3.458	3.451	(0.660)	4486	1.00000	1.2
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	13909	1.00000	1.00

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4547.d
Report Date: 07-May-2014 09:54

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23	1,1-Dichloroethane	63	3.789	3.786	(0.724)	12481	1.00000	1.1
	24	Vinyl acetate	43	3.821	3.821	(0.730)	23626	1.00000	0.99(T)
	25	Diisopropyl Ether	45	3.821	3.824	(0.730)	28436	1.00000	0.97
	26	2-Chloro-1,3-Butadiene	53	3.860	3.860	(0.737)	11649	1.00000	0.90
	27	Ethyl tert-butyl ether	59	4.114	4.117	(0.786)	19710	1.00000	0.97
	29	2,2-Dichloropropane	77	4.262	4.258	(0.814)	6507	1.00000	0.83
	28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	4414	1.00000	1.1
	30	2-Butanone	72	4.278	4.258	(0.817)	251	1.00000	0.52(T)
	32	Propionitrile	54	4.319	4.303	(0.825)	8540	1.00000	8.4
	33	Methacrylonitrile	41	4.442	4.435	(0.848)	7660	1.00000	1.5
	34	Bromochloromethane	128	4.458	4.454	(0.851)	2299	1.00000	1.1
	31	Tetrahydrofuran	72	4.499	4.503	(0.859)	562	1.00000	1.2
	35	Chloroform	83	4.506	4.506	(0.861)	9907	1.00000	1.0
$	36	Dibromofluoromethane	113	4.641	4.644	(0.886)	211955	1.00000	51
	37	1,1,1-Trichloroethane	97	4.676	4.683	(0.893)	10649	1.00000	1.1
	38	Cyclohexane	56	4.734	4.741	(0.904)	11179	1.00000	1.0
	39	1,1-Dichloropropene	110	4.824	4.821	(0.921)	2143	1.00000	1.1
	40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	7864	1.00000	0.95
	41	Isobutyl Alcohol	43	4.869	4.882	(0.930)	857	1.00000	12(T)
$	42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	36346	1.00000	52
	43	Benzene	78	5.007	5.001	(0.956)	15108	1.00000	1.1
	44	1,2-Dichloroethane	62	5.014	5.007	(0.958)	12752	1.00000	1.0
	45	tert-Amyl methyl ether	73	5.081	5.078	(0.971)	12075	1.00000	1.0
M	50	1,2-Dichloroethene (Total)	96				8900	2.00000	(a)
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	556524	50.0000	
	47	Trichloroethene	130	5.564	5.564	(1.063)	4362	1.00000	1.1
	48	Methylcyclohexane	83	5.757	5.753	(1.099)	5830	1.00000	1.0
	49	1,2-Dichloropropane	63	5.776	5.769	(1.103)	5288	1.00000	1.0
	51	Methyl Methacrylate	69	5.860	5.847	(1.119)	2034	1.00000	0.70
	52	Dibromomethane	93	5.885	5.882	(1.124)	3071	1.00000	1.0
	53	1,4-Dioxane	88	5.901	5.885	(1.127)	432	1.00000	11
	54	Bromodichloromethane	83	6.014	6.014	(1.149)	5867	1.00000	0.84
	55	2-Chloroethyl vinyl ether	63	6.708	6.445	(1.281)	232	1.00000	4.7(T)
	56	cis-1,3-Dichloropropene	75	6.448	6.441	(1.231)	5307	1.00000	0.87
	57	4-Methyl-2-pentanone	43	6.596	6.580	(1.260)	7418	1.00000	0.96
$	58	Toluene-d8	98	6.715	6.715	(0.817)	643680	1.00000	50
	59	Toluene	91	6.792	6.782	(1.297)	16153	1.00000	1.0
	60	trans-1,3-Dichloropropene	75	6.998	6.988	(1.336)	4835	1.00000	0.79
	61	Ethyl Methacrylate	69	7.078	7.068	(1.352)	2743	1.00000	0.82
	62	1,1,2-Trichloroethane	97	7.178	7.175	(1.371)	3248	1.00000	0.95
	63	Tetrachloroethene	164	7.342	7.345	(0.893)	4359	1.00000	1.1
	64	1,3-Dichloropropane	76	7.358	7.355	(0.895)	6237	1.00000	1.00
	65	2-Hexanone	43	7.451	7.435	(0.906)	2097	1.00000	0.39(a)
	66	Dibromochloromethane	129	7.602	7.593	(0.925)	4319	1.00000	0.91(T)
	67	1,2-Dibromoethane	107	7.747	7.728	(0.942)	3348	1.00000	0.87(T)
	69	1-Chlorohexane	91	8.223	8.216	(1.000)	5961	1.00000	1.2
*	68	Chlorobenzene-d5	117	8.223	8.220	(1.000)	539002	50.0000	
	70	Chlorobenzene	112	8.255	8.255	(1.004)	9593	1.00000	0.97
	71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	4833	1.00000	1.1
	72	Ethylbenzene	106	8.371	8.367	(1.018)	5153	1.00000	1.0
	73	m,p-Xylene	106	8.496	8.496	(1.033)	11676	2.00000	1.9
	74	o-Xylene	106	8.946	8.943	(1.088)	5337	1.00000	0.91
	75	Styrene	104	8.959	8.959	(1.090)	7627	1.00000	0.81
	76	Bromoform	173	9.162	9.165	(1.114)	2280	1.00000	0.81(T)

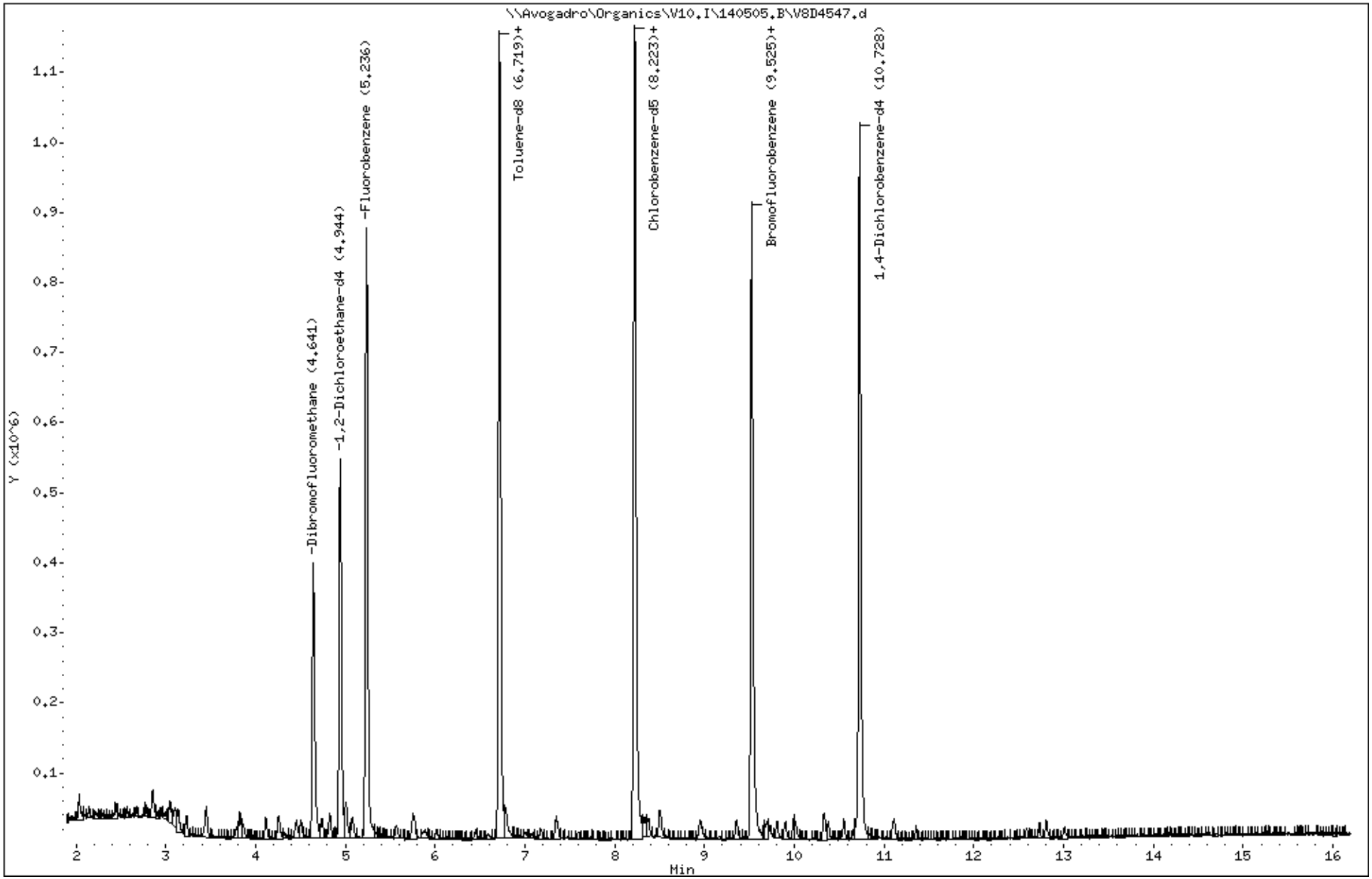
Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4547.d
Report Date: 07-May-2014 09:54

		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	9.355	(1.138)	14616	1.00000	0.87
	78	trans-1,4-Dichloro-2-butene	75	9.525	9.422	(1.158)	189699	1.00000	200(T)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	307666	1.00000	47
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	3811	1.00000	1.0
	81	Bromobenzene	156	9.692	9.692	(0.903)	4800	1.00000	1.3
	82	1,2,3-Trichloropropane	75	9.728	9.718	(0.907)	6292	1.00000	1.3
	83	n-Propylbenzene	120	9.802	9.801	(0.914)	3178	1.00000	0.99
	84	2-Chlorotoluene	126	9.908	9.895	(0.924)	3688	1.00000	1.2
	85	1,3,5-Trimethylbenzene	105	9.985	9.988	(0.931)	12695	1.00000	1.1
	86	4-Chlorotoluene	126	10.023	10.010	(0.934)	3241	1.00000	1.0
M	94	Xylene (Total)	106				17013	3.00000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	14516	1.00000	1.2
	88	1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	12761	1.00000	1.1
	89	sec-Butylbenzene	105	10.547	10.551	(0.983)	15942	1.00000	1.1
	90	1,3-Dichlorobenzene	146	10.670	10.660	(0.995)	6180	1.00000	1.0
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	12550	1.00000	1.1
*	92	1,4-Dichlorobenzene-d4	152	10.728	10.724	(1.000)	231445	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	8490	1.00000	1.3
	95	n-Butylbenzene	91	11.097	11.094	(1.034)	10295	1.00000	1.0
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	5244	1.00000	0.93
	97	Hexachloroethane	117	11.361	11.358	(1.059)	2221	1.00000	1.1
	98	1,2-Dibromo-3-chloropropane	75	11.834	11.837	(1.103)	509	1.00000	0.73(T)
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	3076	1.00000	(a)
	99	1,2,4-Trichlorobenzene	180	12.596	12.586	(1.174)	3573	1.00000	1.2
	100	Hexachlorobutadiene	225	12.734	12.731	(1.187)	3618	1.00000	1.4
	101	Naphthalene	128	12.811	12.801	(1.194)	9074	1.00000	4.4
	102	1,2,3-Trichlorobenzene	180	13.004	13.007	(1.212)	3454	1.00000	5.6

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\V10.I\140505.B\V8D4547.d
Date : 05-MAY-2014 13:50
Client ID: VSTD00110I
Instrument: V10.i
Sample Info: 5ML,VSTD00110I,VSTD00110I
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4549.d
Report Date: 07-May-2014 09:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4549.d
Lab Smp Id: VSTD20010I Client Smp ID: VSTD20010I
Inj Date : 05-MAY-2014 14:45
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD20010I,VSTD20010I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 08:41 mscarpaci Quant Type: ISTD
Cal Date : 05-MAY-2014 14:45 Cal File: V8D4549.d
Als bottle: 10 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)	1421716	200.000	200
2	Freon114	85	1.705	1.705	(0.326)	784344	200.000	190
3	Chloromethane	50	1.754	1.754	(0.335)	2462242	200.000	190
4	Vinyl Chloride	62	1.853	1.853	(0.354)	1584039	200.000	200(Q)
5	Bromomethane	94	2.136	2.143	(0.408)	615962	200.000	160
6	Chloroethane	64	2.226	2.229	(0.425)	800028	200.000	200
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	2058837	200.000	200
126	Ethanol	46	2.570	2.567	(0.491)	761991	20000.0	19000(A)
8	Ether	59	2.667	2.667	(0.509)	1220291	200.000	200(Q)
9	Acrolein	56	2.766	2.770	(0.528)	1670033	1000.00	1100(A)
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	891735	200.000	200(AQ)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	1039002	200.000	200
12	Acetone	58	2.889	2.889	(0.552)	150956	200.000	150(Q)
13	Iodomethane	142	2.982	2.982	(0.570)	1170025	200.000	250(A)
14	Carbon Disulfide	76	3.043	3.043	(0.581)	2834548	200.000	200
15	Acetonitrile	41	3.136	3.136	(0.599)	3338767	2000.00	2000(AQ)
16	Allyl Chloride	39	3.136	3.136	(0.599)	2468348	200.000	200(Q)
17	Methyl Acetate	43	3.143	3.143	(0.600)	2069650	200.000	200
18	Methylene Chloride	84	3.229	3.229	(0.617)	859221	200.000	200(Q)
19	tert-Butanol	59	3.300	3.297	(0.630)	305231	400.000	420(A)
20	Acrylonitrile	53	3.419	3.422	(0.653)	711148	200.000	200
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	838557	200.000	210(A)
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	3241114	200.000	210(A)

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4549.d
Report Date: 07-May-2014 09:55

	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	3.782	3.786	(0.722)	2411725	200.000	210(A)
	24 Vinyl acetate	43	3.818	3.821	(0.729)	5753994	200.000	220(A)
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	6985223	200.000	220(A)
	26 2-Chloro-1,3-Butadiene	53	3.860	3.860	(0.737)	3088121	200.000	220(A)
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	4783029	200.000	220(A)
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	2000012	200.000	240(A)
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	895960	200.000	220(A)
	30 2-Butanone	72	4.255	4.258	(0.813)	108616	200.000	200(AQ)
	32 Propionitrile	54	4.303	4.303	(0.822)	2399145	2000.00	2200(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	2588180	400.000	460(A)
	34 Bromochloromethane	128	4.451	4.454	(0.850)	441449	200.000	200
	31 Tetrahydrofuran	72	4.503	4.503	(0.860)	210510	400.000	430(A)
	35 Chloroform	83	4.506	4.506	(0.861)	2199774	200.000	210(A)
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	222744	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	2260293	200.000	210(A)
	38 Cyclohexane	56	4.741	4.741	(0.905)	2560848	200.000	210(A)
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	432378	200.000	220(AQ)
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	1973183	200.000	220(A)
	41 Isobutyl Alcohol	43	4.737	4.882	(0.905)	322359	4000.00	2300(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	37596	50.0000	49
	43 Benzene	78	5.001	5.001	(0.955)	3252000	200.000	210(A)
	44 1,2-Dichloroethane	62	5.004	5.007	(0.956)	2819678	200.000	210(A)
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	2804269	200.000	220(A)
M	50 1,2-Dichloroethene (Total)	96				1734517	400.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	606663	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	897017	200.000	210(A)
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	1323312	200.000	220(AQ)
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	1204007	200.000	220(A)
	51 Methyl Methacrylate	69	5.847	5.847	(1.117)	721212	200.000	230(AQ)
	52 Dibromomethane	93	5.879	5.882	(1.123)	707560	200.000	210(A)
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	184648	4000.00	4200(AQ)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	1761223	200.000	220(A)
	55 2-Chloroethyl vinyl ether	63	6.445	6.445	(1.231)	12759	200.000	160(TQ)
	56 cis-1,3-Dichloropropene	75	6.438	6.441	(1.230)	1595195	200.000	240(A)
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	1862454	200.000	220(AQ)
$	58 Toluene-d8	98	6.718	6.715	(0.817)	708211	50.0000	48
	59 Toluene	91	6.782	6.782	(1.295)	3623411	200.000	220(A)
	60 trans-1,3-Dichloropropene	75	6.985	6.988	(1.334)	1654342	200.000	300(AQ)
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	885736	200.000	240(AQ)
	62 1,1,2-Trichloroethane	97	7.178	7.175	(1.371)	789810	200.000	210(A)
	63 Tetrachloroethene	164	7.342	7.345	(0.893)	890791	200.000	210(A)
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	1485368	200.000	210(A)
	65 2-Hexanone	43	7.432	7.435	(0.904)	1234626	200.000	200
	66 Dibromochloromethane	129	7.593	7.593	(0.923)	1217612	200.000	230(A)
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	938675	200.000	220(A)
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	1177061	200.000	210(AQ)
*	68 Chlorobenzene-d5	117	8.223	8.220	(1.000)	610464	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	2350660	200.000	210(AQ)
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	1064490	200.000	220(A)
	72 Ethylbenzene	106	8.371	8.367	(1.018)	1236500	200.000	220(AQ)
	73 m,p-Xylene	106	8.499	8.496	(1.034)	3092510	400.000	440(A)
	74 o-Xylene	106	8.943	8.943	(1.088)	1473672	200.000	220(A)
	75 Styrene	104	8.959	8.959	(1.090)	2458769	200.000	230(A)
	76 Bromoform	173	9.162	9.165	(1.114)	771717	200.000	240(A)

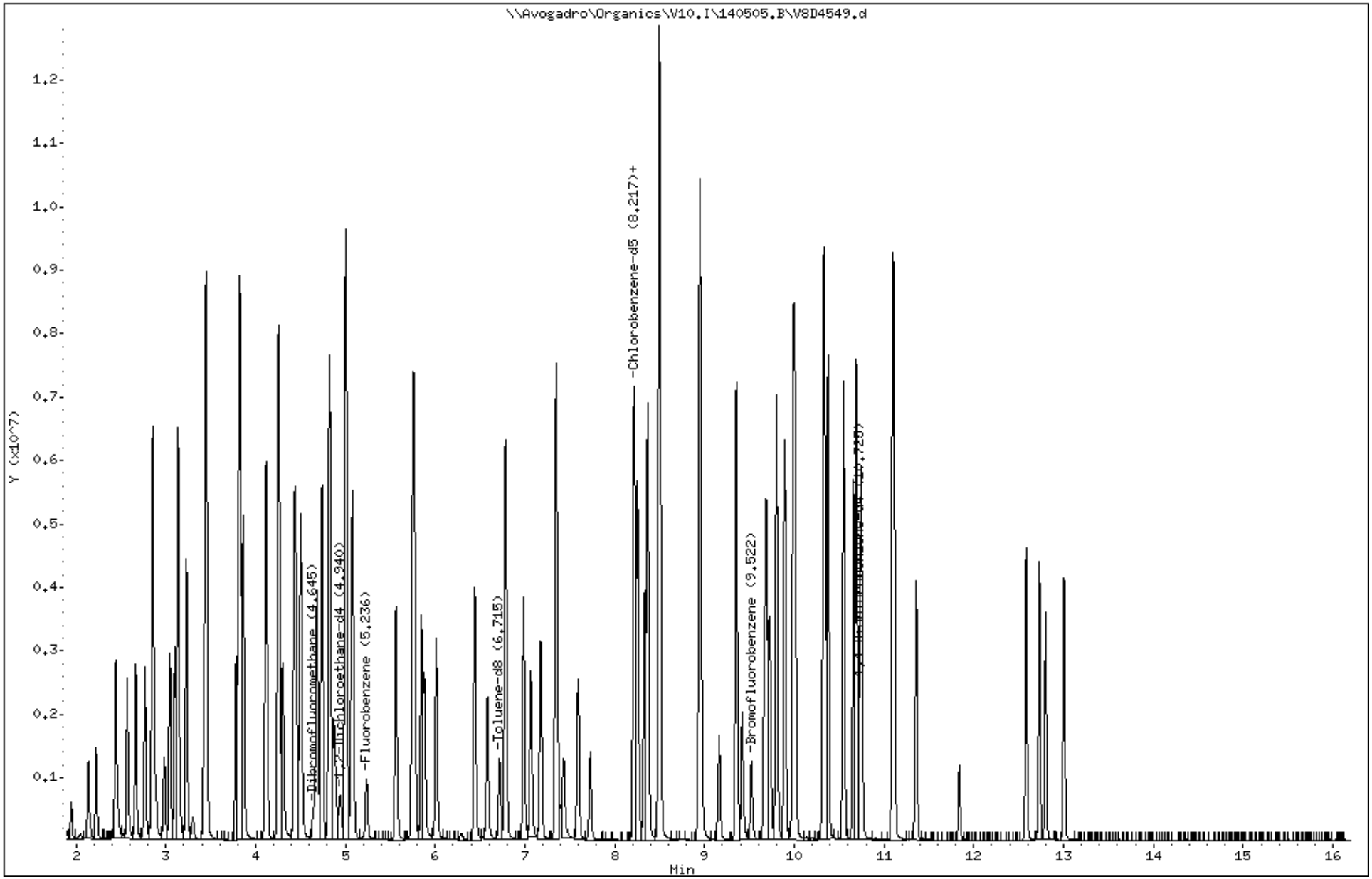
Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4549.d
Report Date: 07-May-2014 09:55

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77	Isopropylbenzene	105	9.355	9.355	(1.138)	4318340	200.000	230(A)
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	275080	200.000	260(AQ)
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	376531	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	1075191	200.000	190
	81	Bromobenzene	156	9.689	9.692	(0.903)	1087250	200.000	200
	82	1,2,3-Trichloropropane	75	9.721	9.718	(0.906)	1379171	200.000	210(AQ)
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	992050	200.000	200
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	915611	200.000	200(Q)
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	3715239	200.000	200(A)
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	948116	200.000	200(Q)
M	94	Xylene (Total)	106				4566182	600.000	(a)
	87	tert-Butylbenzene	119	10.326	10.329	(0.963)	3521615	200.000	200
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	3732013	200.000	210(A)
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	4284585	200.000	210(A)
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	1829247	200.000	210(A)
	91	4-Isopropyltoluene	119	10.692	10.695	(0.997)	3589263	200.000	210(A)
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	354063	50.0000	(Q)
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	1906441	200.000	200(Q)
	95	n-Butylbenzene	91	11.094	11.094	(1.034)	3367773	200.000	220(A)
	96	1,2-Dichlorobenzene	146	11.110	11.113	(1.036)	1807552	200.000	210(A)
	97	Hexachloroethane	117	11.358	11.358	(1.059)	671017	200.000	220(AQ)
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.837	(1.104)	261985	200.000	250(AQ)
	141	1,3,5-Trichlorobenzene	182	12.583	12.586	(2.403)	1082510	200.000	(a)
	99	1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	1141151	200.000	270(A)
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	712351	200.000	200
	101	Naphthalene	128	12.798	12.801	(1.193)	2112805	200.000	200
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	1017919	200.000	240(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.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4549.d
Date : 05-MAY-2014 14:45
Client ID: VSTD20010I
Instrument: V10.i
Sample Info: 5ML,VSTD20010I,VSTD20010I
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4550.d
Report Date: 07-May-2014 09:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4550.d
Lab Smp Id: VSTD10010I Client Smp ID: VSTD10010I
Inj Date : 05-MAY-2014 15:12
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD10010I,VSTD10010I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 08:41 mscarpaci Quant Type: ISTD
Cal Date : 05-MAY-2014 15:12 Cal File: V8D4550.d
Als bottle: 11 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)	651564	100.000	89
2	Freon114	85	1.705	1.705	(0.326)	370894	100.000	90
3	Chloromethane	50	1.753	1.754	(0.335)	1152669	100.000	89
4	Vinyl Chloride	62	1.856	1.853	(0.355)	746963	100.000	93
5	Bromomethane	94	2.139	2.143	(0.409)	331408	100.000	86
6	Chloroethane	64	2.226	2.229	(0.425)	370688	100.000	89
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	918303	100.000	87
126	Ethanol	46	2.570	2.567	(0.491)	360874	10000.0	8800(A)
8	Ether	59	2.666	2.667	(0.509)	564570	100.000	90
9	Acrolein	56	2.769	2.770	(0.529)	739761	500.000	480
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	415947	100.000	93
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	481003	100.000	88
12	Acetone	58	2.885	2.889	(0.551)	67251	100.000	67
13	Iodomethane	142	2.982	2.982	(0.570)	449058	100.000	95
14	Carbon Disulfide	76	3.046	3.043	(0.582)	1274337	100.000	89
15	Acetonitrile	41	3.136	3.136	(0.599)	1528029	1000.00	880(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	1123914	100.000	90
17	Methyl Acetate	43	3.142	3.143	(0.600)	951702	100.000	88
18	Methylene Chloride	84	3.229	3.229	(0.617)	388312	100.000	86
19	tert-Butanol	59	3.303	3.297	(0.631)	135690	200.000	180
20	Acrylonitrile	53	3.419	3.422	(0.653)	313849	100.000	86
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	378807	100.000	90
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	1423005	100.000	92

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4550.d
Report Date: 07-May-2014 09:55

							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	3.786	(0.722)	1078166	100.000	90
	24 Vinyl acetate	43	3.818	3.821	(0.729)	2502409	100.000	94
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	3028127	100.000	92
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	1345691	100.000	93
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	2102991	100.000	94
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	850020	100.000	99
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	404158	100.000	95
	30 2-Butanone	72	4.255	4.258	(0.813)	44292	100.000	81(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	1095011	1000.00	960(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	1120662	200.000	190
	34 Bromochloromethane	128	4.454	4.454	(0.851)	199228	100.000	90
	31 Tetrahydrofuran	72	4.502	4.503	(0.860)	95452	200.000	190
	35 Chloroform	83	4.506	4.506	(0.861)	965360	100.000	90
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	224856	50.0000	49
	37 1,1,1-Trichloroethane	97	4.682	4.683	(0.894)	983800	100.000	91
	38 Cyclohexane	56	4.737	4.741	(0.905)	1159409	100.000	93
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	190483	100.000	93
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	872246	100.000	95
	41 Isobutyl Alcohol	43	4.737	4.882	(0.905)	151463	2000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	38853	50.0000	49
	43 Benzene	78	5.004	5.001	(0.956)	1418895	100.000	91
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	1220593	100.000	90
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	1238420	100.000	95
M	50 1,2-Dichloroethene (Total)	96				782965	200.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	623414	50.0000	
	47 Trichloroethene	130	5.563	5.564	(1.063)	395891	100.000	90
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	617661	100.000	98
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	515003	100.000	91
	51 Methyl Methacrylate	69	5.850	5.847	(1.117)	310334	100.000	95
	52 Dibromomethane	93	5.879	5.882	(1.123)	308819	100.000	91
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	83233	2000.00	1800(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	745667	100.000	92
	55 2-Chloroethyl vinyl ether	63	6.441	6.445	(1.230)	4657	100.000	57(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	678322	100.000	100
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	806536	100.000	93
$	58 Toluene-d8	98	6.715	6.715	(0.817)	711314	50.0000	49
	59 Toluene	91	6.782	6.782	(1.295)	1567063	100.000	93
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	695941	100.000	120
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	370933	100.000	99
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	350115	100.000	91
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	393323	100.000	92
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	640868	100.000	92
	65 2-Hexanone	43	7.432	7.435	(0.904)	522241	100.000	87
	66 Dibromochloromethane	129	7.592	7.593	(0.923)	516209	100.000	100
	67 1,2-Dibromoethane	107	7.724	7.728	(0.939)	407518	100.000	95
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	525995	100.000	96(Q)
*	68 Chlorobenzene-d5	117	8.223	8.220	(1.000)	601020	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	1024095	100.000	92
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	456105	100.000	95
	72 Ethylbenzene	106	8.370	8.367	(1.018)	525630	100.000	94
	73 m,p-Xylene	106	8.496	8.496	(1.033)	1330552	200.000	190
	74 o-Xylene	106	8.943	8.943	(1.088)	643114	100.000	99
	75 Styrene	104	8.956	8.959	(1.089)	1024873	100.000	97
	76 Bromoform	173	9.165	9.165	(1.115)	315804	100.000	100

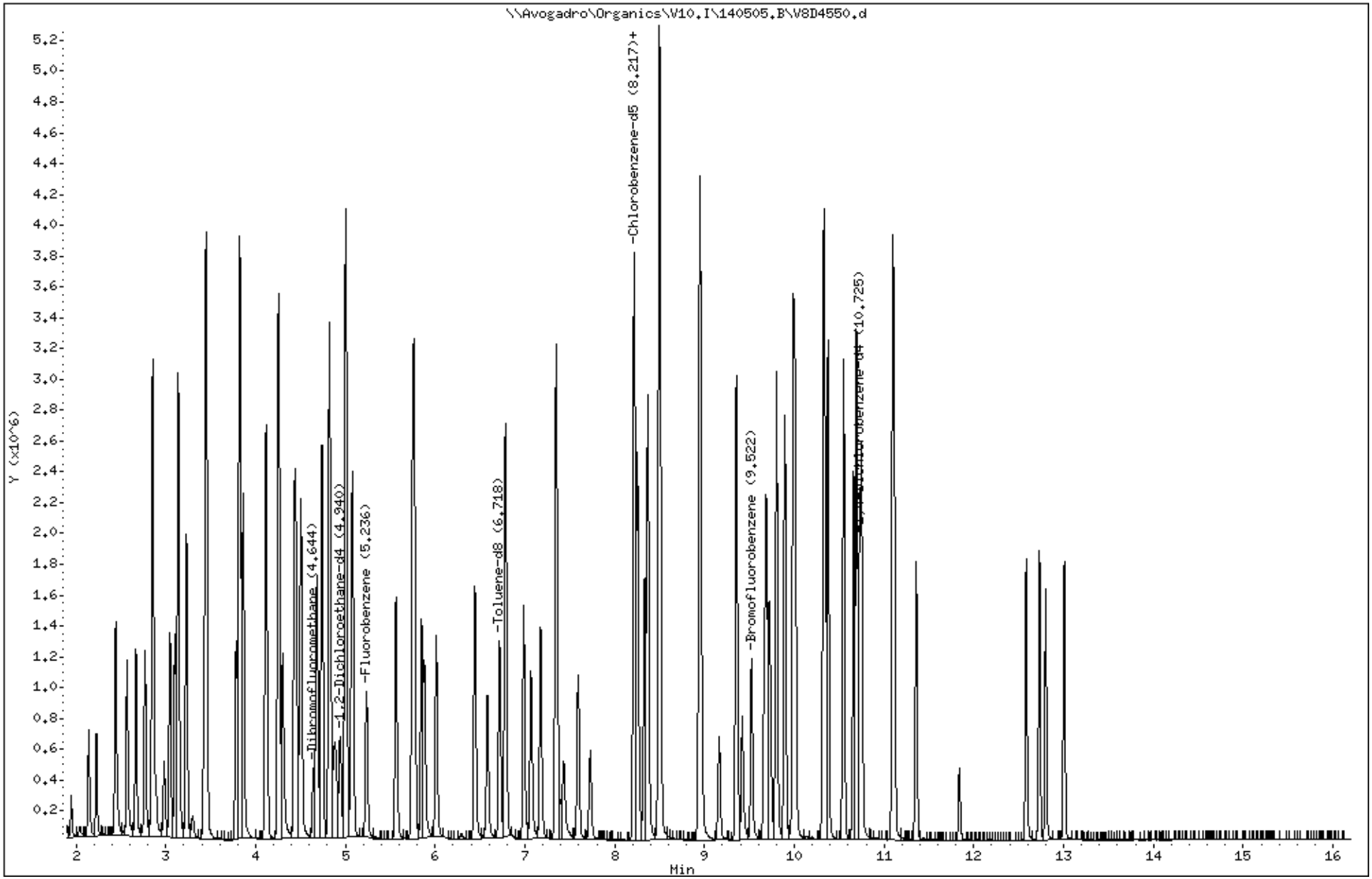
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Report Date: 07-May-2014 09:55

		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	9.355	(1.138)	1847460	100.000	99	
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	113792	100.000	110	
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	371026	50.0000	50	
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	472555	100.000	90	
	81	Bromobenzene	156	9.689	9.692	(0.903)	465202	100.000	89	
	82	1,2,3-Trichloropropane	75	9.721	9.718	(0.906)	593123	100.000	93	
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	429583	100.000	92	
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	393629	100.000	91	
	85	1,3,5-Trimethylbenzene	105	9.985	9.988	(0.931)	1577089	100.000	92	
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	403173	100.000	89	
M	94	Xylene (Total)	106				1973666	300.000	(a)	
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	1511353	100.000	90	
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	1589668	100.000	94	
	89	sec-Butylbenzene	105	10.547	10.551	(0.984)	1860378	100.000	94	
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	788468	100.000	93	
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	1568667	100.000	97	
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	336790	50.0000	(Q)	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	821847	100.000	91	
	95	n-Butylbenzene	91	11.094	11.094	(1.034)	1450885	100.000	100	
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	781107	100.000	95	
	97	Hexachloroethane	117	11.357	11.358	(1.059)	284086	100.000	100	
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.837	(1.104)	106576	100.000	110	
	141	1,3,5-Trichlorobenzene	182	12.582	12.586	(2.403)	440856	100.000	(a)	
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	457981	100.000	110	
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	315840	100.000	92	
	101	Naphthalene	128	12.801	12.801	(1.194)	977778	100.000	99	
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	430984	100.000	110	

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\140505.B\V8D4550.d
Date : 05-MAY-2014 15:12
Client ID: VSTD10010I
Instrument: V10.i
Sample Info: 5ML,VSTD10010I,VSTD10010I
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.: N0695 Mod. Ref No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date: 05/04/2014 Time: 3:14

Lab File ID: V8D4468.D Init. Calib. Date(s): 04/28/2014 04/28/2014

EPA Sample No.(VSTD#####) VSTD05010H Init. Calib. Time(s): 9:57 14:13

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	0.437	0.418	0.100	-4.2	20.0
Chloromethane	0.832	0.952	0.100	14.5	20.0
Vinyl chloride	0.561	0.592	0.100	5.5	20.0
Bromomethane	0.269	0.233	0.100	-13.6	20.0
Chloroethane	0.294	0.303	0.100	3.1	20.0
Trichlorofluoromethane	0.592	0.673	0.100	13.6	20.0
1,1-Dichloroethene	0.314	0.324	0.100	3.3	20.0
Acetone	0.062	0.044	0.100	-28.3	20.0
Iodomethane	0.291	0.393	0.100	35.0	20.0
Carbon disulfide	1.074	0.987	0.100	-8.1	20.0
Methylene chloride	0.341	0.342	0.100	0.2	20.0
trans-1,2-Dichloroethene	0.317	0.317	0.100	0.0	20.0
Methyl tert-butyl ether	1.122	1.127	0.100	0.4	20.0
1,1-Dichloroethane	0.847	0.888	0.200	4.9	20.0
Vinyl acetate	1.786	1.928	0.100	8.0	20.0
2-Butanone	0.038	0.031	0.100	-19.3	20.0
cis-1,2-Dichloroethene	0.337	0.339	0.100	0.6	20.0
2,2-Dichloropropane	0.573	0.543	0.100	-5.2	20.0
Bromochloromethane	0.163	0.174	0.100	7.2	20.0
Chloroform	0.707	0.796	0.200	12.5	20.0
1,1,1-Trichloroethane	0.690	0.790	0.100	14.6	20.0
1,1-Dichloropropene	0.144	0.158	0.100	9.1	20.0
Carbon tetrachloride	0.568	0.661	0.100	16.3	20.0
1,2-Dichloroethane	0.793	0.965	0.100	21.8	20.0
Benzene	1.175	1.202	0.500	2.3	20.0
Trichloroethene	0.318	0.333	0.200	4.6	20.0
1,2-Dichloropropane	0.437	0.437	0.100	0.2	20.0
Dibromomethane	0.223	0.244	0.100	9.6	20.0
Bromodichloromethane	0.545	0.594	0.200	9.1	20.0
cis-1,3-Dichloropropene	0.548	0.525	0.200	-4.1	20.0
4-Methyl-2-pentanone	0.551	0.559	0.100	1.5	20.0
Toluene	1.274	1.309	0.400	2.7	20.0
trans-1,3-Dichloropropene	0.518	0.506	0.100	-2.3	20.0
1,1,2-Trichloroethane	0.283	0.291	0.100	2.9	20.0
1,3-Dichloropropane	0.621	0.555	0.100	-10.5	20.0
Tetrachloroethene	0.382	0.342	0.200	-10.5	20.0
2-Hexanone	0.495	0.341	0.100	-31.1	20.0
Dibromochloromethane	0.450	0.430	0.100	-4.4	20.0
1,2-Dibromoethane	0.379	0.343	0.100	-9.6	20.0
Chlorobenzene	0.989	0.916	0.500	-7.4	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date: 05/04/2014 Time: 3:14

Lab File ID: V8D4468.D Init. Calib. Date(s): 04/28/2014 04/28/2014

EPA Sample No.(VSTD#####) VSTD05010H Init. Calib. Time(s): 9:57 14:13

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	0.412	0.392	0.100	-4.9	20.0
Ethylbenzene	0.527	0.473	0.100	-10.3	20.0
m,p-Xylene	0.645	0.585	0.100	-9.2	20.0
o-Xylene	0.611	0.576	0.300	-5.7	20.0
Xylene (Total)	0.633	0.582	0.100	-8.1	20.0
Styrene	0.972	0.901	0.300	-7.4	20.0
Bromoform	0.292	0.245	0.100	-16.1	20.0
Isopropylbenzene	1.712	1.615	0.100	-5.6	20.0
1,1,2,2-Tetrachloroethane	0.906	0.685	0.300	-24.4	20.0
Bromobenzene	0.890	0.757	0.100	-15.0	20.0
1,2,3-Trichloropropane	1.036	0.861	0.100	-16.8	20.0
n-Propylbenzene	0.807	0.694	0.100	-14.0	20.0
2-Chlorotoluene	0.754	0.632	0.100	-16.2	20.0
1,3,5-Trimethylbenzene	2.912	2.554	0.100	-12.3	20.0
4-Chlorotoluene	0.778	0.670	0.100	-13.8	20.0
tert-Butylbenzene	2.891	2.470	0.100	-14.6	20.0
1,2,4-Trimethylbenzene	2.902	2.571	0.100	-11.4	20.0
sec-Butylbenzene	3.390	2.968	0.100	-12.4	20.0
4-Isopropyltoluene	2.787	2.487	0.100	-10.8	20.0
1,3-Dichlorobenzene	1.430	1.261	0.600	-11.8	20.0
1,4-Dichlorobenzene	1.509	1.303	0.500	-13.7	20.0
n-Butylbenzene	2.431	2.166	0.100	-10.9	20.0
1,2-Dichlorobenzene	1.402	1.254	0.400	-10.6	20.0
1,2-Dibromo-3-chloropropane	0.166	0.138	0.050	-17.0	20.0
1,2,4-Trichlorobenzene	0.699	0.603	0.200	-13.8	20.0
Hexachlorobutadiene	0.595	0.483	0.100	-18.9	20.0
1,2,3-Trichlorobenzene	0.668	0.590	0.100	-11.7	20.0
Naphthalene	1.369	1.125	0.100	-17.8	20.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date: 05/04/2014 Time: 3:14

Lab File ID: V8D4468.D Init. Calib. Date(s): 04/28/2014 04/28/2014

EPA Sample No.(VSTD#####) VSTD05010H Init. Calib. Time(s): 9:57 14:13

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	0.310	0.362	0.100	16.8	20.0
1,2-Dichloroethane-d4	0.059	0.061	0.100	4.6	20.0
Toluene-d8	1.307	1.210	0.100	-7.4	20.0
Bromofluorobenzene	0.569	0.594	0.100	4.4	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date: 05/05/2014 Time: 16:35

Lab File ID: V8D4553.D Init. Calib. Date(s): 05/05/2014 05/05/2014

EPA Sample No.(VSTD#####) VSTD05010J Init. Calib. Time(s): 12:27 15:12

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	0.595	0.546	0.100	-8.2	20.0
Chloromethane	1.050	0.979	0.100	-6.8	20.0
Vinyl chloride	0.655	0.621	0.100	-5.2	20.0
Bromomethane	0.314	0.288	0.100	-8.5	20.0
Chloroethane	0.341	0.317	0.100	-6.9	20.0
Trichlorofluoromethane	0.851	0.805	0.100	-5.5	20.0
1,1-Dichloroethene	0.387	0.351	0.100	-9.3	20.0
Acetone	0.081	0.066	0.100	-18.1	20.0
Iodomethane	0.386	0.371	0.100	-3.8	20.0
Carbon disulfide	1.171	1.081	0.100	-7.7	20.0
Methylene chloride	0.367	0.341	0.100	-7.0	20.0
trans-1,2-Dichloroethene	0.343	0.326	0.100	-5.2	20.0
Methyl tert-butyl ether	1.252	1.229	0.100	-1.8	20.0
1,1-Dichloroethane	0.986	0.943	0.200	-4.4	20.0
Vinyl acetate	2.149	2.114	0.100	-1.7	20.0
2-Butanone	0.044	0.038	0.100	-13.7	20.0
cis-1,2-Dichloroethene	0.355	0.348	0.100	-1.8	20.0
2,2-Dichloropropane	0.701	0.732	0.100	4.4	20.0
Bromochloromethane	0.182	0.176	0.100	-3.0	20.0
Chloroform	0.866	0.858	0.200	-0.9	20.0
1,1,1-Trichloroethane	0.883	0.866	0.100	-2.0	20.0
1,1-Dichloropropene	0.170	0.164	0.100	-3.6	20.0
Carbon tetrachloride	0.743	0.748	0.100	0.7	20.0
1,2-Dichloroethane	1.106	1.073	0.100	-3.0	20.0
Benzene	1.261	1.245	0.500	-1.3	20.0
Trichloroethene	0.355	0.343	0.200	-3.4	20.0
1,2-Dichloropropane	0.458	0.455	0.100	-0.7	20.0
Dibromomethane	0.272	0.267	0.100	-1.9	20.0
Bromodichloromethane	0.628	0.642	0.200	2.2	20.0
cis-1,3-Dichloropropene	0.551	0.569	0.200	3.4	20.0
4-Methyl-2-pentanone	0.698	0.698	0.100	0.0	20.0
Toluene	1.379	1.337	0.400	-3.0	20.0
trans-1,3-Dichloropropene	0.547	0.565	0.100	3.3	20.0
1,1,2-Trichloroethane	0.306	0.300	0.100	-1.7	20.0
1,3-Dichloropropane	0.580	0.566	0.100	-2.5	20.0
Tetrachloroethene	0.358	0.349	0.200	-2.5	20.0
2-Hexanone	0.497	0.423	0.100	-14.8	20.0
Dibromochloromethane	0.441	0.440	0.100	-0.3	20.0
1,2-Dibromoethane	0.355	0.344	0.100	-3.1	20.0
Chlorobenzene	0.916	0.909	0.500	-0.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date: 05/05/2014 Time: 16:35

Lab File ID: V8D4553.D Init. Calib. Date(s): 05/05/2014 05/05/2014

EPA Sample No.(VSTD#####) VSTD05010J Init. Calib. Time(s): 12:27 15:12

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	0.414	0.405	0.100	-2.3	20.0
Ethylbenzene	0.467	0.467	0.100	-0.1	20.0
m,p-Xylene	0.579	0.581	0.100	0.4	20.0
o-Xylene	0.546	0.559	0.300	2.5	20.0
Xylene (Total)	0.568	0.574	0.100	1.1	20.0
Styrene	0.847	0.876	0.300	3.4	20.0
Bromoform	0.261	0.265	0.100	1.4	20.0
Isopropylbenzene	1.559	1.604	0.100	2.9	20.0
1,1,2,2-Tetrachloroethane	0.786	0.735	0.300	-6.5	20.0
Bromobenzene	0.816	0.724	0.100	-11.3	20.0
1,2,3-Trichloropropane	1.027	0.913	0.100	-11.1	20.0
n-Propylbenzene	0.690	0.675	0.100	-2.3	20.0
2-Chlorotoluene	0.670	0.630	0.100	-6.0	20.0
1,3,5-Trimethylbenzene	2.583	2.501	0.100	-3.2	20.0
4-Chlorotoluene	0.665	0.633	0.100	-4.8	20.0
tert-Butylbenzene	2.610	2.373	0.100	-9.1	20.0
1,2,4-Trimethylbenzene	2.579	2.467	0.100	-4.3	20.0
sec-Butylbenzene	3.042	2.848	0.100	-6.4	20.0
4-Isopropyltoluene	2.498	2.386	0.100	-4.5	20.0
1,3-Dichlorobenzene	1.261	1.221	0.600	-3.2	20.0
1,4-Dichlorobenzene	1.414	1.259	0.500	-10.9	20.0
n-Butylbenzene	2.210	2.126	0.100	-3.8	20.0
1,2-Dichlorobenzene	1.221	1.192	0.400	-2.4	20.0
1,2-Dibromo-3-chloropropane	0.150	0.153	0.050	1.7	20.0
1,2,4-Trichlorobenzene	0.645	0.563	0.200	-12.7	20.0
Hexachlorobutadiene	0.558	0.474	0.100	-15.0	20.0
1,2,3-Trichlorobenzene	0.623	0.565	0.100	-9.3	20.0
Naphthalene	1.466	1.094	0.100	-25.4	20.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Instrument ID: V10 Calibration Date: 05/05/2014 Time: 16:35

Lab File ID: V8D4553.D Init. Calib. Date(s): 05/05/2014 05/05/2014

EPA Sample No.(VSTD#####) VSTD05010J Init. Calib. Time(s): 12:27 15:12

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	0.370	0.380	0.100	2.8	20.0
1,2-Dichloroethane-d4	0.063	0.065	0.100	2.3	20.0
Toluene-d8	1.196	1.183	0.100	-1.1	20.0
Bromofluorobenzene	0.611	0.628	0.100	2.7	20.0

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4468.d
Report Date: 07-May-2014 10:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4468.d
Lab Smp Id: VSTD05010H Client Smp ID: VSTD05010H
Inj Date : 04-MAY-2014 03:14
Operator : MMS SRC: MMS Inst ID: V10.i
Smp Info : 5ML,VSTD05010H,VSTD05010H
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 54 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)	289369	50.0000	48
2	Freon114	85	1.705	1.705	(0.326)	156438	50.0000	43
3	Chloromethane	50	1.753	1.753	(0.335)	658388	50.0000	57
4	Vinyl Chloride	62	1.856	1.856	(0.355)	409647	50.0000	53
5	Bromomethane	94	2.142	2.142	(0.409)	161005	50.0000	49
6	Chloroethane	64	2.229	2.229	(0.426)	209750	50.0000	54
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	465172	50.0000	57
126	Ethanol	46	2.567	2.567	(0.490)	169052	5000.00	5100(A)
8	Ether	59	2.667	2.667	(0.509)	308921	50.0000	52
9	Acrolein	56	2.769	2.769	(0.529)	363587	250.000	240
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	224138	50.0000	52
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	216130	50.0000	49
12	Acetone	58	2.888	2.888	(0.552)	30561	50.0000	36
13	Iodomethane	142	2.985	2.985	(0.570)	271695	50.0000	68
14	Carbon Disulfide	76	3.046	3.046	(0.582)	682662	50.0000	50
15	Acetonitrile	41	3.139	3.139	(0.600)	851873	500.000	520(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	604656	50.0000	57
17	Methyl Acetate	43	3.146	3.146	(0.601)	467063	50.0000	54
18	Methylene Chloride	84	3.229	3.229	(0.617)	236530	50.0000	54
19	tert-Butanol	59	3.297	3.297	(0.630)	63833	100.000	88
20	Acrylonitrile	53	3.422	3.422	(0.654)	161711	50.0000	49
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	218989	50.0000	53

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4468.d
Report Date: 07-May-2014 10:23

	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)	779572	50.0000	50
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	614082	50.0000	52
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1333410	50.0000	54
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1705651	50.0000	56
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	725234	50.0000	58
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1186167	50.0000	52
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	375308	50.0000	47
	28 cis-1,2-Dichloroethene	96	4.252	4.252	(0.812)	234221	50.0000	50
	30 2-Butanone	72	4.265	4.265	(0.815)	21321	50.0000	40
	32 Propionitrile	54	4.303	4.303	(0.822)	530735	500.000	510(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	542949	100.000	110
	34 Bromochloromethane	128	4.451	4.451	(0.850)	120469	50.0000	54
	31 Tetrahydrofuran	72	4.502	4.502	(0.860)	46391	100.000	93
	35 Chloroform	83	4.509	4.509	(0.861)	550270	50.0000	56
$	36 Dibromofluoromethane	113	4.647	4.647	(0.888)	250167	50.0000	58
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	546295	50.0000	57
	38 Cyclohexane	56	4.740	4.740	(0.905)	570678	50.0000	48
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	108907	50.0000	54
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	457063	50.0000	58
	41 Isobutyl Alcohol	43	4.885	4.885	(0.933)	294938	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	42454	50.0000	52
	43 Benzene	78	5.004	5.004	(0.956)	830901	50.0000	51
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	667553	50.0000	61
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	684895	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				453210	100.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	691455	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	229949	50.0000	52
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	277886	50.0000	42
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	302477	50.0000	51
	51 Methyl Methacrylate	69	5.853	5.853	(1.118)	160784	50.0000	54
	52 Dibromomethane	93	5.879	5.879	(1.123)	168925	50.0000	55
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	39815	1000.00	980(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	410889	50.0000	54
	55 2-Chloroethyl vinyl ether	63	6.445	6.445	(1.231)	2454	50.0000	38(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	363135	50.0000	48
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	386577	50.0000	51
$	58 Toluene-d8	98	6.715	6.715	(0.817)	782437	50.0000	46
	59 Toluene	91	6.782	6.782	(1.295)	905029	50.0000	51
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	349767	50.0000	49
	61 Ethyl Methacrylate	69	7.071	7.071	(1.351)	190895	50.0000	46
	62 1,1,2-Trichloroethane	97	7.178	7.178	(1.371)	201178	50.0000	51
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	221170	50.0000	45
	64 1,3-Dichloropropane	76	7.354	7.354	(0.894)	359078	50.0000	45
	65 2-Hexanone	43	7.438	7.438	(0.905)	220573	50.0000	34
	66 Dibromochloromethane	129	7.592	7.592	(0.923)	278074	50.0000	48
	67 1,2-Dibromoethane	107	7.727	7.727	(0.940)	221612	50.0000	45
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	279262	50.0000	41
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	646519	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	592499	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	253410	50.0000	48
	72 Ethylbenzene	106	8.370	8.370	(1.018)	305524	50.0000	45
	73 m,p-Xylene	106	8.499	8.499	(1.034)	756820	100.000	91
	74 o-Xylene	106	8.943	8.943	(1.088)	372184	50.0000	47
	75 Styrene	104	8.959	8.959	(1.090)	582275	50.0000	45

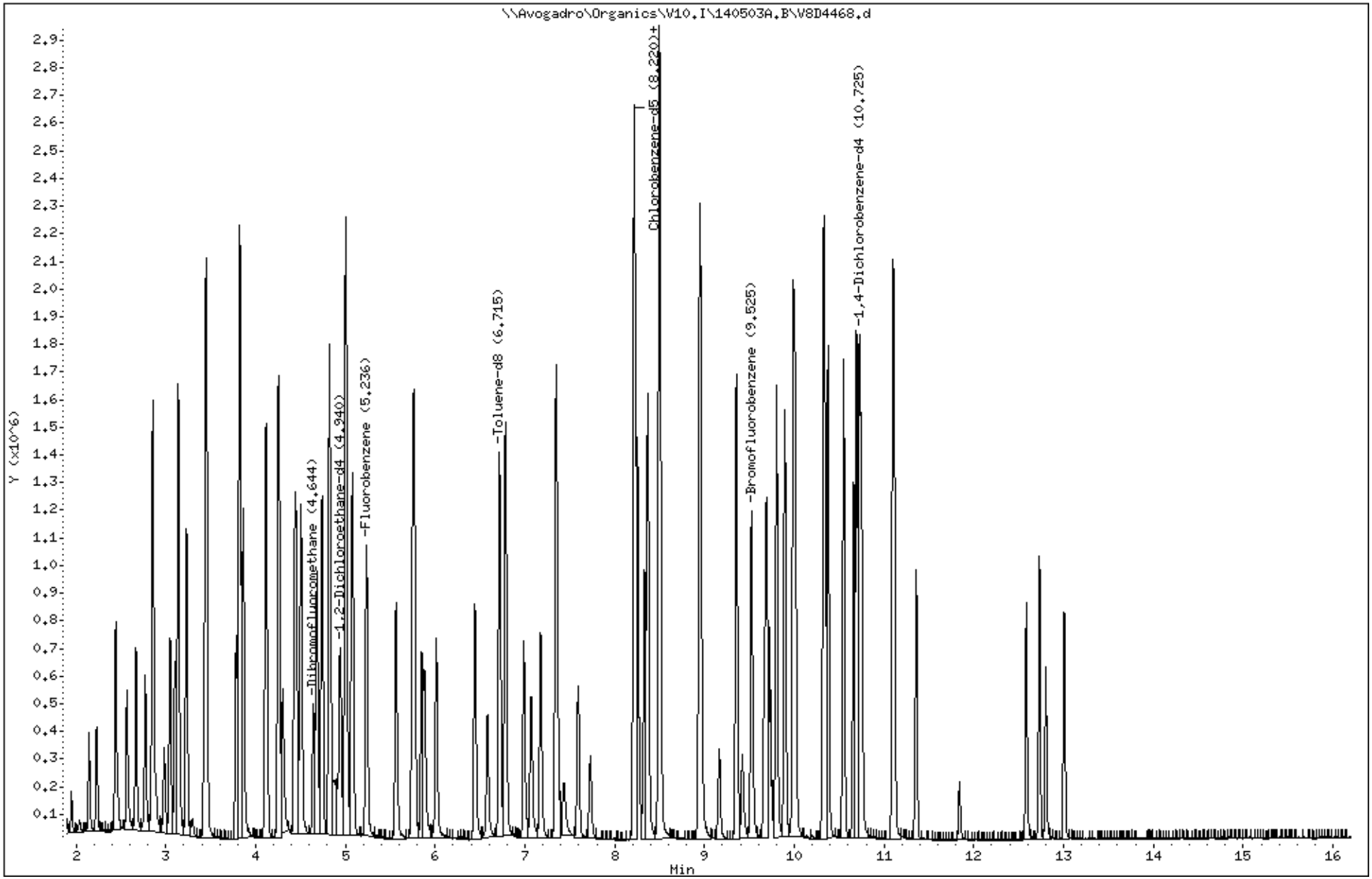
Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4468.d
Report Date: 07-May-2014 10:23

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76	Bromoform	173	9.161	9.161	(1.114)	158429	50.0000	42
	77	Isopropylbenzene	105	9.354	9.354	(1.138)	1044216	50.0000	47
	78	trans-1,4-Dichloro-2-butene	75	9.425	9.425	(1.146)	44214	50.0000	33(Q)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	384055	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	240539	50.0000	38
	81	Bromobenzene	156	9.692	9.692	(0.904)	265585	50.0000	42
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	302234	50.0000	42
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	243710	50.0000	43
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	221808	50.0000	42
	85	1,3,5-Trimethylbenzene	105	9.985	9.985	(0.931)	896185	50.0000	45
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	235092	50.0000	43
M	94	Xylene (Total)	106				1129004	150.000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	866815	50.0000	43
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	902374	50.0000	44
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	1041516	50.0000	44
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	442621	50.0000	44
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	872583	50.0000	45
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	350922	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	457213	50.0000	43
	95	n-Butylbenzene	91	11.094	11.094	(1.034)	760174	50.0000	44
	96	1,2-Dichlorobenzene	146	11.110	11.110	(1.036)	440096	50.0000	45
	97	Hexachloroethane	117	11.357	11.357	(1.059)	147949	50.0000	38
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	48317	50.0000	41
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	205333	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	211486	50.0000	37
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	169372	50.0000	43
	101	Naphthalene	128	12.804	12.804	(1.194)	394824	50.0000	38
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	207076	50.0000	39

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\140503A.B\V8D4468.d
Date : 04-MAY-2014 03:14
Client ID: VSTD05010H
Instrument: V10.i
Sample Info: 5ML,VSTD05010H,VSTD05010H
Purge Volume: 5.0
Operator: MMS SRC: MMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4553.d
Report Date: 07-May-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4553.d
Lab Smp Id: VSTD05010J Client Smp ID: VSTD05010J
Inj Date : 05-MAY-2014 16:35
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010J,VSTD05010J
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 14 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)	321002	50.0000	46
2	Freon114	85	1.705	1.705	(0.326)	183834	50.0000	47
3	Chloromethane	50	1.753	1.753	(0.335)	575586	50.0000	47
4	Vinyl Chloride	62	1.856	1.856	(0.355)	365256	50.0000	47
5	Bromomethane	94	2.143	2.143	(0.410)	169163	50.0000	55
6	Chloroethane	64	2.229	2.226	(0.426)	186720	50.0000	46
7	Trichlorofluoromethane	101	2.442	2.442	(0.467)	473253	50.0000	47
126	Ethanol	46	2.567	2.570	(0.491)	182597	5000.00	4700(AQ)
8	Ether	59	2.667	2.667	(0.510)	285811	50.0000	48(Q)
9	Acrolein	56	2.769	2.770	(0.529)	365422	250.000	240
10	1,1-Dichloroethene	96	2.856	2.853	(0.546)	206381	50.0000	49
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	238975	50.0000	46
12	Acetone	58	2.885	2.888	(0.551)	38850	50.0000	41
13	Iodomethane	142	2.982	2.982	(0.570)	218298	50.0000	48
14	Carbon Disulfide	76	3.046	3.046	(0.582)	635948	50.0000	49
15	Acetonitrile	41	3.136	3.136	(0.599)	838100	500.000	510(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	600934	50.0000	51
17	Methyl Acetate	43	3.146	3.146	(0.601)	479651	50.0000	48
18	Methylene Chloride	84	3.229	3.229	(0.617)	200614	50.0000	50
19	tert-Butanol	59	3.300	3.297	(0.631)	68075	100.000	96
20	Acrylonitrile	53	3.425	3.422	(0.655)	158916	50.0000	46
21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.660)	191552	50.0000	47

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4553.d
Report Date: 07-May-2014 09:51

	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	3.445	3.445	(0.658)	722997	50.0000	49
	23 1,1-Dichloroethane	63	3.786	3.786	(0.724)	554498	50.0000	48
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1243266	50.0000	49
	25 Diisopropyl Ether	45	3.824	3.824	(0.731)	1572508	50.0000	51
	26 2-Chloro-1,3-Butadiene	53	3.859	3.863	(0.738)	686715	50.0000	50
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.787)	1066733	50.0000	50
	29 2,2-Dichloropropane	77	4.261	4.261	(0.814)	430499	50.0000	52
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	204891	50.0000	49(Q)
	30 2-Butanone	72	4.258	4.258	(0.814)	22193	50.0000	43(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	534505	500.000	500(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.848)	541843	100.000	100
	34 Bromochloromethane	128	4.451	4.454	(0.851)	103730	50.0000	48
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	44219	100.000	93(Q)
	35 Chloroform	83	4.506	4.509	(0.861)	504826	50.0000	50
$	36 Dibromofluoromethane	113	4.641	4.644	(0.887)	223731	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.895)	509420	50.0000	49
	38 Cyclohexane	56	4.740	4.740	(0.906)	580669	50.0000	49
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	96345	50.0000	48
	40 Carbon Tetrachloride	117	4.831	4.827	(0.923)	440238	50.0000	50
	41 Isobutyl Alcohol	43	4.876	4.879	(0.932)	20715	1000.00	270(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.945)	38104	50.0000	51
	43 Benzene	78	5.004	5.004	(0.956)	731995	50.0000	49
	44 1,2-Dichloroethane	62	5.007	5.007	(0.957)	631041	50.0000	48
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.971)	613342	50.0000	49
M	50 1,2-Dichloroethene (Total)	96				396443	100.000	96
*	46 Fluorobenzene	96	5.232	5.236	(1.000)	588161	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	201692	50.0000	48
	48 Methylcyclohexane	83	5.750	5.753	(1.099)	298547	50.0000	49
	49 1,2-Dichloropropane	63	5.769	5.769	(1.103)	267690	50.0000	50
	51 Methyl Methacrylate	69	5.853	5.850	(1.119)	151216	50.0000	49
	52 Dibromomethane	93	5.879	5.882	(1.123)	157190	50.0000	49
	53 1,4-Dioxane	88	5.885	5.885	(1.125)	41104	1000.00	970(A)
	54 Bromodichloromethane	83	6.014	6.011	(1.149)	377640	50.0000	51
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.232)	1725	50.0000	33(TQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.232)	334868	50.0000	52
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.258)	410350	50.0000	50
$	58 Toluene-d8	98	6.718	6.718	(0.817)	681115	50.0000	49
	59 Toluene	91	6.782	6.782	(1.296)	786322	50.0000	48
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	332594	50.0000	52
	61 Ethyl Methacrylate	69	7.068	7.068	(1.351)	181414	50.0000	51
	62 1,1,2-Trichloroethane	97	7.174	7.174	(1.371)	176702	50.0000	49
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	200652	50.0000	49
	64 1,3-Dichloropropane	76	7.355	7.351	(0.894)	325565	50.0000	49
	65 2-Hexanone	43	7.432	7.435	(0.904)	243605	50.0000	42
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	253354	50.0000	50
	67 1,2-Dibromoethane	107	7.731	7.728	(0.940)	198096	50.0000	48
	69 1-Chlorohexane	91	8.213	8.213	(0.999)	259508	50.0000	48
*	68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	575691	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	523235	50.0000	50
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	233030	50.0000	49
	72 Ethylbenzene	106	8.371	8.371	(1.018)	268733	50.0000	50
	73 m,p-Xylene	106	8.499	8.496	(1.034)	668649	100.000	100
	74 o-Xylene	106	8.943	8.946	(1.088)	322052	50.0000	51
	75 Styrene	104	8.962	8.959	(1.090)	504260	50.0000	50

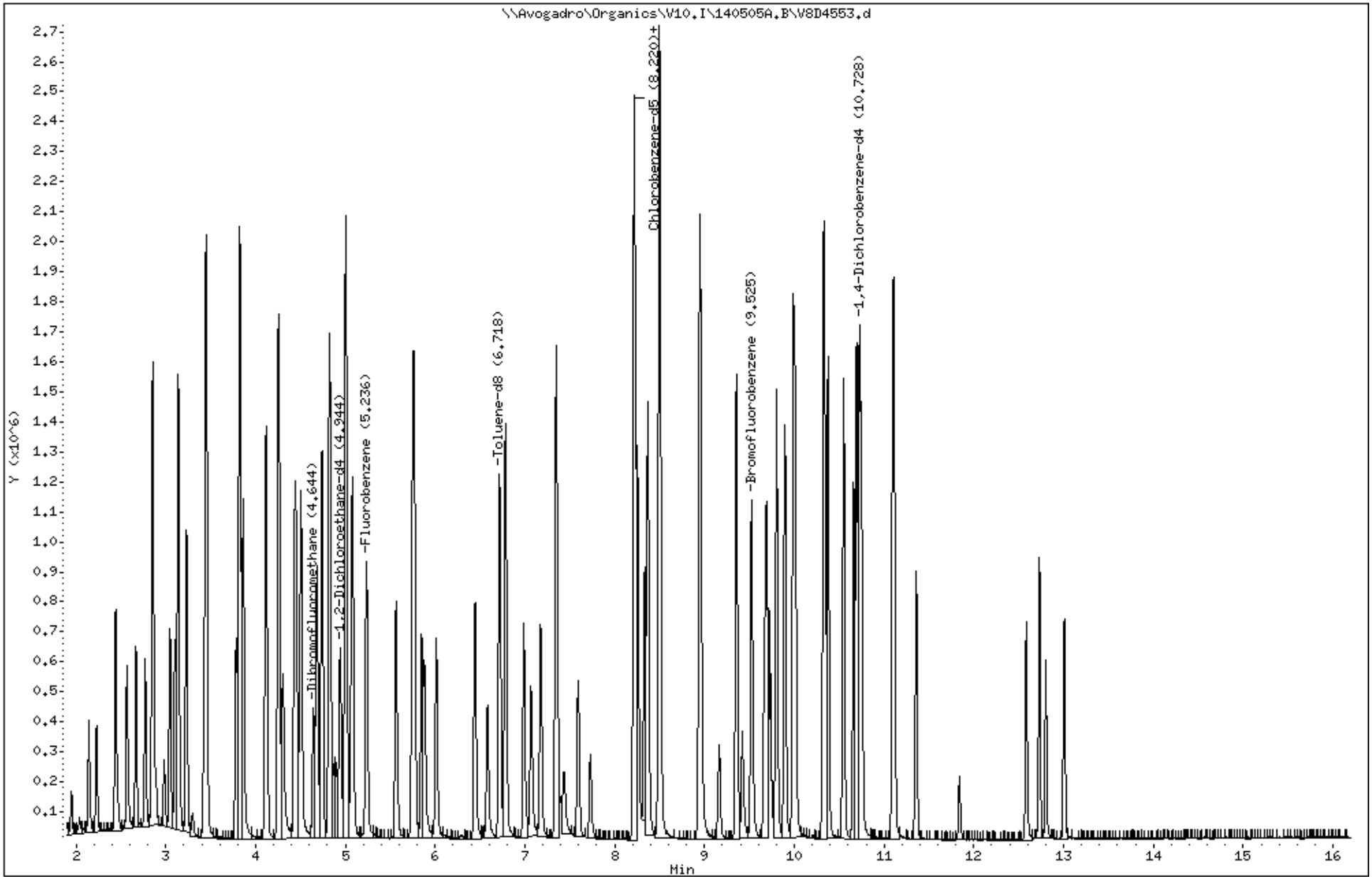
Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4553.d
Report Date: 07-May-2014 09:51

		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)	152583	50.0000	51
	77	Isopropylbenzene	105	9.354	9.354	(1.138)	923456	50.0000	51
	78	trans-1,4-Dichloro-2-butene	75	9.425	9.422	(1.146)	47636	50.0000	48(Q)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	361456	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.663	(0.901)	236527	50.0000	47
	81	Bromobenzene	156	9.692	9.689	(0.903)	233012	50.0000	49
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	293794	50.0000	48
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	217104	50.0000	49
	84	2-Chlorotoluene	126	9.895	9.898	(0.922)	202611	50.0000	47
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	805024	50.0000	49
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	203755	50.0000	48
M	94	Xylene (Total)	106				990701	150.000	150
	87	tert-Butylbenzene	119	10.325	10.329	(0.963)	763615	50.0000	45
	88	1,2,4-Trimethylbenzene	105	10.377	10.374	(0.967)	794118	50.0000	48
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	916648	50.0000	47
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	393104	50.0000	48
	91	4-Isopropyltoluene	119	10.695	10.692	(0.997)	768043	50.0000	48
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	321854	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	405275	50.0000	49
	95	n-Butylbenzene	91	11.094	11.094	(1.034)	684118	50.0000	48
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	383761	50.0000	49
	97	Hexachloroethane	117	11.361	11.358	(1.059)	135271	50.0000	47
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.843	(1.104)	49265	50.0000	51(Q)
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.405)	173992	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.583	(1.173)	181325	50.0000	44
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	152586	50.0000	48
	101	Naphthalene	128	12.801	12.801	(1.193)	352110	50.0000	39
	102	1,2,3-Trichlorobenzene	180	13.004	13.007	(1.212)	181730	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).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4553.d
Date : 05-MAY-2014 16:35
Client ID: VSTD05010J
Instrument: V10.i
Sample Info: 5ML,VSTD05010J,VSTD05010J
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\140428.B\V8D4262.d
Lab Smp Id: BFB10Z Client Smp ID: BFB10Z
Inj Date : 28-APR-2014 09:29
Operator : ALM SRC: ALM Inst ID: V10.i
Smp Info : 5ML,BFB10Z,BFB10Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140428.B\BFBSOM_V10.m
Meth Date : 01-May-2014 13:44 mscarpaci Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 8 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	55913			0.00- 100.00	100.00
4.438	4.800	(0.000)	50	18609			15.00- 40.00	33.28
4.438	4.800	(0.000)	75	31401			30.00- 80.00	56.16
4.438	4.800	(0.000)	96	3466			5.00- 9.00	6.20
4.438	4.800	(0.000)	173	262			0.00- 2.00	0.52
4.438	4.800	(0.000)	174	50168			50.00- 120.00	89.73
4.438	4.800	(0.000)	175	3945			5.00- 9.00	7.86
4.438	4.800	(0.000)	176	49401			95.00- 101.00	98.47
4.438	4.800	(0.000)	177	3288			5.00- 9.00	6.66

Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4262.d

Date : 28-APR-2014 09:29

Client ID: BFB10Z

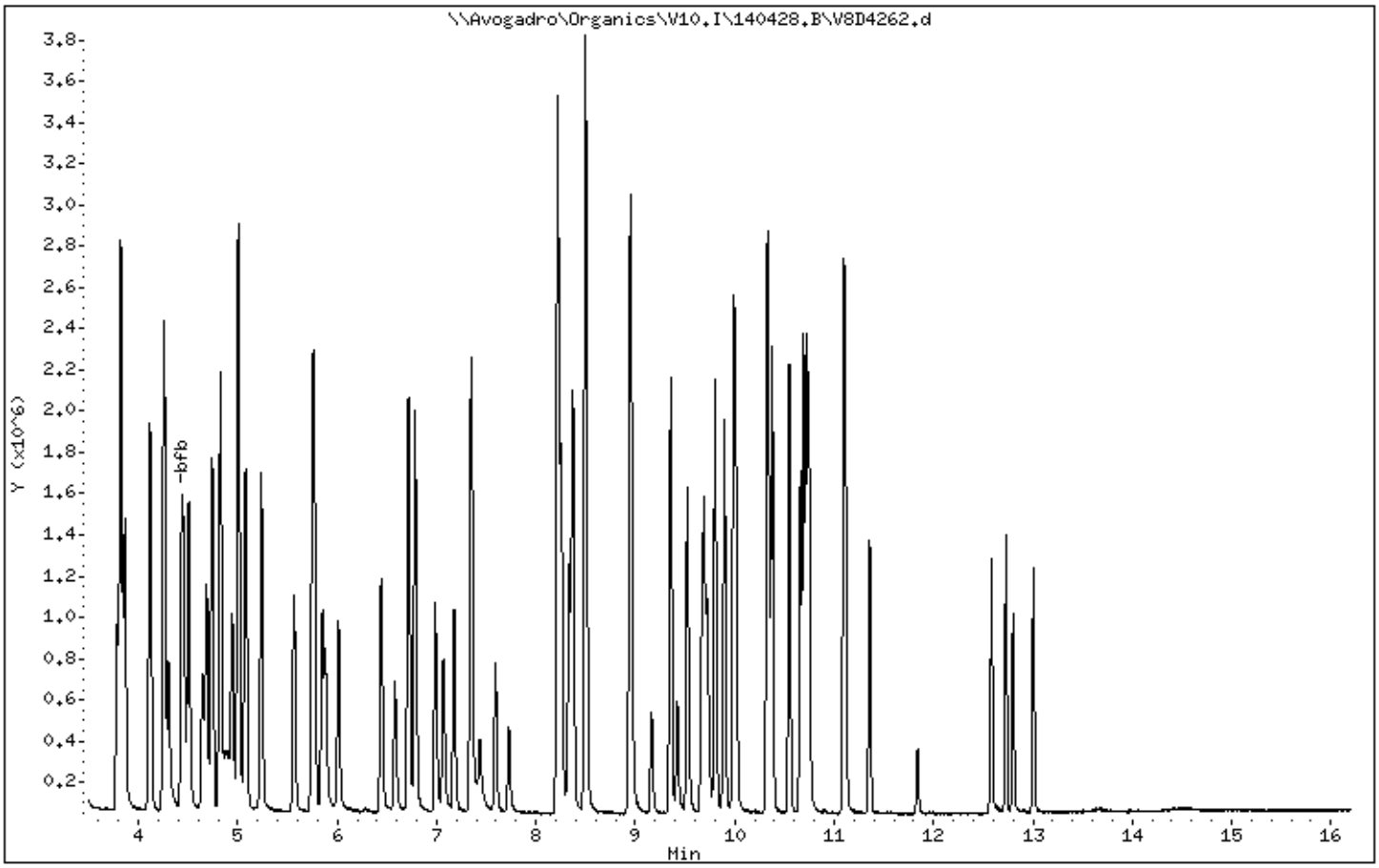
Instrument: V10.i

Sample Info: 5ML,BFB10Z,BFB10Z

Operator: ALM SRC: ALM

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140428.B\V8D4262.d

Date : 28-APR-2014 09:29

Client ID: BFB10Z

Instrument: V10.i

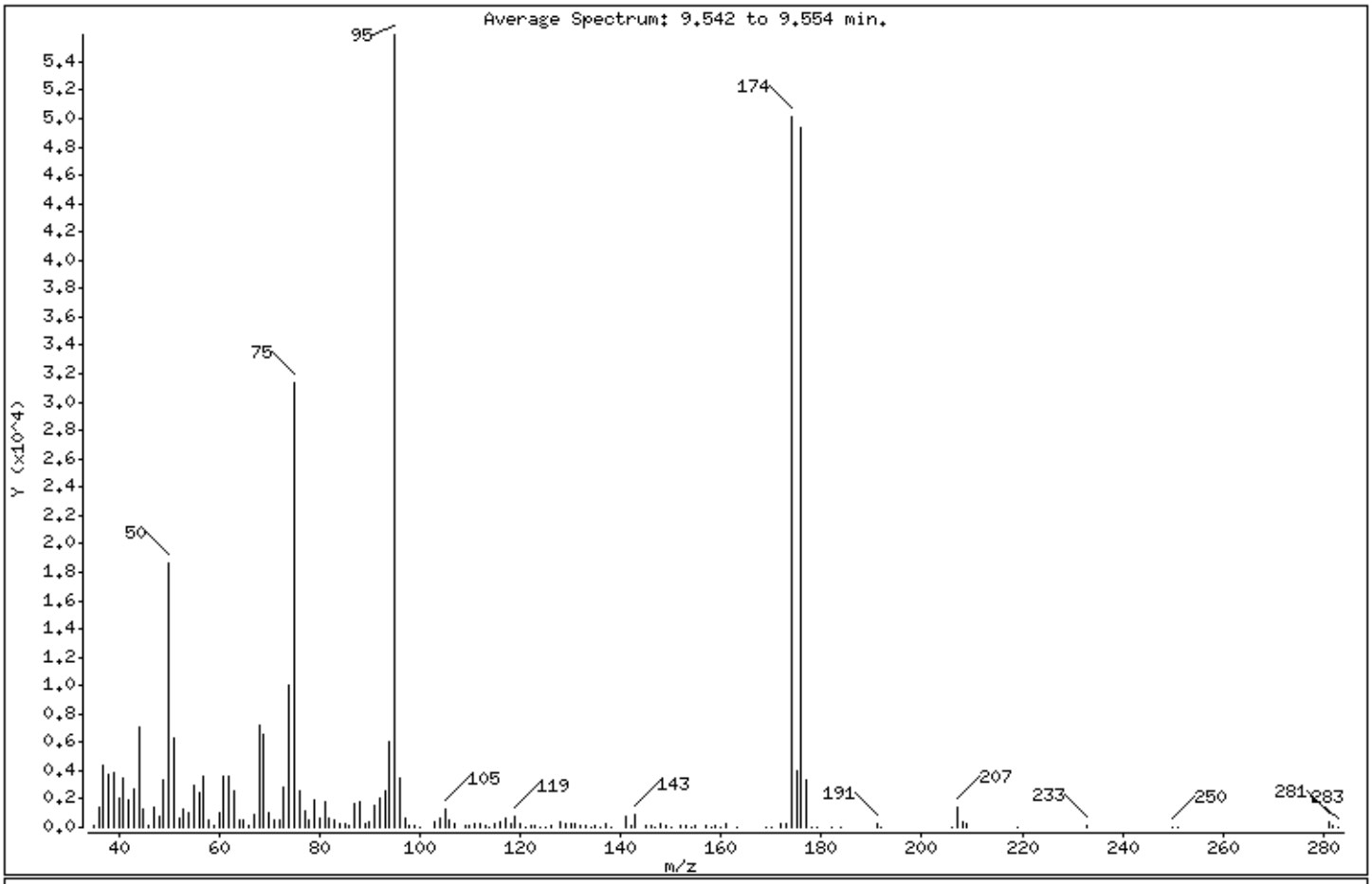
Sample Info: 5ML,BFB10Z,BFB10Z

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	33.28
75	30.00 - 80.00% of mass 95	56.16
96	5.00 - 9.00% of mass 95	6.20
173	Less than 2.00% of mass 174	0.47 (0.52)
174	50.00 - 120.00% of mass 95	89.73
175	5.00 - 9.00% of mass 174	7.06 (7.86)
176	95.00 - 101.00% of mass 174	88.35 (98.47)
177	5.00 - 9.00% of mass 176	5.88 (6.66)

Date : 28-APR-2014 09:29

Client ID: BFB10Z Instrument: V10.i

Sample Info: 5ML,BFB10Z,BFB10Z

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V8D4262.d
Spectrum: Average Spectrum: 9.542 to 9.554 min.
Location of Maximum: 95.00
Number of points: 144

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	125	72.00	477	112.00	239	154.00	31
36.00	1429	73.00	2791	113.00	95	155.00	97
37.00	4372	74.00	10085	114.00	34	157.00	118
38.00	3718	75.00	31400	115.00	251	158.00	20
39.00	3877	76.00	2563	116.00	405	159.00	71
40.00	2086	77.00	1113	117.00	684	160.00	34
41.00	3502	78.00	533	118.00	239	161.00	251
42.00	1895	79.00	1906	119.00	735	163.00	51
43.00	2689	80.00	664	120.00	207	169.00	50
44.00	7109	81.00	1831	121.00	60	170.00	63
45.00	1348	82.00	610	122.00	88	172.00	195
46.00	177	83.00	527	123.00	70	173.00	262
47.00	1396	84.00	237	124.00	20	174.00	50168
48.00	826	85.00	261	125.00	21	175.00	3945
49.00	3381	86.00	70	126.00	186	176.00	49400
50.00	18608	87.00	1732	128.00	390	177.00	3288
51.00	6321	88.00	1798	129.00	282	178.00	59
52.00	700	89.00	261	130.00	289	179.00	20
53.00	1286	90.00	331	131.00	298	182.00	32
54.00	987	91.00	1596	132.00	116	184.00	43
55.00	2954	92.00	2018	133.00	175	191.00	286
56.00	2381	93.00	2623	134.00	35	192.00	27
57.00	3600	94.00	6032	135.00	152	206.00	21
58.00	513	95.00	55912	136.00	53	207.00	1362
59.00	89	96.00	3466	137.00	225	208.00	389
60.00	1081	97.00	646	138.00	24	209.00	296
61.00	3604	98.00	126	141.00	740	219.00	37
62.00	3543	99.00	79	142.00	97	233.00	68
63.00	2561	100.00	27	143.00	849	250.00	22
64.00	566	103.00	389	145.00	70	251.00	22
65.00	464	104.00	652	146.00	127	281.00	399
66.00	147	105.00	1252	147.00	20	282.00	113
67.00	938	106.00	454	148.00	289	283.00	22
68.00	7173	107.00	305	149.00	70		
69.00	6504	109.00	154	150.00	59		

Date : 28-APR-2014 09:29

Client ID: BFB10Z Instrument: V10.i

Sample Info: 5ML,BFB10Z,BFB10Z

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V8D4262.d
Spectrum: Average Spectrum: 9.542 to 9.554 min.
Location of Maximum: 95.00
Number of points: 144

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	1034	110.00	111	152.00	89		
71.00	535	111.00	298	153.00	68		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4466.d
Lab Smp Id: BFB10H Client Smp ID: BFB10H
Inj Date : 04-MAY-2014 02:20
Operator : MMS SRC: MMS Inst ID: V10.i
Smp Info : 5ML,BFB10H,BFB10H
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140503A.B\BFBSOM_V10.m
Meth Date : 07-May-2014 10:21 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		
9.525	9.600	(0.000)	95	166208			0.00- 100.00	100.00
9.525	9.600	(0.000)	50	63904			15.00- 40.00	38.45
9.525	9.600	(0.000)	75	101008			30.00- 80.00	60.77
9.525	9.600	(0.000)	96	11396			5.00- 9.00	6.86
9.525	9.600	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.525	9.600	(0.000)	174	128264			50.00- 120.00	77.17
9.525	9.600	(0.000)	175	11509			5.00- 9.00	8.97
9.525	9.600	(0.000)	176	127584			95.00- 101.00	99.47
9.525	9.600	(0.000)	177	10887			5.00- 9.00	8.53

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4466.d

Date : 04-MAY-2014 02:20

Client ID: BFB10H

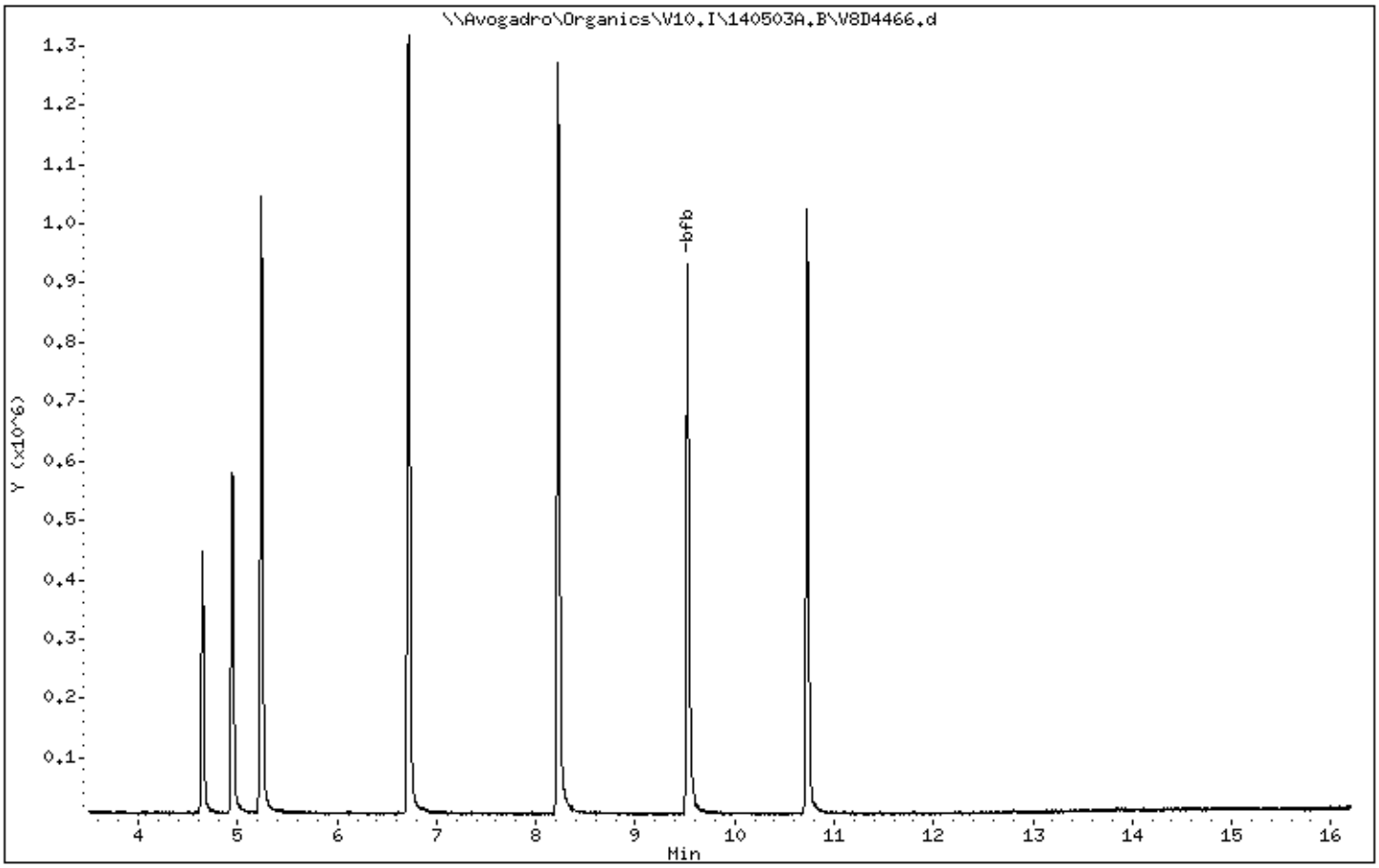
Instrument: V10.i

Sample Info: 5ML,BFB10H,BFB10H

Operator: MMS SRC: MMS

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4466.d

Date : 04-MAY-2014 02:20

Client ID: BFB10H

Instrument: V10.i

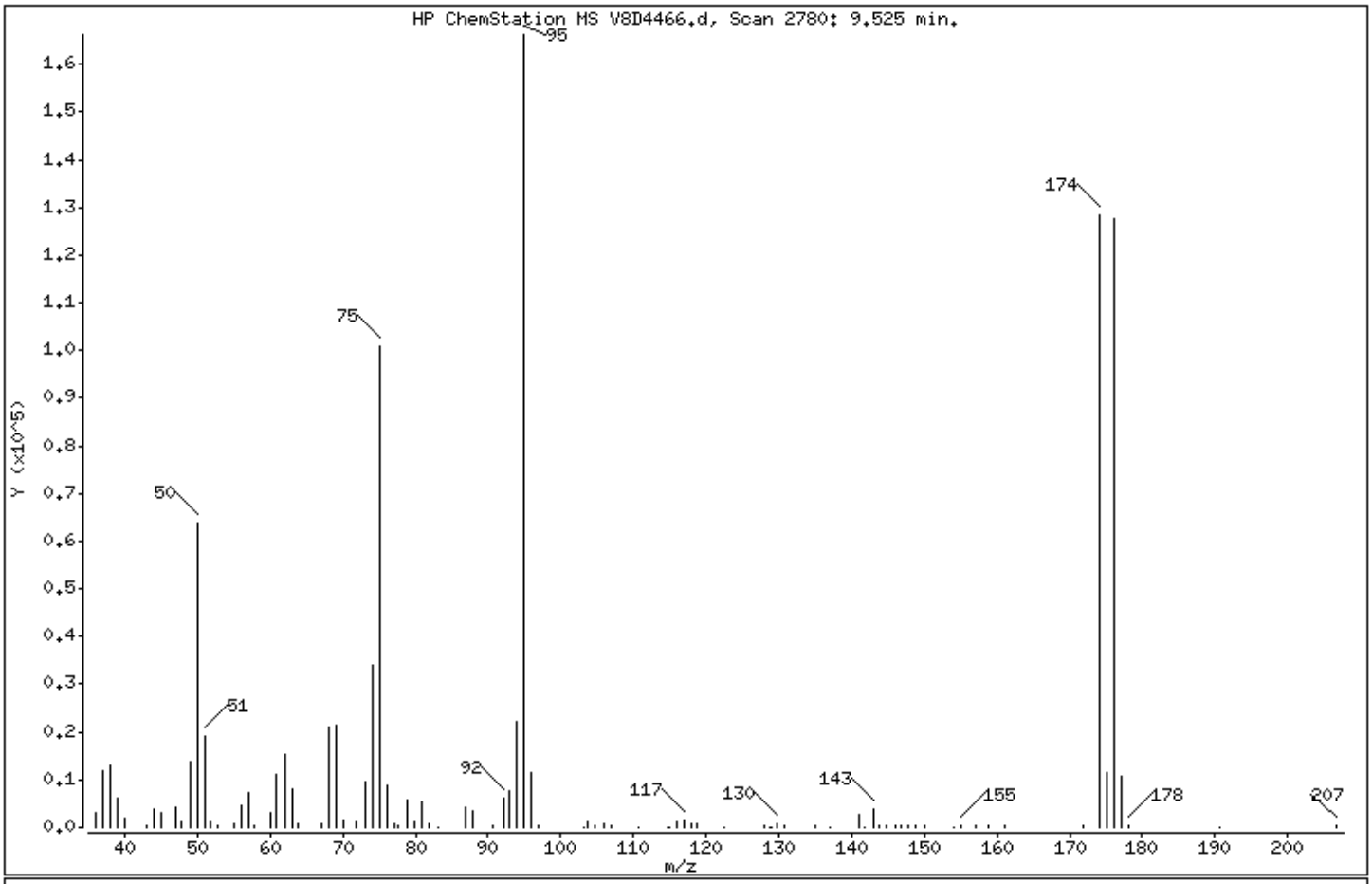
Sample Info: 5ML,BFB10H,BFB10H

Operator: MMS SRC: MMS

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	38.45
75	30.00 - 80.00% of mass 95	60.77
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	77.17
175	5.00 - 9.00% of mass 174	6.92 (8.97)
176	95.00 - 101.00% of mass 174	76.76 (99.47)
177	5.00 - 9.00% of mass 176	6.55 (8.53)

Date : 04-MAY-2014 02:20

Client ID: BFB10H Instrument: V10.i

Sample Info: 5ML,BFB10H,BFB10H

Operator: MMS SRC: MMS

Column phase: DB-624 Column diameter: 0.25

Data File: V8D4466.d
Spectrum: HP ChemStation MS V8D4466.d, Scan 2780: 9.525 min.
Location of Maximum: 95.00
Number of points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2901	67.10	593	96.90	428	143.90	192
37.00	11720	68.00	21080	103.10	132	144.80	195
38.10	12869	69.00	21216	103.80	1009	146.00	195
39.10	6118	70.00	1482	104.80	363	146.70	398
39.90	1903	71.80	973	105.90	908	147.90	224
42.90	335	73.10	9489	106.90	328	148.80	206
44.00	3888	74.00	33824	110.60	104	150.00	292
45.00	3083	75.00	101008	114.70	180	154.10	140
47.00	4199	76.00	8962	115.00	167	155.00	558
47.80	1073	77.00	935	115.90	987	157.10	555
49.00	13745	77.60	536	117.00	1449	158.90	307
50.00	63904	78.90	5752	118.00	648	161.00	217
51.10	19008	79.90	1328	118.80	851	171.80	381
51.90	1138	80.90	5230	122.50	108	174.00	128264
52.90	321	81.90	830	127.90	498	175.00	11509
55.10	792	83.20	159	128.80	171	176.00	127584
56.10	4727	87.00	4289	129.10	190	177.00	10887
57.00	7193	87.90	3257	129.80	893	178.10	269
57.80	194	90.70	486	130.70	262	190.60	162
60.00	3085	92.10	6061	135.10	245	206.70	332
60.90	11249	93.00	7511	136.90	115		
62.00	15447	94.00	22240	141.00	2579		
63.10	8211	95.00	166208	141.90	108		
63.90	719	96.00	11396	143.00	3798		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140505.B\V8D4543.d
Lab Smp Id: BFB10I Client Smp ID: BFB10I
Inj Date : 05-MAY-2014 11:41
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10I,BFB10I
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140505.B\BFBSOM_V10.m
Meth Date : 06-May-2014 08:35 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 4 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		
9.525	9.600	(0.000)	95	181376			0.00- 100.00	100.00
9.525	9.600	(0.000)	50	71804			15.00- 40.00	39.59
9.525	9.600	(0.000)	75	119540			30.00- 80.00	65.91
9.525	9.600	(0.000)	96	12658			5.00- 9.00	6.98
9.525	9.600	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.525	9.600	(0.000)	174	138144			50.00- 120.00	76.16
9.525	9.600	(0.000)	175	11171			5.00- 9.00	8.09
9.525	9.600	(0.000)	176	136112			95.00- 101.00	98.53
9.525	9.600	(0.000)	177	9082			5.00- 9.00	6.67

Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4543.d

Date : 05-MAY-2014 11:41

Client ID: BFB10I

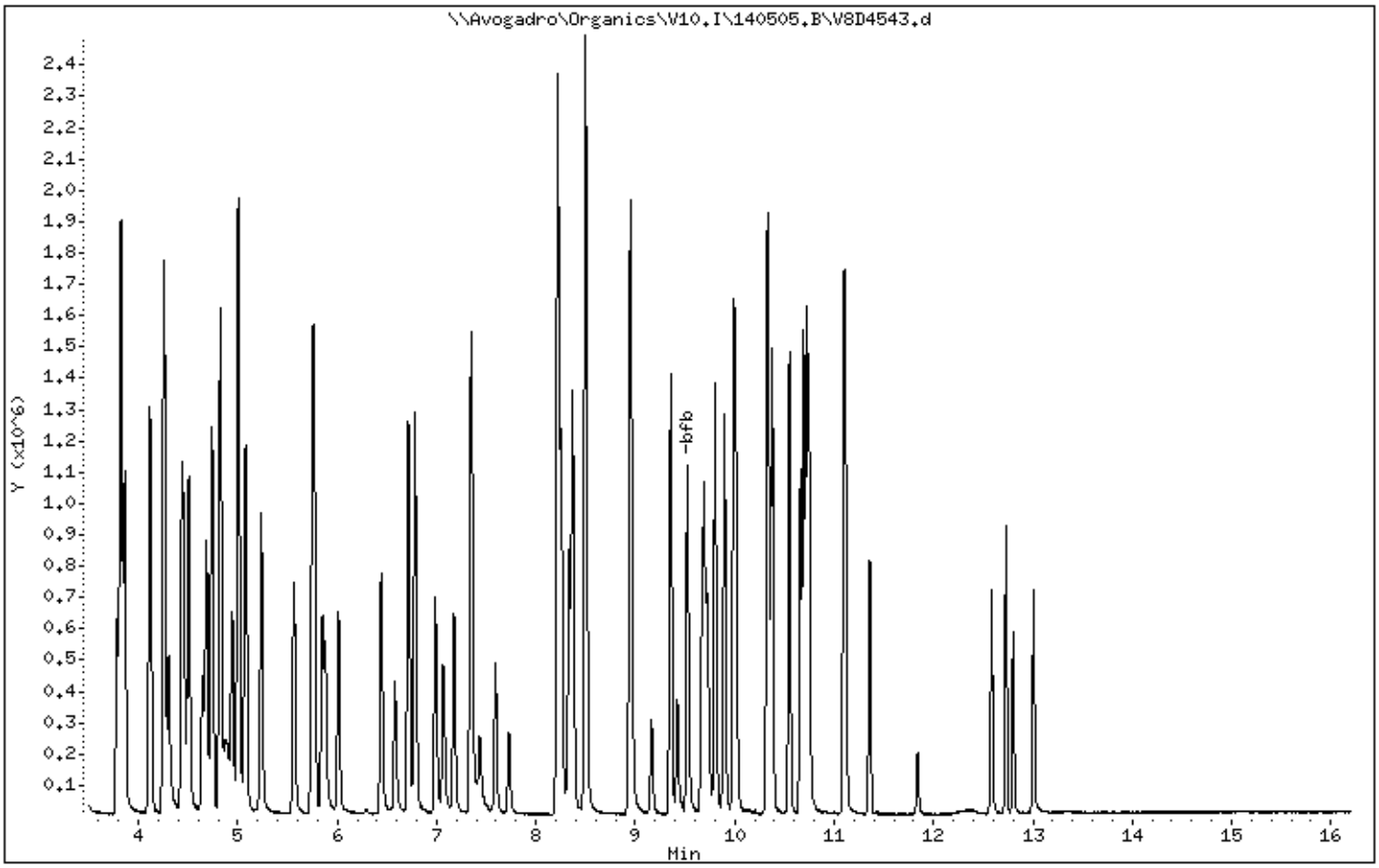
Instrument: V10.i

Sample Info: 5ML,BFB10I,BFB10I

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505.B\V8D4543.d

Date : 05-MAY-2014 11:41

Client ID: BFB10I

Instrument: V10.i

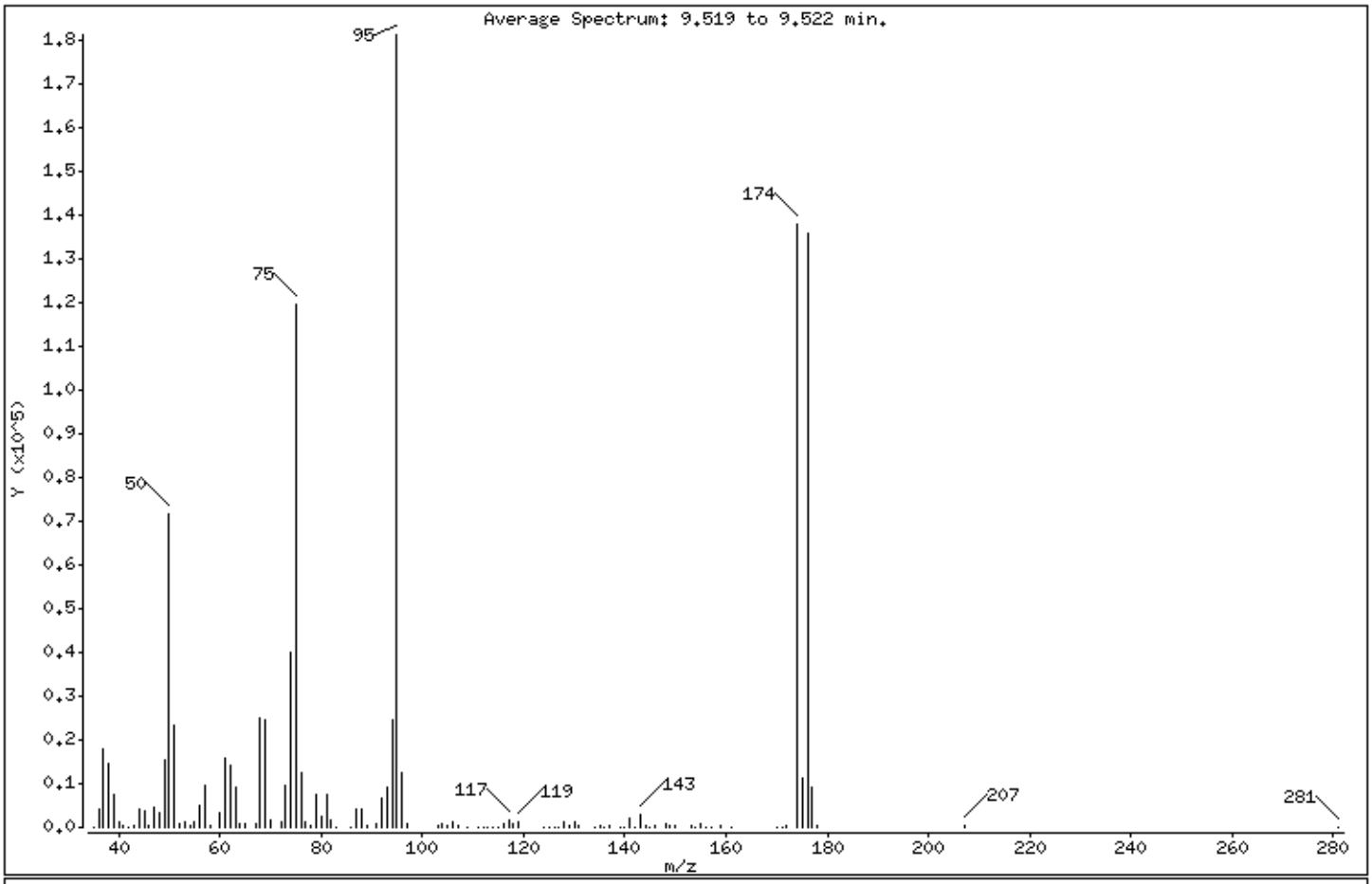
Sample Info: 5ML,BFB10I,BFB10I

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	39.59
75	30.00 - 80.00% of mass 95	65.91
96	5.00 - 9.00% of mass 95	6.98
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	76.16
175	5.00 - 9.00% of mass 174	6.16 (8.09)
176	95.00 - 101.00% of mass 174	75.04 (98.53)
177	5.00 - 9.00% of mass 176	5.01 (6.67)

Date : 05-MAY-2014 11:41

Client ID: BFB10I Instrument: V10.i

Sample Info: 5ML,BFB10I,BFB10I

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D4543.d
Spectrum: Average Spectrum: 9.519 to 9.522 min.
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	206	65.00	664	104.00	840	142.00	159
36.00	3987	67.00	650	105.00	623	143.00	2913
37.00	17840	68.00	24840	106.00	1225	144.00	321
38.00	14506	69.00	24488	107.00	328	145.00	148
39.00	7527	70.00	1716	109.00	76	146.00	514
40.00	1200	72.00	1405	111.00	195	148.00	779
41.00	487	73.00	9415	112.00	75	149.00	287
42.00	53	74.00	40136	113.00	97	150.00	272
43.00	512	75.00	119536	114.00	160	153.00	426
44.00	3971	76.00	12570	115.00	187	154.00	119
45.00	3817	77.00	1141	116.00	936	155.00	752
46.00	240	78.00	620	117.00	1587	156.00	109
47.00	4410	79.00	7546	118.00	845	157.00	169
48.00	3223	80.00	2387	119.00	1279	159.00	561
49.00	15500	81.00	7607	124.00	125	161.00	83
50.00	71800	82.00	1480	125.00	81	170.00	84
51.00	23408	83.00	64	126.00	151	171.00	89
52.00	934	86.00	81	127.00	57	172.00	304
53.00	1076	87.00	4121	128.00	1104	174.00	138112
54.00	457	88.00	4159	129.00	491	175.00	11171
55.00	1044	89.00	261	130.00	1088	176.00	136064
56.00	4827	91.00	916	131.00	432	177.00	9082
57.00	9454	92.00	6549	134.00	81	178.00	282
58.00	296	93.00	9157	135.00	605	207.00	292
60.00	3303	94.00	24680	136.00	77	281.00	62
61.00	16029	95.00	181376	137.00	364		
62.00	14038	96.00	12658	139.00	122		
63.00	9121	97.00	757	140.00	184		
64.00	667	103.00	215	141.00	2132		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4552.d
Lab Smp Id: BFB10J Client Smp ID: BFB10J
Inj Date : 05-MAY-2014 16:07
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10J,BFB10J
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140505A.B\BFBSOM_V10.m
Meth Date : 06-May-2014 06:52 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	157824			0.00- 100.00	100.00
9.525	9.600	(0.000)	50	60784			15.00- 40.00	38.51
9.525	9.600	(0.000)	75	98376			30.00- 80.00	62.33
9.525	9.600	(0.000)	96	9297			5.00- 9.00	5.89
9.525	9.600	(0.000)	173	628			0.00- 2.00	0.51
9.525	9.600	(0.000)	174	122168			50.00- 120.00	77.41
9.525	9.600	(0.000)	175	10309			5.00- 9.00	8.44
9.525	9.600	(0.000)	176	121280			95.00- 101.00	99.27
9.525	9.600	(0.000)	177	8890			5.00- 9.00	7.33

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4552.d

Date : 05-MAY-2014 16:07

Client ID: BFB10J

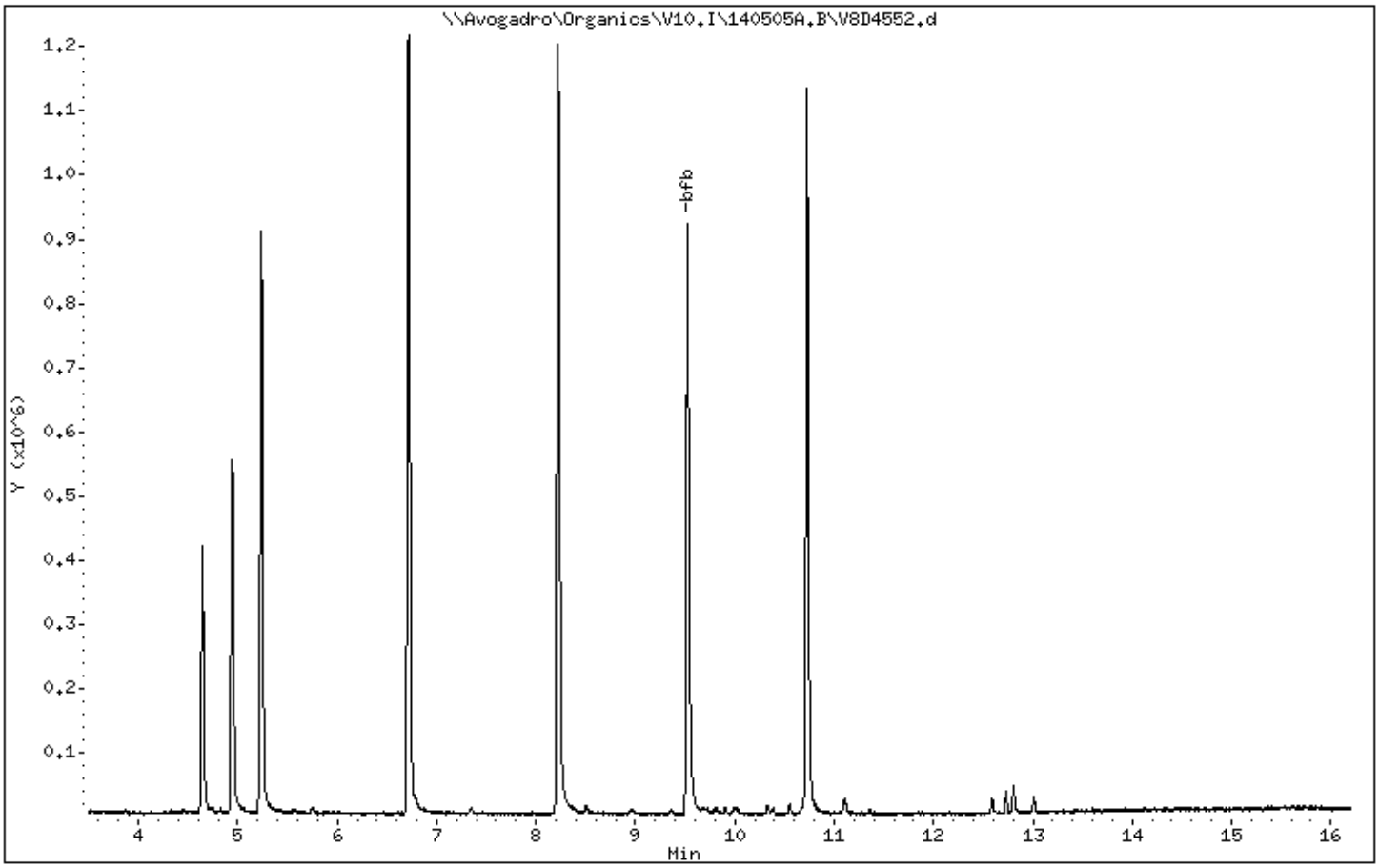
Instrument: V10.i

Sample Info: 5ML,BFB10J,BFB10J

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4552.d

Date : 05-MAY-2014 16:07

Client ID: BFB10J

Instrument: V10.i

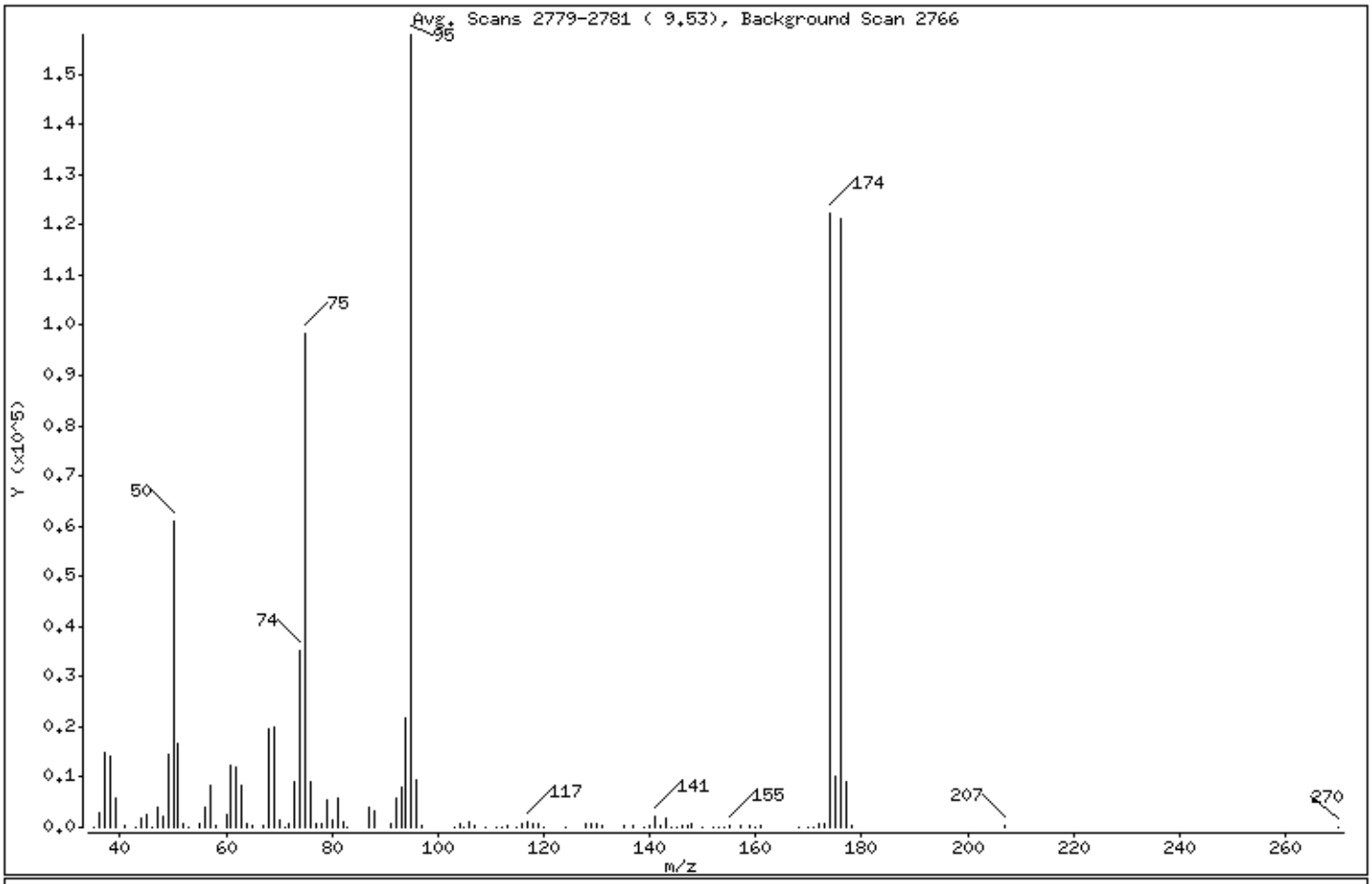
Sample Info: 5ML,BFB10J,BFB10J

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	38.51
75	30.00 - 80.00% of mass 95	62.33
96	5.00 - 9.00% of mass 95	5.89
173	Less than 2.00% of mass 174	0.40 (0.51)
174	50.00 - 120.00% of mass 95	77.41
175	5.00 - 9.00% of mass 174	6.53 (8.44)
176	95.00 - 101.00% of mass 174	76.85 (99.27)
177	5.00 - 9.00% of mass 176	5.63 (7.33)

Date : 05-MAY-2014 16:07

Client ID: BFB10J Instrument: V10.i

Sample Info: 5ML,BFB10J,BFB10J

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D4552.d
Spectrum: Avg. Scans 2779-2781 (9.53), Background Scan 2766
Location of Maximum: 95.00
Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	55	67.00	423	104.00	747	145.00	158
36.00	2903	68.00	19512	105.00	129	146.00	272
37.00	14703	69.00	19808	106.00	943	147.00	340
38.00	13980	70.00	1562	107.00	385	148.00	678
39.00	5812	71.00	51	109.00	46	150.00	98
41.00	309	72.00	801	111.00	144	152.00	76
43.00	171	73.00	8901	112.00	46	153.00	76
44.00	1986	74.00	35328	113.00	289	154.00	118
45.00	2395	75.00	98376	115.00	126	155.00	528
46.00	61	76.00	8918	116.00	698	157.00	386
47.00	3894	77.00	806	117.00	1010	159.00	197
48.00	2133	78.00	812	118.00	761	160.00	112
49.00	14405	79.00	5353	119.00	884	161.00	318
50.00	60784	80.00	1520	120.00	113	168.00	39
51.00	16824	81.00	5854	124.00	41	170.00	49
52.00	692	82.00	1152	128.00	796	171.00	50
53.00	88	83.00	90	129.00	774	172.00	621
55.00	563	87.00	3933	130.00	861	173.00	628
56.00	4088	88.00	3443	131.00	490	174.00	122168
57.00	8341	91.00	800	135.00	390	175.00	10309
58.00	425	92.00	5734	137.00	446	176.00	121280
60.00	2450	93.00	7872	139.00	166	177.00	8890
61.00	12229	94.00	21600	140.00	235	178.00	230
62.00	11904	95.00	157824	141.00	2200	207.00	218
63.00	8270	96.00	9297	142.00	217	270.00	34
64.00	851	97.00	406	143.00	1970		
65.00	459	103.00	44	144.00	88		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-76932

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4472.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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

EPA SAMPLE NO.

MB-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-76932

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4472.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/04/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4472.d
Report Date: 07-May-2014 10:23

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4472.d
Lab Smp Id: MB-76932 Client Smp ID: MB-76932
Inj Date : 04-MAY-2014 05:02
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-76932,MB-76932,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 58 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	4.644	4.647	(0.887)	241803	56.7364	57
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	42097	52.1147	52
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	687787	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	765286	47.1160	47
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	621259	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.522	(1.159)	335312	47.4071	47
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	250293	50.0000	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4472.d
Report Date: 07-May-2014 10:23

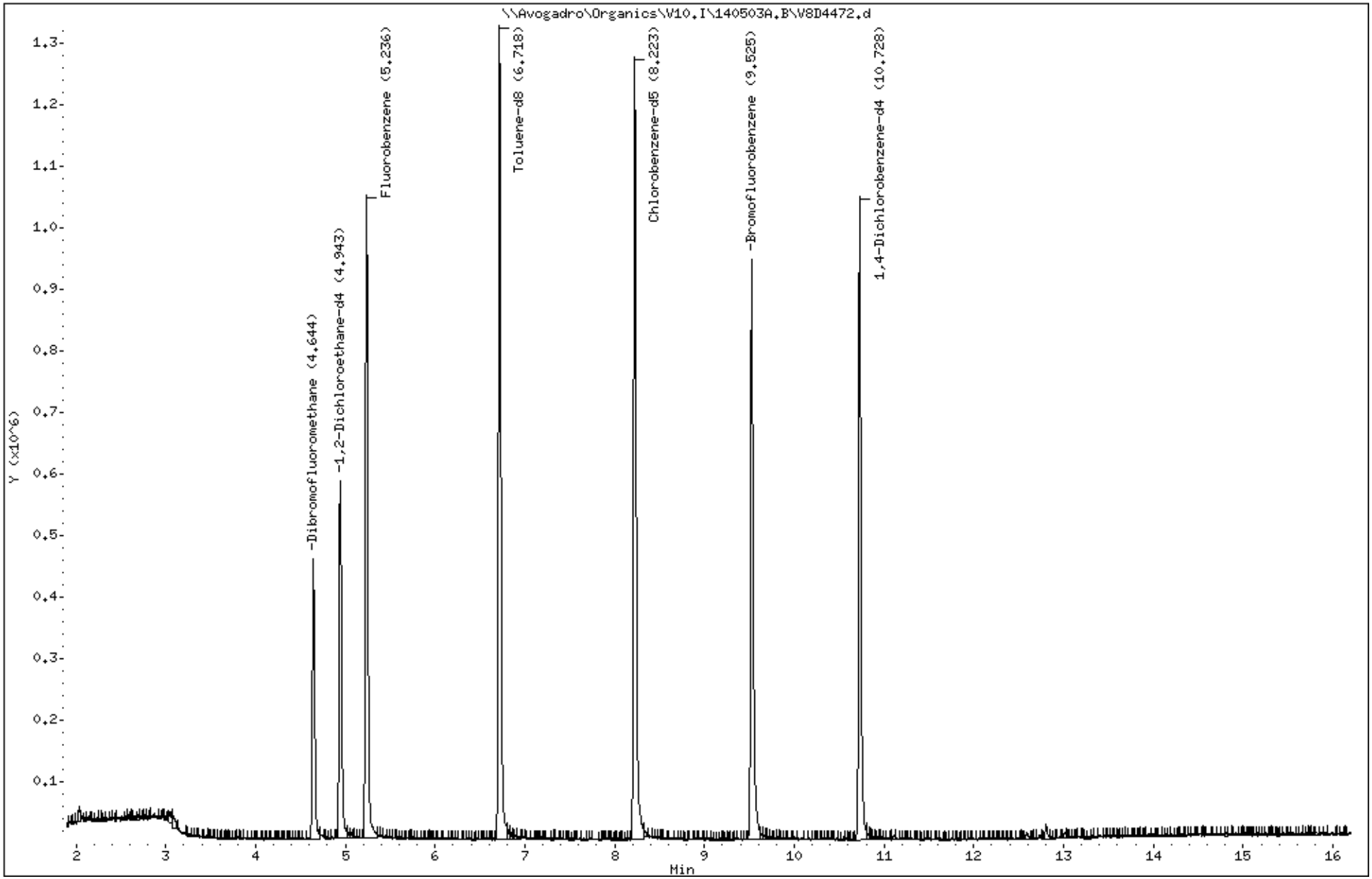
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4472.d
Lab Smp Id: MB-76932 Client Smp ID: MB-76932
Inj Date : 04-MAY-2014 05:02
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-76932,MB-76932,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 58 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\140503A.B\V8D4472.d
Date : 04-MAY-2014 05:02
Client ID: MB-76932
Instrument: V10.i
Sample Info: 5ML,MB-76932,MB-76932,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-76949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4557.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/05/2014

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	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

EPA SAMPLE NO.

MB-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-76949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4557.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/05/2014

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	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4557.d
Report Date: 07-May-2014 09:52

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4557.d
Lab Smp Id: MB-76949 Client Smp ID: MB-76949
Inj Date : 05-MAY-2014 18:24
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-76949,MB-76949,76949
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 18 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)	215304	52.0870	52
$ 42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.944)	36835	52.0870	52
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	558309	50.0000	
$ 58 Toluene-d8	98	6.715	6.718	(0.817)	662736	50.2541	50
* 68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	551284	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.522	(1.159)	309282	45.8926	46
* 92 1,4-Dichlorobenzene-d4	152	10.731	10.724	(1.000)	233176	50.0000	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4557.d
Report Date: 07-May-2014 09:52

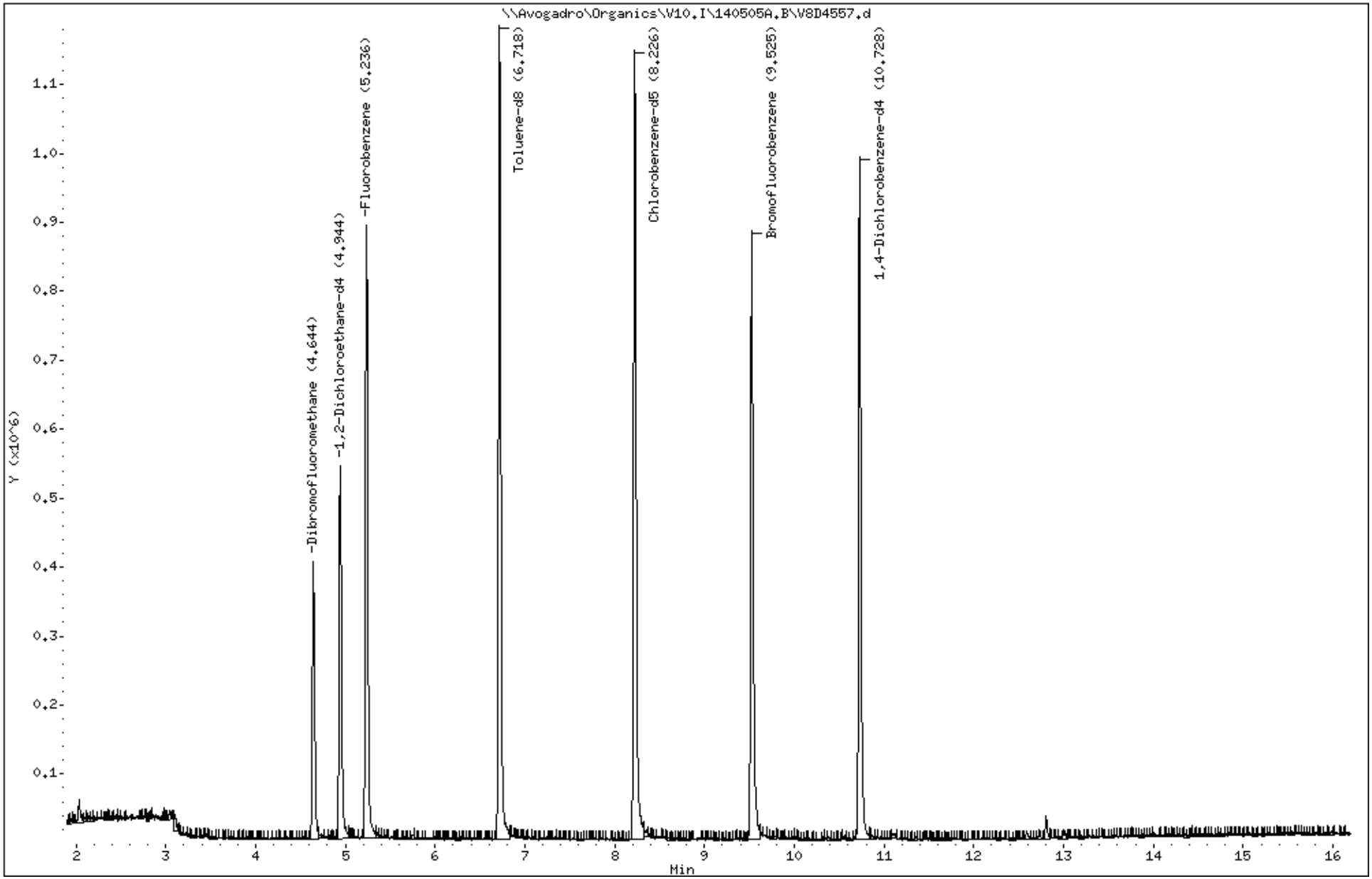
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4557.d
Lab Smp Id: MB-76949 Client Smp ID: MB-76949
Inj Date : 05-MAY-2014 18:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-76949,MB-76949,76949
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 18 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\140505A.B\V8D4557.d
Date : 05-MAY-2014 18:24
Client ID: MB-76949
Instrument: V10.i
Sample Info: 5ML,MB-76949,MB-76949,76949
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-5-043014MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4491.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	58	
74-87-3	Chloromethane	59	
75-01-4	Vinyl chloride	56	
74-83-9	Bromomethane	52	
75-00-3	Chloroethane	56	
75-69-4	Trichlorofluoromethane	67	
75-35-4	1,1-Dichloroethene	58	
67-64-1	Acetone	47	
74-88-4	Iodomethane	69	
75-15-0	Carbon disulfide	53	
75-09-2	Methylene chloride	54	
156-60-5	trans-1,2-Dichloroethene	55	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	57	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	50	
156-59-2	cis-1,2-Dichloroethene	85	
594-20-7	2,2-Dichloropropane	40	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	60	
71-55-6	1,1,1-Trichloroethane	63	
563-58-6	1,1-Dichloropropene	56	
56-23-5	Carbon tetrachloride	63	
107-06-2	1,2-Dichloroethane	67	
71-43-2	Benzene	53	
79-01-6	Trichloroethene	87	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	60	
75-27-4	Bromodichloromethane	59	
10061-01-5	cis-1,3-Dichloropropene	47	
108-10-1	4-Methyl-2-pentanone	62	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	47	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-043014MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4491.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	44	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	49	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	45	
179601-23-1	m,p-Xylene	91	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	41	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	41	
108-86-1	Bromobenzene	42	
96-18-4	1,2,3-Trichloropropane	44	
103-65-1	n-Propylbenzene	42	
95-49-8	2-Chlorotoluene	42	
108-67-8	1,3,5-Trimethylbenzene	44	
106-43-4	4-Chlorotoluene	42	
98-06-6	tert-Butylbenzene	42	
95-63-6	1,2,4-Trimethylbenzene	43	
135-98-8	sec-Butylbenzene	42	
99-87-6	4-Isopropyltoluene	43	
541-73-1	1,3-Dichlorobenzene	42	
106-46-7	1,4-Dichlorobenzene	42	
104-51-8	n-Butylbenzene	43	
95-50-1	1,2-Dichlorobenzene	44	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	34	
87-68-3	Hexachlorobutadiene	39	
87-61-6	1,2,3-Trichlorobenzene	36	
91-20-3	Naphthalene	32	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4491.d
Report Date: 07-May-2014 10:25

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4491.d
Lab Smp Id: N0695-03AMS Client Smp ID: MW-5-043014MS
Inj Date : 04-MAY-2014 13:44
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-03AMS,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 77 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)	315264	57.6515	58
2	Freon114	85	1.705	1.705	(0.326)	148870	45.4063	45
3	Chloromethane	50	1.753	1.753	(0.335)	616705	59.2287	59
4	Vinyl Chloride	62	1.856	1.856	(0.355)	392837	55.8971	56
5	Bromomethane	94	2.142	2.142	(0.409)	152906	51.7200	52
6	Chloroethane	64	2.229	2.229	(0.426)	195969	55.9268	56
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	494780	66.7161	67
126	Ethanol	46	2.570	2.567	(0.491)	191063	6404.66	6400(A)
8	Ether	59	2.670	2.667	(0.510)	300393	56.4192	56
9	Acrolein	56	2.773	2.769	(0.530)	286130	206.065	210
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	226508	57.6766	58
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	230612	57.6441	58
12	Acetone	58	2.888	2.888	(0.552)	36636	47.4856	47
13	Iodomethane	142	2.982	2.985	(0.570)	251183	68.9399	69(R)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	662979	53.4262	53
15	Acetonitrile	41	3.136	3.139	(0.599)	797754	542.038	540(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	599157	62.5771	62
17	Methyl Acetate	43	3.142	3.146	(0.600)	356819	45.4830	45
18	Methylene Chloride	84	3.229	3.229	(0.617)	212835	53.8935	54
19	tert-Butanol	59	3.300	3.297	(0.630)	72262	110.436	110
20	Acrylonitrile	53	3.422	3.422	(0.654)	174210	58.2728	58
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	205445	54.8932	55

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4491.d
Report Date: 07-May-2014 10:25

	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)	771847	54.9291	55
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	608315	57.3707	57
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1085692	48.5611	48
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1638330	59.3980	59
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	640827	56.3789	56
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1127140	54.2879	54
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	286918	40.0165	40
	28 cis-1,2-Dichloroethene	96	4.255	4.252	(0.813)	357954	84.8820	85(R)
	30 2-Butanone	72	4.258	4.265	(0.813)	23992	50.1772	50(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	564744	597.839	600(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	568170	127.352	130
	34 Bromochloromethane	128	4.454	4.451	(0.851)	112626	55.3425	55
	31 Tetrahydrofuran	72	4.499	4.502	(0.859)	49378	109.381	110
	35 Chloroform	83	4.509	4.509	(0.861)	535752	60.4976	60
$	36 Dibromofluoromethane	113	4.647	4.647	(0.888)	227070	58.5409	58(R)
	37 1,1,1-Trichloroethane	97	4.682	4.683	(0.894)	542055	62.7872	63
	38 Cyclohexane	56	4.737	4.740	(0.905)	585278	53.9412	54
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	101817	56.3378	56
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	447627	62.9341	63
	41 Isobutyl Alcohol	43	4.898	4.885	(0.936)	328276	1334.14	1300(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	40231	54.7230	55
	43 Benzene	78	5.004	5.004	(0.956)	777306	52.8467	53
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	662233	66.7126	67(R)
	45 tert-Amyl methyl ether	73	5.081	5.078	(0.971)	645075	51.7049	52
M	50 1,2-Dichloroethene (Total)	96				563399	139.775	140
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	625971	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	346716	87.0782	87(R)
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	279397	46.6507	47
	49 1,2-Dichloropropane	63	5.772	5.769	(1.103)	281938	52.9849	53
	51 Methyl Methacrylate	69	5.850	5.853	(1.117)	156841	58.5133	58
	52 Dibromomethane	93	5.879	5.879	(1.123)	166772	59.7653	60
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	44159	1199.80	1200(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	402914	59.0739	59
	55 2-Chloroethyl vinyl ether	63	6.441	6.445	(1.230)	2311	39.0482	39
	56 cis-1,3-Dichloropropene	75	6.444	6.441	(1.231)	323998	47.2486	47
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	429168	62.2504	62
$	58 Toluene-d8	98	6.715	6.715	(0.817)	707816	45.6481	46
	59 Toluene	91	6.782	6.782	(1.295)	839903	52.6389	53
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	323359	49.8609	50
	61 Ethyl Methacrylate	69	7.065	7.071	(1.349)	194892	51.3534	51
	62 1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	191982	54.2300	54
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	211310	46.5913	46
	64 1,3-Dichloropropane	76	7.354	7.354	(0.894)	348064	47.2687	47
	65 2-Hexanone	43	7.438	7.438	(0.905)	259825	44.2468	44
	66 Dibromochloromethane	129	7.592	7.592	(0.923)	266507	49.9459	50
	67 1,2-Dibromoethane	107	7.731	7.727	(0.940)	218894	48.6629	49
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	255633	41.3213	41
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	593083	50.0000	
	70 Chlorobenzene	112	8.251	8.255	(1.004)	559357	47.6646	48
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	242630	49.6371	50
	72 Ethylbenzene	106	8.370	8.370	(1.018)	281335	45.0273	45
	73 m,p-Xylene	106	8.499	8.499	(1.034)	699376	91.4621	91
	74 o-Xylene	106	8.946	8.943	(1.088)	335060	46.2544	46
	75 Styrene	104	8.959	8.959	(1.090)	480160	40.8973	41

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4491.d
Report Date: 07-May-2014 10:25

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	76	Bromoform	173	9.165	9.161	(1.115)	159259	45.9914	46
	77	Isopropylbenzene	105	9.358	9.354	(1.138)	969479	47.7540	48
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	39995	32.4303	32(Q)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	356682	52.8241	53
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.666	(0.901)	247790	41.1126	41
	81	Bromobenzene	156	9.692	9.692	(0.903)	246316	41.6058	42
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	302374	43.9064	44
	83	n-Propylbenzene	120	9.804	9.801	(0.914)	226070	42.1174	42
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	209261	41.7332	42
	85	1,3,5-Trimethylbenzene	105	9.988	9.985	(0.931)	826240	43.6627	44
	86	4-Chlorotoluene	126	10.007	10.010	(0.933)	216934	41.9548	42
M	94	Xylene (Total)	106				1034436	137.716	140
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	797951	41.5122	42
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.967)	831921	43.1118	43
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	948764	42.0945	42
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	403361	42.4216	42
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	802717	43.3072	43
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	332477	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	423925	42.2479	42
	95	n-Butylbenzene	91	11.097	11.094	(1.034)	688046	42.5708	42
	96	1,2-Dichlorobenzene	146	11.113	11.110	(1.036)	407130	43.6595	44
	97	Hexachloroethane	117	11.361	11.357	(1.059)	134891	37.0231	37
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	49752	45.0809	45
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.173)	181174	33.7860	34
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	146460	39.3761	39
	101	Naphthalene	128	12.804	12.804	(1.194)	301929	31.6560	32
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	180405	35.9616	36

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\140503A.B\V8D4491.d
Report Date: 07-May-2014 10:25

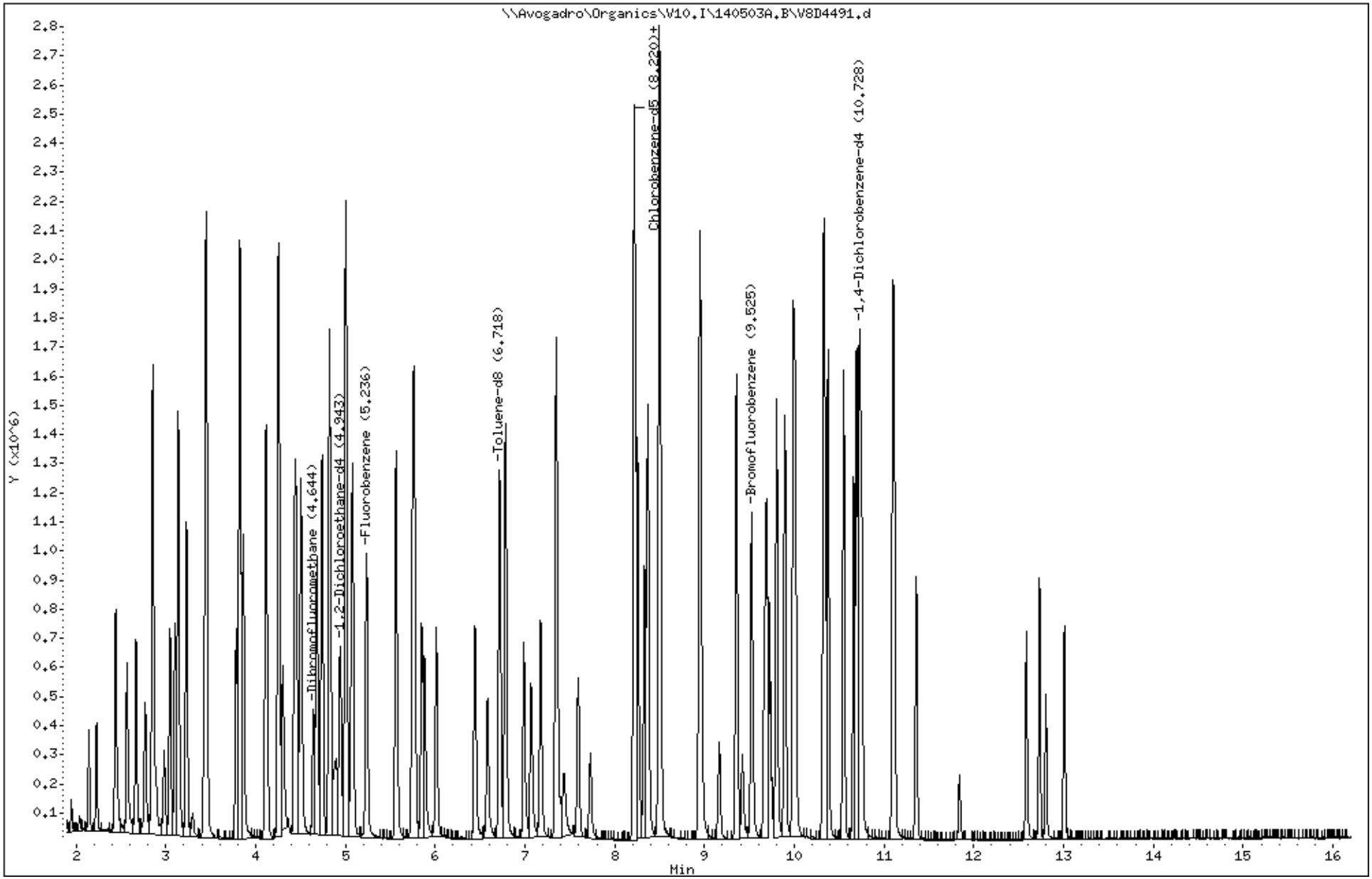
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4491.d
Lab Smp Id: N0695-03AMS Client Smp ID: MW-5-043014MS
Inj Date : 04-MAY-2014 13:44
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-03AMS,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 77 QC Sample: MS
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\140503A.B\V8D4491.d
Date : 04-MAY-2014 13:44
Client ID: MW-5-043014MS
Instrument: V10.i
Sample Info: 5ML,N0695-03AMS,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-043014MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4492.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	55	
74-87-3	Chloromethane	60	
75-01-4	Vinyl chloride	57	
74-83-9	Bromomethane	55	
75-00-3	Chloroethane	58	
75-69-4	Trichlorofluoromethane	66	
75-35-4	1,1-Dichloroethene	57	
67-64-1	Acetone	47	
74-88-4	Iodomethane	73	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	55	
156-60-5	trans-1,2-Dichloroethene	56	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	56	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	52	
156-59-2	cis-1,2-Dichloroethene	87	
594-20-7	2,2-Dichloropropane	40	
74-97-5	Bromochloromethane	54	
67-66-3	Chloroform	60	
71-55-6	1,1,1-Trichloroethane	63	
563-58-6	1,1-Dichloropropene	59	
56-23-5	Carbon tetrachloride	64	
107-06-2	1,2-Dichloroethane	66	
71-43-2	Benzene	53	
79-01-6	Trichloroethene	87	
78-87-5	1,2-Dichloropropane	54	
74-95-3	Dibromomethane	59	
75-27-4	Bromodichloromethane	59	
10061-01-5	cis-1,3-Dichloropropene	48	
108-10-1	4-Methyl-2-pentanone	63	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-043014MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4492.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	49	
108-90-7	Chlorobenzene	47	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	92	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	41	
75-25-2	Bromoform	47	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	43	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	46	
103-65-1	n-Propylbenzene	43	
95-49-8	2-Chlorotoluene	44	
108-67-8	1,3,5-Trimethylbenzene	45	
106-43-4	4-Chlorotoluene	43	
98-06-6	tert-Butylbenzene	43	
95-63-6	1,2,4-Trimethylbenzene	45	
135-98-8	sec-Butylbenzene	43	
99-87-6	4-Isopropyltoluene	45	
541-73-1	1,3-Dichlorobenzene	45	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	38	
87-68-3	Hexachlorobutadiene	42	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	43	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4492.d
Report Date: 07-May-2014 10:25

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4492.d
Lab Smp Id: N0695-03AMSD Client Smp ID: MW-5-043014MSD
Inj Date : 04-MAY-2014 14:12
Operator : MMS   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-03AMSD,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.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)	305146	55.2055	55
2	Freon114	85	1.705	1.705	(0.326)	152128	45.9046	46
3	Chloromethane	50	1.753	1.753	(0.335)	630731	59.9290	60
4	Vinyl Chloride	62	1.856	1.856	(0.355)	406621	57.2406	57
5	Bromomethane	94	2.142	2.142	(0.409)	164827	55.3212	55
6	Chloroethane	64	2.229	2.229	(0.426)	207176	58.4947	58
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	494029	65.9036	66
126	Ethanol	46	2.567	2.567	(0.490)	194490	6449.92	6400(A)
8	Ether	59	2.666	2.667	(0.509)	304849	56.6448	57
9	Acrolein	56	2.769	2.769	(0.529)	295695	210.679	210
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	225635	56.8408	57
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	227603	56.2845	56
12	Acetone	58	2.888	2.888	(0.552)	36297	46.5439	46
13	Iodomethane	142	2.982	2.985	(0.570)	267200	72.5529	72(R)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	673016	53.6566	54
15	Acetonitrile	41	3.136	3.139	(0.599)	808995	543.807	540(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	564914	58.3707	58
17	Methyl Acetate	43	3.146	3.146	(0.601)	355825	44.8606	45
18	Methylene Chloride	84	3.232	3.229	(0.617)	219418	54.9736	55
19	tert-Butanol	59	3.300	3.297	(0.630)	76629	115.859	120
20	Acrylonitrile	53	3.422	3.422	(0.654)	171331	56.6979	57
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	213480	56.4365	56

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4492.d
Report Date: 07-May-2014 10:25

	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)	786493	55.3737	55
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	599100	55.8983	56
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1123143	49.6998	50
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1655198	59.3688	59
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	650604	56.6279	57
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1138080	54.2296	54
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	287504	39.6700	40
	28 cis-1,2-Dichloroethene	96	4.255	4.252	(0.813)	369476	86.6788	87(R)
	30 2-Butanone	72	4.258	4.265	(0.813)	24943	51.6091	52(Q)
	32 Propionitrile	54	4.306	4.303	(0.823)	563844	590.513	590(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	577345	128.026	130
	34 Bromochloromethane	128	4.454	4.451	(0.851)	111871	54.3845	54
	31 Tetrahydrofuran	72	4.502	4.502	(0.860)	49770	109.072	110
	35 Chloroform	83	4.506	4.509	(0.861)	536359	59.9194	60
$	36 Dibromofluoromethane	113	4.644	4.647	(0.887)	225695	57.5651	58
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	547464	62.7366	63
	38 Cyclohexane	56	4.737	4.740	(0.905)	573100	52.2796	52
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	106940	58.5406	58
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	459693	63.9404	64
	41 Isobutyl Alcohol	43	4.901	4.885	(0.936)	339947	1366.82	1400(AR)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	39355	52.9599	53
	43 Benzene	78	5.004	5.004	(0.956)	794545	53.4419	53
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	664195	66.1958	66(R)
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	657004	52.0988	52
M	50 1,2-Dichloroethene (Total)	96				582956	143.115	140
*	46 Fluorobenzene	96	5.235	5.236	(1.000)	632727	50.0000	
	47 Trichloroethene	130	5.563	5.564	(1.063)	350202	87.0145	87(R)
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	281319	46.4701	46
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	290202	53.9557	54
	51 Methyl Methacrylate	69	5.853	5.853	(1.118)	163204	60.2370	60
	52 Dibromomethane	93	5.879	5.879	(1.123)	166684	59.0959	59
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	46391	1246.99	1200(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	407418	59.0964	59
	55 2-Chloroethyl vinyl ether	63	6.448	6.445	(1.232)	1771	29.6045	30
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	333173	48.0678	48
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	439365	63.0490	63
$	58 Toluene-d8	98	6.718	6.715	(0.817)	718487	46.0064	46
	59 Toluene	91	6.785	6.782	(1.296)	844860	52.3842	52
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	329732	50.3007	50
	61 Ethyl Methacrylate	69	7.068	7.071	(1.350)	191684	49.9688	50
	62 1,1,2-Trichloroethane	97	7.178	7.178	(1.371)	194475	54.3476	54
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	212383	46.4945	46
	64 1,3-Dichloropropane	76	7.354	7.354	(0.894)	354128	47.7498	48
	65 2-Hexanone	43	7.435	7.438	(0.904)	264274	44.6841	45
	66 Dibromochloromethane	129	7.592	7.592	(0.923)	268498	49.9609	50
	67 1,2-Dibromoethane	107	7.731	7.727	(0.940)	223636	49.3632	49
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	267864	42.9901	43
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	597335	50.0000	
	70 Chlorobenzene	112	8.251	8.255	(1.004)	560574	47.4283	47
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	249442	50.6674	51
	72 Ethylbenzene	106	8.370	8.370	(1.018)	288610	45.8629	46
	73 m,p-Xylene	106	8.499	8.499	(1.034)	711535	92.3898	92
	74 o-Xylene	106	8.946	8.943	(1.088)	338550	46.4035	46
	75 Styrene	104	8.956	8.959	(1.089)	481749	40.7406	41

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4492.d
Report Date: 07-May-2014 10:25

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	76	Bromoform	173	9.161	9.161	(1.114)	165179	47.3615	47
	77	Isopropylbenzene	105	9.354	9.354	(1.138)	983227	48.0864	48
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	40678	32.7493	33(Q)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	358618	52.7328	53
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	248389	42.6017	43
	81	Bromobenzene	156	9.692	9.692	(0.904)	257342	44.9340	45
	82	1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	307303	46.1269	46
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	224939	43.3198	43
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	211731	43.6497	44
	85	1,3,5-Trimethylbenzene	105	9.988	9.985	(0.931)	830868	45.3879	45
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	215097	43.0024	43
M	94	Xylene (Total)	106				1050085	138.793	140
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	796222	42.8191	43
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	840752	45.0387	45
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	943379	43.2671	43
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	411097	44.6931	45
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	801022	44.6731	45
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	321631	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	438507	45.1748	45
	95	n-Butylbenzene	91	11.094	11.094	(1.034)	691005	44.1956	44
	96	1,2-Dichlorobenzene	146	11.110	11.110	(1.036)	417317	46.2610	46
	97	Hexachloroethane	117	11.357	11.357	(1.059)	140006	39.7228	40
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	53806	50.3984	50
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	202182	38.3032	38
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	151154	42.0552	42
	101	Naphthalene	128	12.801	12.804	(1.194)	419078	43.1443	43
	102	1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	199492	40.6799	41

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\140503A.B\V8D4492.d
Report Date: 07-May-2014 10:25

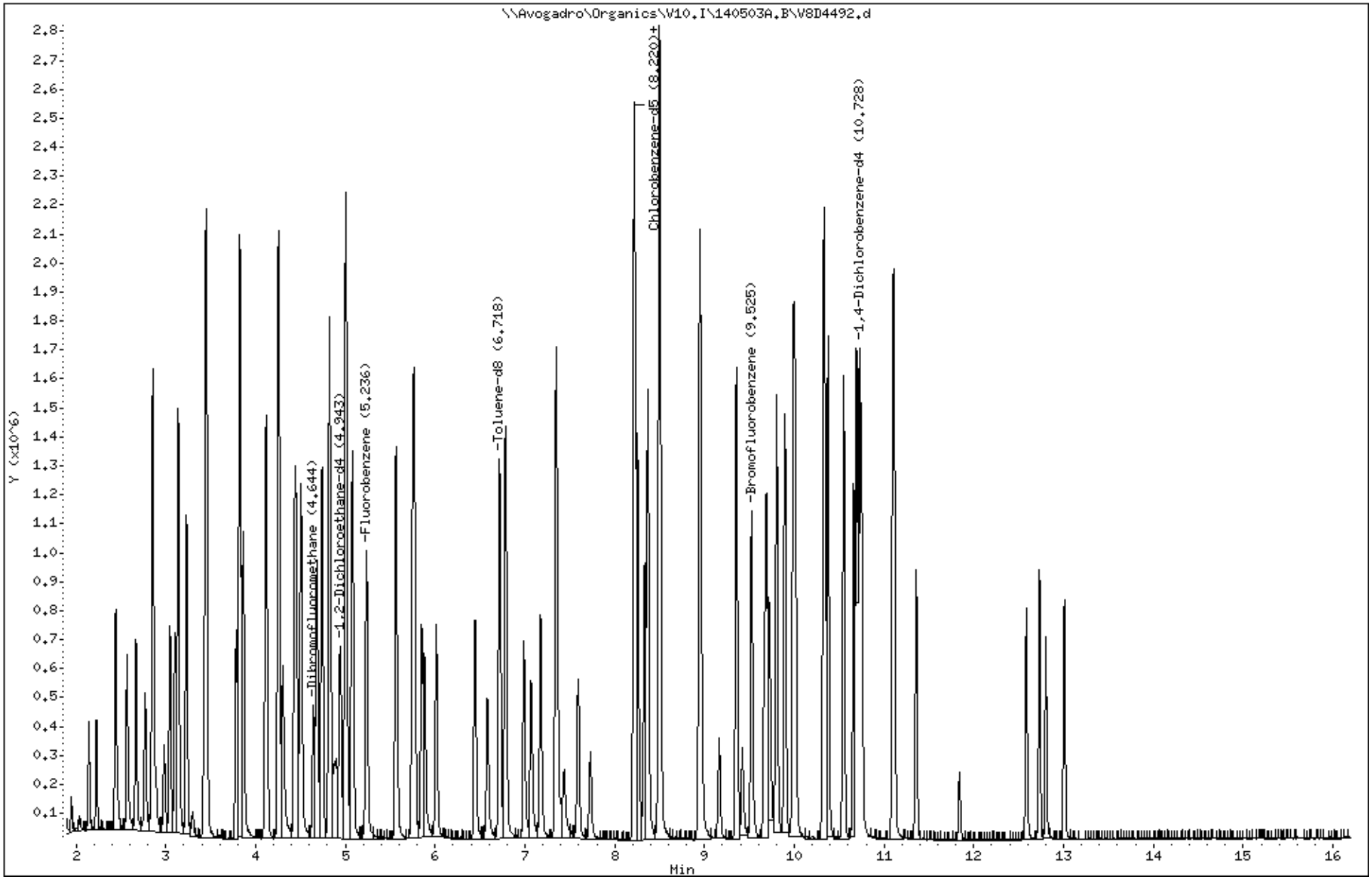
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4492.d
Lab Smp Id: N0695-03AMSD Client Smp ID: MW-5-043014MSD
Inj Date : 04-MAY-2014 14:12
Operator : MMS   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N0695-03AMSD,,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 10:23 V10.i Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.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

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4492.d
Date : 04-MAY-2014 14:12
Client ID: MW-5-043014MSD
Instrument: V10.i
Sample Info: 5ML,N0695-03AMSD,,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-76932

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4469.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/04/2014

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	60	
75-01-4	Vinyl chloride	56	
74-83-9	Bromomethane	52	
75-00-3	Chloroethane	57	
75-69-4	Trichlorofluoromethane	63	
75-35-4	1,1-Dichloroethene	55	
67-64-1	Acetone	37	
74-88-4	Iodomethane	73	
75-15-0	Carbon disulfide	53	
75-09-2	Methylene chloride	56	
156-60-5	trans-1,2-Dichloroethene	55	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	56	
108-05-4	Vinyl acetate	56	
78-93-3	2-Butanone	39	
156-59-2	cis-1,2-Dichloroethene	53	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	59	
71-55-6	1,1,1-Trichloroethane	61	
563-58-6	1,1-Dichloropropene	59	
56-23-5	Carbon tetrachloride	62	
107-06-2	1,2-Dichloroethane	64	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	56	
78-87-5	1,2-Dichloropropane	55	
74-95-3	Dibromomethane	57	
75-27-4	Bromodichloromethane	58	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	54	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	53	
142-28-9	1,3-Dichloropropane	47	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-76932

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4469.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/04/2014

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	38	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	46	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	48	
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	50	
79-34-5	1,1,2,2-Tetrachloroethane	41	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	43	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	45	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	46	
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	48	
106-46-7	1,4-Dichlorobenzene	46	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	42	
120-82-1	1,2,4-Trichlorobenzene	41	
87-68-3	Hexachlorobutadiene	45	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	42	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4469.d
Report Date: 14-May-2014 10:10

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4469.d
Lab Smp Id: LCS-76932 Client Smp ID: LCS-76932
Inj Date : 04-MAY-2014 03:41
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-76932,LCS-76932,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 55 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)	324617	50.0000	53
2	Freon114	85	1.705	1.705	(0.326)	162269	50.0000	44
3	Chloromethane	50	1.754	1.754	(0.335)	701985	50.0000	60
4	Vinyl Chloride	62	1.856	1.856	(0.355)	442128	50.0000	56
5	Bromomethane	94	2.146	2.146	(0.410)	172580	50.0000	52
6	Chloroethane	64	2.229	2.226	(0.426)	225130	50.0000	57
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	520362	50.0000	62
126	Ethanol	46	2.567	2.567	(0.490)	168883	5000.00	5000(A)
8	Ether	59	2.667	2.667	(0.509)	320496	50.0000	54
9	Acrolein	56	2.770	2.773	(0.529)	376005	250.000	240
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	243575	50.0000	55
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	239494	50.0000	53
12	Acetone	58	2.885	2.885	(0.551)	32295	50.0000	37
13	Iodomethane	142	2.985	2.985	(0.570)	296972	50.0000	73
14	Carbon Disulfide	76	3.046	3.046	(0.582)	739636	50.0000	53
15	Acetonitrile	41	3.136	3.136	(0.599)	900929	500.000	540(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	651939	50.0000	61
17	Methyl Acetate	43	3.146	3.146	(0.601)	479701	50.0000	55
18	Methylene Chloride	84	3.229	3.229	(0.617)	249077	50.0000	56
19	tert-Butanol	59	3.294	3.294	(0.629)	64191	100.000	87
20	Acrylonitrile	53	3.422	3.422	(0.654)	170483	50.0000	51
21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.660)	232860	50.0000	55
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	801198	50.0000	51

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4469.d
Report Date: 14-May-2014 10:10

			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	3.782	(0.723)	665207	50.0000	56
	24	Vinyl acetate	43	3.821	3.821	(0.730)	1395721	50.0000	56
	25	Diisopropyl Ether	45	3.824	3.824	(0.730)	1806583	50.0000	58
	26	2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	800986	50.0000	63
	27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1249164	50.0000	54
	29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	392006	50.0000	49
	28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	250767	50.0000	53
	30	2-Butanone	72	4.261	4.255	(0.814)	20954	50.0000	39
	32	Propionitrile	54	4.303	4.303	(0.822)	537856	500.000	510(A)
	33	Methacrylonitrile	41	4.435	4.435	(0.847)	557904	100.000	110
	34	Bromochloromethane	128	4.454	4.451	(0.851)	125450	50.0000	55
	31	Tetrahydrofuran	72	4.499	4.499	(0.859)	49236	100.000	97
	35	Chloroform	83	4.509	4.506	(0.861)	582508	50.0000	59
$	36	Dibromofluoromethane	113	4.644	4.641	(0.887)	248224	50.0000	57
	37	1,1,1-Trichloroethane	97	4.686	4.680	(0.895)	593012	50.0000	61
	38	Cyclohexane	56	4.741	4.737	(0.905)	649512	50.0000	53
	39	1,1-Dichloropropene	110	4.824	4.824	(0.921)	119219	50.0000	59
	40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	492436	50.0000	62
	41	Isobutyl Alcohol	43	4.892	4.898	(0.934)	292714	1000.00	1100(A)
$	42	1,2-Dichloroethane-d4	102	4.940	4.940	(0.944)	43475	50.0000	53
	43	Benzene	78	5.004	5.004	(0.956)	895347	50.0000	54
	44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	709179	50.0000	64
	45	tert-Amyl methyl ether	73	5.075	5.078	(0.969)	716924	50.0000	51
M	50	1,2-Dichloroethene (Total)	96				483627	100.000	110
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	701847	50.0000	
	47	Trichloroethene	130	5.567	5.564	(1.063)	247791	50.0000	56
	48	Methylcyclohexane	83	5.753	5.753	(1.099)	317312	50.0000	47
	49	1,2-Dichloropropane	63	5.769	5.770	(1.102)	326139	50.0000	55
	51	Methyl Methacrylate	69	5.850	5.850	(1.117)	163806	50.0000	54
	52	Dibromomethane	93	5.882	5.879	(1.123)	177120	50.0000	57
	53	1,4-Dioxane	88	5.888	5.882	(1.125)	43552	1000.00	1000(A)
	54	Bromodichloromethane	83	6.011	6.014	(1.148)	439914	50.0000	58
	55	2-Chloroethyl vinyl ether	63	6.448	6.448	(1.232)	1300	50.0000	20
	56	cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	389038	50.0000	51
	57	4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	386819	50.0000	50
$	58	Toluene-d8	98	6.715	6.715	(0.817)	796303	50.0000	46
	59	Toluene	91	6.782	6.782	(1.295)	964884	50.0000	54
	60	trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	372123	50.0000	51
	61	Ethyl Methacrylate	69	7.068	7.065	(1.350)	205904	50.0000	48
	62	1,1,2-Trichloroethane	97	7.178	7.175	(1.371)	208841	50.0000	53
	63	Tetrachloroethene	164	7.342	7.342	(0.893)	241386	50.0000	48
	64	1,3-Dichloropropane	76	7.355	7.355	(0.895)	382991	50.0000	47
	65	2-Hexanone	43	7.435	7.438	(0.905)	246651	50.0000	38
	66	Dibromochloromethane	129	7.593	7.593	(0.924)	296263	50.0000	50
	67	1,2-Dibromoethane	107	7.731	7.728	(0.941)	228670	50.0000	46
	69	1-Chlorohexane	91	8.213	8.213	(0.999)	301178	50.0000	44
*	68	Chlorobenzene-d5	117	8.220	8.223	(1.000)	656959	50.0000	
	70	Chlorobenzene	112	8.252	8.255	(1.004)	621760	50.0000	48
	71	1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	270475	50.0000	50
	72	Ethylbenzene	106	8.374	8.371	(1.019)	331339	50.0000	48
	73	m,p-Xylene	106	8.499	8.499	(1.034)	816292	100.000	96
	74	o-Xylene	106	8.943	8.943	(1.088)	394671	50.0000	49
	75	Styrene	104	8.959	8.959	(1.090)	622511	50.0000	48
	76	Bromoform	173	9.165	9.162	(1.115)	169938	50.0000	44

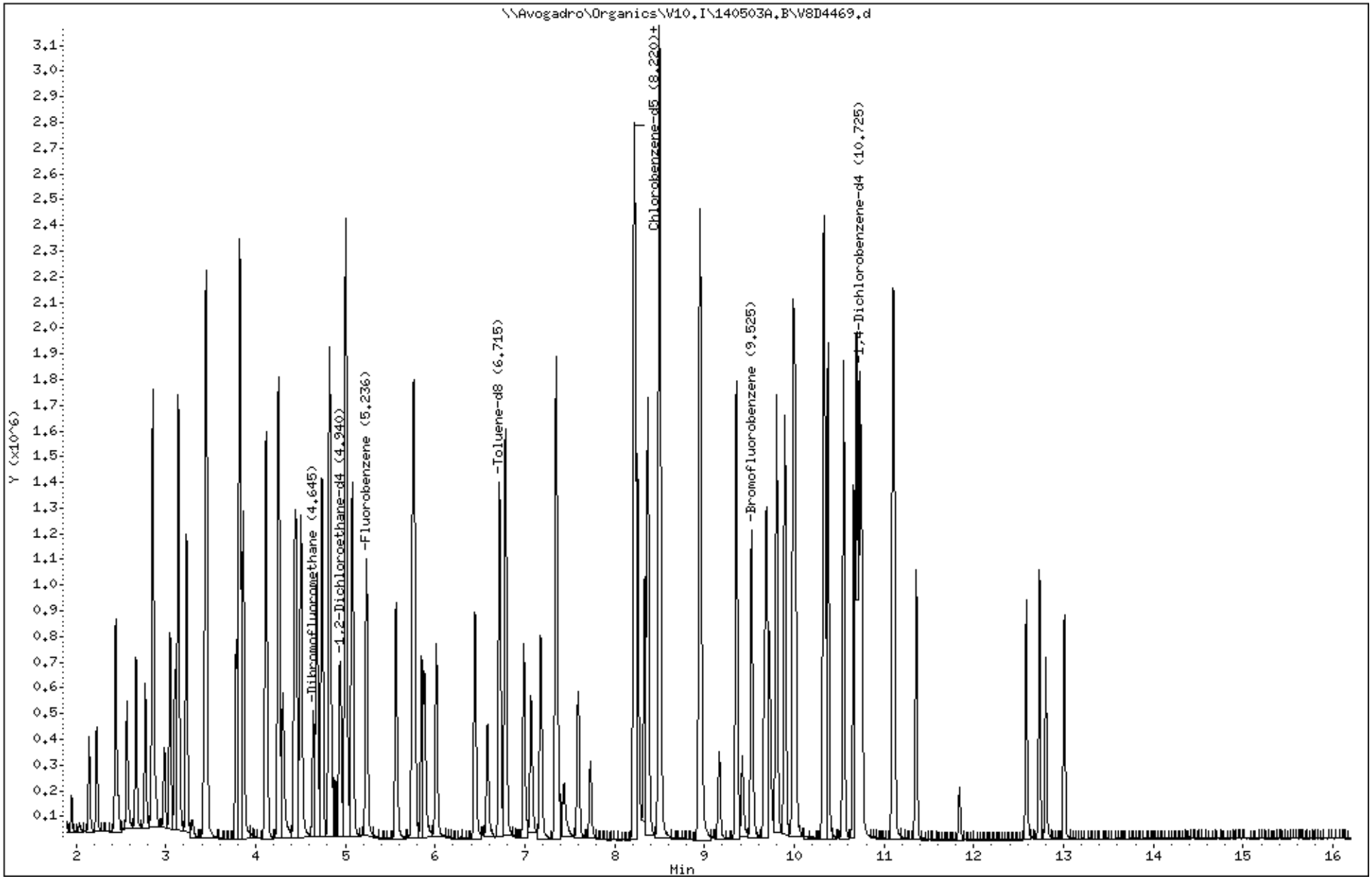
Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4469.d
Report Date: 14-May-2014 10:10

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.358	9.355	(1.138)	1117986	50.0000	50
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	46571	50.0000	34(Q)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.159)	388211	50.0000	52
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	260957	50.0000	41
	81 Bromobenzene	156	9.692	9.692	(0.904)	279344	50.0000	45
	82 1,2,3-Trichloropropane	75	9.721	9.718	(0.906)	308173	50.0000	42
	83 n-Propylbenzene	120	9.805	9.802	(0.914)	256941	50.0000	46
	84 2-Chlorotoluene	126	9.895	9.898	(0.923)	239662	50.0000	45
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	963660	50.0000	48
	86 4-Chlorotoluene	126	10.010	10.010	(0.933)	254275	50.0000	47
M	94 Xylene (Total)	106				1210963	150.000	140
	87 tert-Butylbenzene	119	10.329	10.326	(0.963)	930477	50.0000	46
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	952671	50.0000	47
	89 sec-Butylbenzene	105	10.551	10.551	(0.984)	1086492	50.0000	46
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	480248	50.0000	48
	91 4-Isopropyltoluene	119	10.695	10.692	(0.997)	923877	50.0000	47
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	349784	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	487316	50.0000	46
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	805505	50.0000	47
	96 1,2-Dichlorobenzene	146	11.113	11.110	(1.036)	466912	50.0000	48
	97 Hexachloroethane	117	11.358	11.358	(1.059)	156079	50.0000	41
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	49284	50.0000	42
	141 1,3,5-Trichlorobenzene	182	12.586	12.583	(2.404)	220600	50.0000	(a)
	99 1,2,4-Trichlorobenzene	180	12.586	12.583	(1.174)	237004	50.0000	41
	100 Hexachlorobutadiene	225	12.731	12.727	(1.187)	176368	50.0000	45
	101 Naphthalene	128	12.801	12.801	(1.194)	439281	50.0000	42
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	215943	50.0000	40

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4469.d
Date : 04-MAY-2014 03:41
Client ID: LCS-76932
Instrument: V10.i
Sample Info: 5ML,LCS-76932,LCS-76932,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-76949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4554.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/05/2014

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	48	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	56	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	49	
75-35-4	1,1-Dichloroethene	51	
67-64-1	Acetone	42	
74-88-4	Iodomethane	52	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	52	
156-60-5	trans-1,2-Dichloroethene	48	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	46	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	53	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	52	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	49	
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	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-76949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4554.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/05/2014

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	47	
124-48-1	Dibromochloromethane	52	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	51	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	53	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	52	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	53	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	52	
95-49-8	2-Chlorotoluene	49	
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	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	52	
106-46-7	1,4-Dichlorobenzene	52	
104-51-8	n-Butylbenzene	52	
95-50-1	1,2-Dichlorobenzene	53	
96-12-8	1,2-Dibromo-3-chloropropane	54	
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	47	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4554.d
Report Date: 07-May-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4554.d
Lab Smp Id: LCS-76949 Client Smp ID: LCS-76949
Inj Date : 05-MAY-2014 17:02
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-76949,LCS-76949,76949
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.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	1.586	1.586	(0.303)	336215	50.0000	47
2	Freon114	85	1.705	1.705	(0.326)	193869	50.0000	49
3	Chloromethane	50	1.754	1.753	(0.335)	600010	50.0000	48
4	Vinyl Chloride	62	1.853	1.856	(0.354)	389097	50.0000	50
5	Bromomethane	94	2.143	2.143	(0.409)	175595	50.0000	56
6	Chloroethane	64	2.229	2.226	(0.426)	195780	50.0000	48
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	496424	50.0000	49
126	Ethanol	46	2.567	2.570	(0.490)	185141	5000.00	4700(AQ)
8	Ether	59	2.667	2.667	(0.509)	290230	50.0000	48(Q)
9	Acrolein	56	2.770	2.770	(0.529)	384100	250.000	250
10	1,1-Dichloroethene	96	2.856	2.853	(0.546)	216591	50.0000	51
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	250683	50.0000	47
12	Acetone	58	2.892	2.888	(0.552)	40870	50.0000	42
13	Iodomethane	142	2.985	2.982	(0.570)	240940	50.0000	52
14	Carbon Disulfide	76	3.046	3.046	(0.582)	655599	50.0000	50
15	Acetonitrile	41	3.136	3.136	(0.599)	876721	500.000	530(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	626671	50.0000	52
17	Methyl Acetate	43	3.146	3.146	(0.601)	499182	50.0000	49
18	Methylene Chloride	84	3.229	3.229	(0.617)	212801	50.0000	52
19	tert-Butanol	59	3.300	3.297	(0.630)	70352	100.000	97
20	Acrylonitrile	53	3.422	3.422	(0.654)	169714	50.0000	48
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	199569	50.0000	48
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	765494	50.0000	51

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4554.d
Report Date: 07-May-2014 09:51

							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	3.786	(0.722)	583329	50.0000	49
	24 Vinyl acetate	43	3.818	3.821	(0.729)	1296708	50.0000	50
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1645381	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	714740	50.0000	51
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1121941	50.0000	51
	29 2,2-Dichloropropane	77	4.258	4.261	(0.813)	444779	50.0000	53
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	216825	50.0000	51(Q)
	30 2-Butanone	72	4.255	4.258	(0.813)	24278	50.0000	46(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	553593	500.000	510(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	579439	100.000	100
	34 Bromochloromethane	128	4.451	4.454	(0.850)	110662	50.0000	51
	31 Tetrahydrofuran	72	4.503	4.499	(0.860)	45878	100.000	94(Q)
	35 Chloroform	83	4.506	4.509	(0.861)	529937	50.0000	51
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	223935	50.0000	50
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	534558	50.0000	50
	38 Cyclohexane	56	4.741	4.740	(0.905)	604342	50.0000	50
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	102915	50.0000	50
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	457957	50.0000	51
	41 Isobutyl Alcohol	43	4.885	4.879	(0.933)	33244	1000.00	420(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	36728	50.0000	48
	43 Benzene	78	5.004	5.004	(0.956)	758618	50.0000	50
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	648810	50.0000	49
	45 tert-Amyl methyl ether	73	5.075	5.078	(0.969)	652623	50.0000	51
M	50 1,2-Dichloroethene (Total)	96				416394	100.000	99
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	599815	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	212994	50.0000	50
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	315091	50.0000	51
	49 1,2-Dichloropropane	63	5.773	5.769	(1.103)	282514	50.0000	52
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	155364	50.0000	49
	52 Dibromomethane	93	5.882	5.882	(1.123)	165664	50.0000	51
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	44997	1000.00	1000(A)
	54 Bromodichloromethane	83	6.014	6.011	(1.149)	400174	50.0000	53
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.231)	3200	50.0000	60(Q)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	350500	50.0000	53
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	413316	50.0000	49
$	58 Toluene-d8	98	6.718	6.718	(0.817)	700342	50.0000	50
	59 Toluene	91	6.782	6.782	(1.295)	833286	50.0000	50
	60 trans-1,3-Dichloropropene	75	6.985	6.988	(1.334)	354682	50.0000	54
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	190972	50.0000	53
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.370)	187491	50.0000	51
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	205437	50.0000	49
	64 1,3-Dichloropropane	76	7.355	7.351	(0.894)	348667	50.0000	51
	65 2-Hexanone	43	7.435	7.435	(0.904)	273541	50.0000	47
	66 Dibromochloromethane	129	7.593	7.596	(0.923)	270921	50.0000	52
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	211247	50.0000	51
	69 1-Chlorohexane	91	8.213	8.213	(0.999)	269522	50.0000	49
*	68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	584857	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	545879	50.0000	51
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	242131	50.0000	50
	72 Ethylbenzene	106	8.371	8.371	(1.018)	277146	50.0000	51
	73 m,p-Xylene	106	8.499	8.496	(1.034)	707208	100.000	100
	74 o-Xylene	106	8.943	8.946	(1.088)	336932	50.0000	53
	75 Styrene	104	8.959	8.959	(1.090)	532079	50.0000	52
	76 Bromoform	173	9.162	9.165	(1.114)	164217	50.0000	54

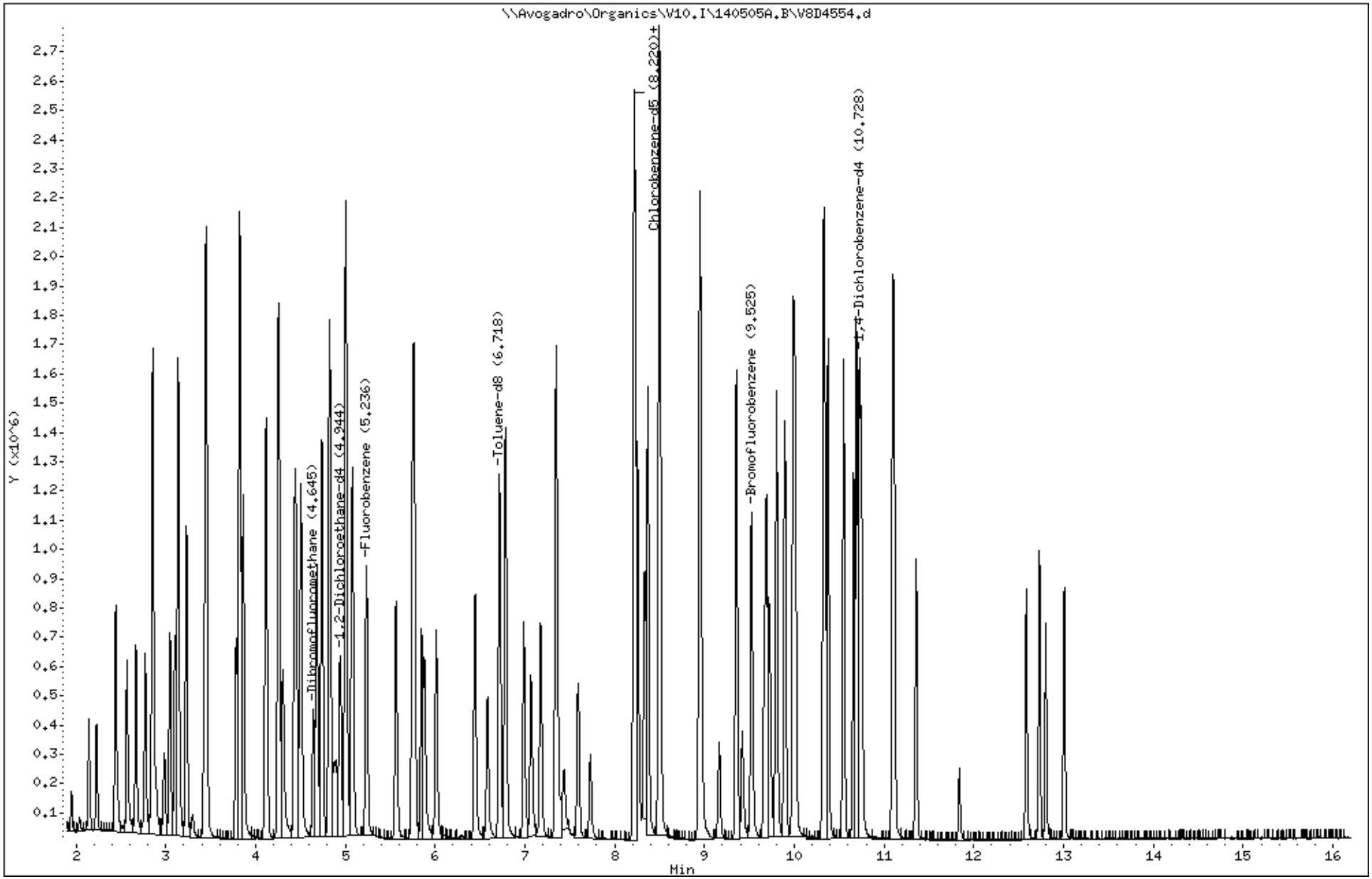
Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4554.d
Report Date: 07-May-2014 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	Isopropylbenzene	105	9.355	9.354	(1.138)	983072	50.0000	54
78	trans-1,4-Dichloro-2-butene	75	9.425	9.422	(1.146)	50552	50.0000	50(Q)
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.158)	360475	50.0000	50
80	1,1,2,2-Tetrachloroethane	83	9.666	9.663	(0.901)	248480	50.0000	50
81	Bromobenzene	156	9.689	9.689	(0.903)	251881	50.0000	53
82	1,2,3-Trichloropropane	75	9.718	9.721	(0.906)	305165	50.0000	50
83	n-Propylbenzene	120	9.801	9.801	(0.914)	227003	50.0000	52
84	2-Chlorotoluene	126	9.895	9.898	(0.923)	210825	50.0000	49
85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	839427	50.0000	52
86	4-Chlorotoluene	126	10.007	10.010	(0.933)	210880	50.0000	50
M 94	Xylene (Total)	106				1044140	150.000	160
87	tert-Butylbenzene	119	10.329	10.329	(0.963)	895808	50.0000	54
88	1,2,4-Trimethylbenzene	105	10.374	10.374	(0.967)	842237	50.0000	51
89	sec-Butylbenzene	105	10.547	10.551	(0.984)	969181	50.0000	50
90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	418393	50.0000	52
91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	815167	50.0000	51
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	319107	50.0000	
93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	426493	50.0000	52
95	n-Butylbenzene	91	11.094	11.094	(1.034)	733630	50.0000	52
96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	410785	50.0000	53
97	Hexachloroethane	117	11.358	11.358	(1.059)	144029	50.0000	51
98	1,2-Dibromo-3-chloropropane	75	11.837	11.843	(1.104)	51708	50.0000	54(Q)
141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	204116	50.0000	(a)
99	1,2,4-Trichlorobenzene	180	12.586	12.583	(1.174)	210087	50.0000	51
100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	164723	50.0000	52
101	Naphthalene	128	12.801	12.801	(1.194)	417747	50.0000	47
102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	206109	50.0000	49

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4554.d
Date : 05-MAY-2014 17:02
Client ID: LCS-76949
Instrument: V10.i
Sample Info: 5ML,LCS-76949,LCS-76949,76949
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-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-76932

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4470.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/04/2014

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	50	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	47	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	34	
74-88-4	Iodomethane	63	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	46	
75-34-3	1,1-Dichloroethane	48	
108-05-4	Vinyl acetate	48	
78-93-3	2-Butanone	35	
156-59-2	cis-1,2-Dichloroethene	45	
594-20-7	2,2-Dichloropropane	40	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	48	
56-23-5	Carbon tetrachloride	53	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	46	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	46	
74-95-3	Dibromomethane	50	
75-27-4	Bromodichloromethane	49	
10061-01-5	cis-1,3-Dichloropropene	44	
108-10-1	4-Methyl-2-pentanone	47	
108-88-3	Toluene	46	
10061-02-6	trans-1,3-Dichloropropene	45	
79-00-5	1,1,2-Trichloroethane	46	
142-28-9	1,3-Dichloropropane	42	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-76932

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-76932

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4470.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/04/2014

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	44	
106-93-4	1,2-Dibromoethane	43	
108-90-7	Chlorobenzene	43	
630-20-6	1,1,1,2-Tetrachloroethane	45	
100-41-4	Ethylbenzene	42	
179601-23-1	m,p-Xylene	85	
95-47-6	o-Xylene	43	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	42	
75-25-2	Bromoform	40	
98-82-8	Isopropylbenzene	44	
79-34-5	1,1,2,2-Tetrachloroethane	38	
108-86-1	Bromobenzene	40	
96-18-4	1,2,3-Trichloropropane	39	
103-65-1	n-Propylbenzene	41	
95-49-8	2-Chlorotoluene	41	
108-67-8	1,3,5-Trimethylbenzene	43	
106-43-4	4-Chlorotoluene	40	
98-06-6	tert-Butylbenzene	40	
95-63-6	1,2,4-Trimethylbenzene	42	
135-98-8	sec-Butylbenzene	42	
99-87-6	4-Isopropyltoluene	43	
541-73-1	1,3-Dichlorobenzene	41	
106-46-7	1,4-Dichlorobenzene	41	
104-51-8	n-Butylbenzene	43	
95-50-1	1,2-Dichlorobenzene	42	
96-12-8	1,2-Dibromo-3-chloropropane	38	
120-82-1	1,2,4-Trichlorobenzene	36	
87-68-3	Hexachlorobutadiene	41	
87-61-6	1,2,3-Trichlorobenzene	37	
91-20-3	Naphthalene	38	

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4470.d
Report Date: 14-May-2014 10:10

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140503A.B\V8D4470.d
Lab Smp Id: LCSD-76932 Client Smp ID: LCSD-76932
Inj Date : 04-MAY-2014 04:08
Operator : MMS SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCSD-76932,LCSD-76932,76932
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140503A.B\v108260Gadd-6lvl.m
Meth Date : 14-May-2014 10:07 amarquis Quant Type: ISTD
Cal Date : 28-APR-2014 14:13 Cal File: V8D4272.d
Als bottle: 56 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)	303485	50.0000	48
2	Freon114	85	1.705	1.705	(0.326)	160032	50.0000	42
3	Chloromethane	50	1.754	1.754	(0.335)	603654	50.0000	50
4	Vinyl Chloride	62	1.856	1.856	(0.355)	379192	50.0000	47
5	Bromomethane	94	2.146	2.146	(0.410)	160121	50.0000	47
6	Chloroethane	64	2.226	2.226	(0.425)	190819	50.0000	47
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	470818	50.0000	55
126	Ethanol	46	2.567	2.567	(0.490)	162988	5000.00	4700(A)
8	Ether	59	2.667	2.667	(0.509)	285711	50.0000	47
9	Acrolein	56	2.773	2.773	(0.530)	342224	250.000	210
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	214011	50.0000	47
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	228133	50.0000	50
12	Acetone	58	2.885	2.885	(0.551)	30156	50.0000	34
13	Iodomethane	142	2.985	2.985	(0.570)	263753	50.0000	63
14	Carbon Disulfide	76	3.046	3.046	(0.582)	640671	50.0000	45
15	Acetonitrile	41	3.136	3.136	(0.599)	791425	500.000	470(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	538510	50.0000	49
17	Methyl Acetate	43	3.146	3.146	(0.601)	454212	50.0000	50
18	Methylene Chloride	84	3.229	3.229	(0.617)	216396	50.0000	48
19	tert-Butanol	59	3.294	3.294	(0.629)	58405	100.000	78
20	Acrylonitrile	53	3.422	3.422	(0.654)	158179	50.0000	46
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	202766	50.0000	47
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	742183	50.0000	46

Data File: \\Avogadro\Organics\V10.I\140503A.B\V8D4470.d
Report Date: 14-May-2014 10:10

	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	3.782	(0.722)	580491	50.0000	48
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1245736	50.0000	48
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1610083	50.0000	51
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	681005	50.0000	52
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1129849	50.0000	47
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	330058	50.0000	40
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	220397	50.0000	45
	30 2-Butanone	72	4.255	4.255	(0.813)	19199	50.0000	35
	32 Propionitrile	54	4.303	4.303	(0.822)	510797	500.000	470(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	517581	100.000	100
	34 Bromochloromethane	128	4.451	4.451	(0.850)	111727	50.0000	48
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	46520	100.000	90
	35 Chloroform	83	4.506	4.506	(0.861)	512312	50.0000	50
$	36 Dibromofluoromethane	113	4.641	4.641	(0.886)	249756	50.0000	56
	37 1,1,1-Trichloroethane	97	4.680	4.680	(0.894)	509531	50.0000	51
	38 Cyclohexane	56	4.737	4.737	(0.905)	592660	50.0000	48
	39 1,1-Dichloropropene	110	4.824	4.824	(0.921)	99977	50.0000	48
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	431853	50.0000	53
	41 Isobutyl Alcohol	43	4.898	4.898	(0.936)	274903	1000.00	970(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.940	(0.944)	44855	50.0000	53
	43 Benzene	78	5.004	5.004	(0.956)	778811	50.0000	46
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	631209	50.0000	55
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	648689	50.0000	45
M	50 1,2-Dichloroethene (Total)	96				423163	100.000	92
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	720452	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	212643	50.0000	46
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	304864	50.0000	44
	49 1,2-Dichloropropane	63	5.770	5.770	(1.102)	281252	50.0000	46
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	148638	50.0000	48
	52 Dibromomethane	93	5.879	5.879	(1.123)	160352	50.0000	50
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	39891	1000.00	940(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	385989	50.0000	49
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.231)	1621	50.0000	24(T)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	347208	50.0000	44
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	371215	50.0000	47
$	58 Toluene-d8	98	6.715	6.715	(0.817)	808810	50.0000	47
	59 Toluene	91	6.782	6.782	(1.295)	846185	50.0000	46
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	333577	50.0000	45
	61 Ethyl Methacrylate	69	7.065	7.065	(1.349)	174309	50.0000	40
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	188779	50.0000	46
	63 Tetrachloroethene	164	7.342	7.342	(0.893)	217732	50.0000	44
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	343936	50.0000	42
	65 2-Hexanone	43	7.438	7.438	(0.905)	223614	50.0000	35
	66 Dibromochloromethane	129	7.593	7.593	(0.923)	255535	50.0000	44
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	210288	50.0000	42
	69 1-Chlorohexane	91	8.213	8.213	(0.999)	276405	50.0000	41
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	652384	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	550261	50.0000	43
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	240002	50.0000	45
	72 Ethylbenzene	106	8.371	8.371	(1.018)	289302	50.0000	42
	73 m,p-Xylene	106	8.499	8.499	(1.034)	714835	100.000	85
	74 o-Xylene	106	8.943	8.943	(1.088)	342814	50.0000	43
	75 Styrene	104	8.959	8.959	(1.090)	544057	50.0000	42
	76 Bromoform	173	9.162	9.162	(1.114)	151462	50.0000	40

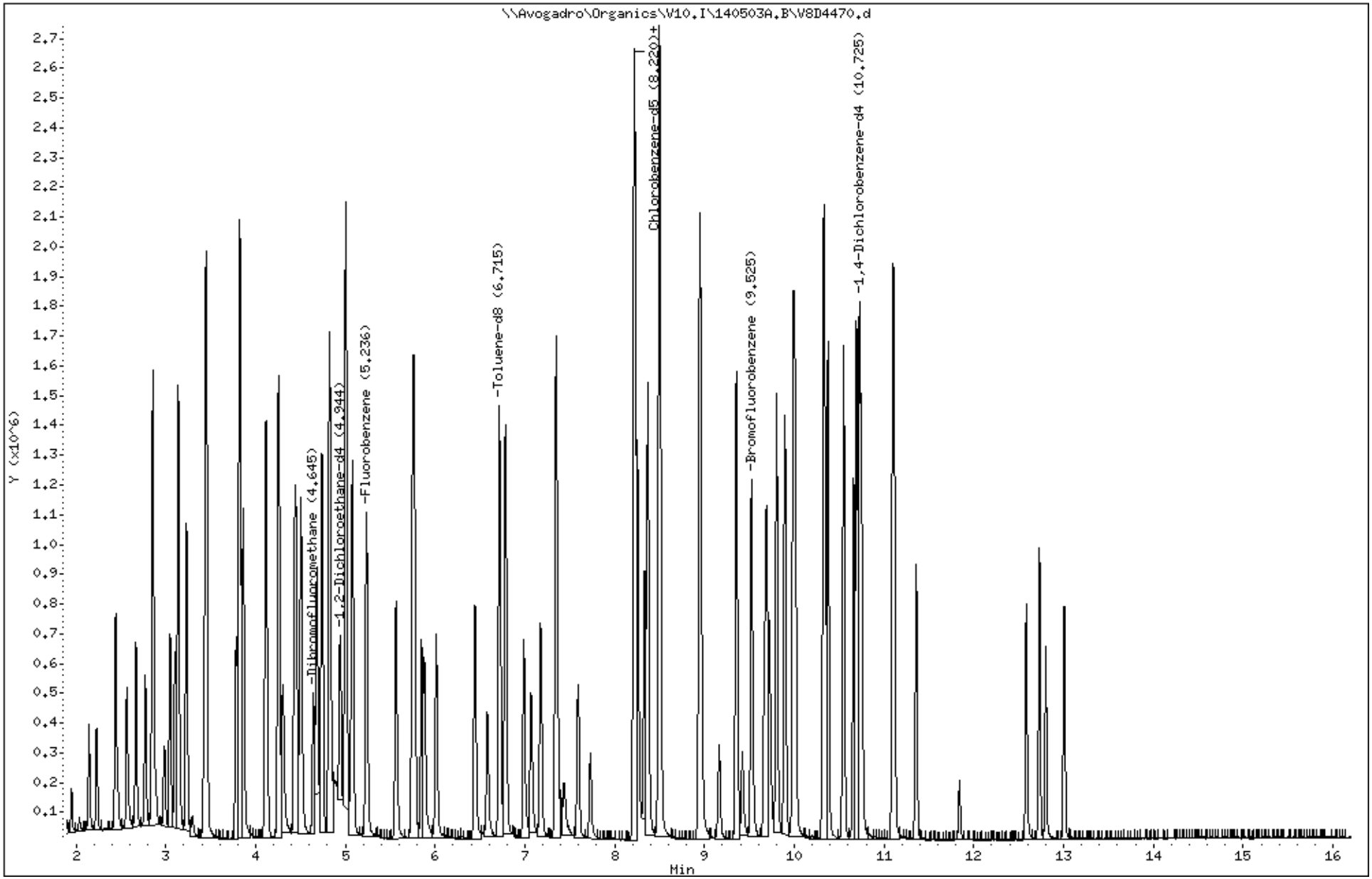
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Report Date: 14-May-2014 10:10

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.355	9.355	(1.138)	993742	50.0000	44
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	42090	50.0000	31(Q)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	394450	50.0000	53
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	241476	50.0000	38
	81	Bromobenzene	156	9.692	9.692	(0.904)	251449	50.0000	40
	82	1,2,3-Trichloropropane	75	9.718	9.718	(0.906)	283123	50.0000	39
	83	n-Propylbenzene	120	9.802	9.802	(0.914)	233187	50.0000	41
	84	2-Chlorotoluene	126	9.898	9.898	(0.923)	214644	50.0000	41
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	850239	50.0000	43
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	218282	50.0000	40
M	94	Xylene (Total)	106				1057649	150.000	130
	87	tert-Butylbenzene	119	10.326	10.326	(0.963)	810571	50.0000	40
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	845007	50.0000	42
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	991882	50.0000	42
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	414933	50.0000	41
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	829822	50.0000	42
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	350136	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	436490	50.0000	41
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	723789	50.0000	42
	96	1,2-Dichlorobenzene	146	11.110	11.110	(1.036)	412058	50.0000	42
	97	Hexachloroethane	117	11.358	11.358	(1.059)	139935	50.0000	36
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	44714	50.0000	38
	141	1,3,5-Trichlorobenzene	182	12.583	12.583	(2.403)	195713	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.583	12.583	(1.173)	204154	50.0000	36
	100	Hexachlorobutadiene	225	12.727	12.727	(1.187)	159657	50.0000	41
	101	Naphthalene	128	12.801	12.801	(1.194)	395014	50.0000	38
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	196736	50.0000	37

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\140503A.B\V8D4470.d
Date : 04-MAY-2014 04:08
Client ID: LCSD-76932
Instrument: V10.i
Sample Info: 5ML,LCSD-76932,LCSD-76932,76932
Purge Volume: 5.0
Operator: MMS SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-76949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4555.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/05/2014

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	48	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	56	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	50	
75-35-4	1,1-Dichloroethene	51	
67-64-1	Acetone	42	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	49	
75-09-2	Methylene chloride	51	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	50	
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	52	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	52	
74-95-3	Dibromomethane	50	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	49	
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	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-76949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-76949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4555.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 05/05/2014

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	51	
591-78-6	2-Hexanone	47	
124-48-1	Dibromochloromethane	52	
106-93-4	1,2-Dibromoethane	51	
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	54	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	53	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	52	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	52	
104-51-8	n-Butylbenzene	52	
95-50-1	1,2-Dichlorobenzene	52	
96-12-8	1,2-Dibromo-3-chloropropane	55	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	50	
87-61-6	1,2,3-Trichlorobenzene	48	
91-20-3	Naphthalene	47	

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4555.d
Report Date: 07-May-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140505A.B\V8D4555.d
Lab Smp Id: LCSD-76949 Client Smp ID: LCSD-76949
Inj Date : 05-MAY-2014 17:29
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCSD-76949,LCSD-76949,76949
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140505A.B\v108260Gadd-6lvl.m
Meth Date : 07-May-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 05-MAY-2014 13:50 Cal File: V8D4547.d
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: 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)	347520	50.0000	48
2	Freon114	85	1.705	1.705	(0.326)	204591	50.0000	51
3	Chloromethane	50	1.753	1.753	(0.335)	611672	50.0000	48
4	Vinyl Chloride	62	1.856	1.856	(0.355)	399461	50.0000	50
5	Bromomethane	94	2.143	2.143	(0.409)	175948	50.0000	56
6	Chloroethane	64	2.226	2.226	(0.425)	198072	50.0000	48
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	509450	50.0000	50
126	Ethanol	46	2.570	2.570	(0.491)	187665	5000.00	4700(AQ)
8	Ether	59	2.667	2.667	(0.509)	292804	50.0000	48(Q)
9	Acrolein	56	2.770	2.770	(0.529)	394219	250.000	250
10	1,1-Dichloroethene	96	2.853	2.853	(0.545)	220399	50.0000	51
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	262384	50.0000	49
12	Acetone	58	2.888	2.888	(0.552)	40486	50.0000	42
13	Iodomethane	142	2.982	2.982	(0.570)	259812	50.0000	56
14	Carbon Disulfide	76	3.046	3.046	(0.582)	656018	50.0000	49
15	Acetonitrile	41	3.136	3.136	(0.599)	872885	500.000	520(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	631172	50.0000	52
17	Methyl Acetate	43	3.146	3.146	(0.601)	505915	50.0000	49
18	Methylene Chloride	84	3.229	3.229	(0.617)	210010	50.0000	51
19	tert-Butanol	59	3.297	3.297	(0.630)	68476	100.000	94
20	Acrylonitrile	53	3.422	3.422	(0.654)	169268	50.0000	48
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	206120	50.0000	50
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	762612	50.0000	50

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4555.d
Report Date: 07-May-2014 09:51

							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	3.786	(0.723)	590378	50.0000	50
	24 Vinyl acetate	43	3.821	3.821	(0.730)	1322513	50.0000	51
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1657048	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	730570	50.0000	52
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1126237	50.0000	51
	29 2,2-Dichloropropane	77	4.261	4.261	(0.814)	443956	50.0000	52
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	218976	50.0000	51(Q)
	30 2-Butanone	72	4.258	4.258	(0.813)	25029	50.0000	47(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	553805	500.000	500(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	578633	100.000	100
	34 Bromochloromethane	128	4.454	4.454	(0.851)	109055	50.0000	50
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	48617	100.000	99(Q)
	35 Chloroform	83	4.509	4.509	(0.861)	529462	50.0000	50
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	221060	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	543444	50.0000	51
	38 Cyclohexane	56	4.740	4.740	(0.905)	621584	50.0000	51
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	105425	50.0000	51
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	463647	50.0000	52
	41 Isobutyl Alcohol	43	4.879	4.879	(0.932)	20564	1000.00	260(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	37790	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	773023	50.0000	51
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	661049	50.0000	49
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	651561	50.0000	51
M	50 1,2-Dichloroethene (Total)	96				425096	100.000	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	604455	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	217846	50.0000	51
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	323695	50.0000	52
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	287145	50.0000	52
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	161948	50.0000	51
	52 Dibromomethane	93	5.882	5.882	(1.123)	164098	50.0000	50
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	46523	1000.00	1100(A)
	54 Bromodichloromethane	83	6.011	6.011	(1.148)	399196	50.0000	52
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.232)	1078	50.0000	20(TQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	355914	50.0000	53
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	412085	50.0000	49
$	58 Toluene-d8	98	6.718	6.718	(0.817)	698701	50.0000	50
	59 Toluene	91	6.782	6.782	(1.295)	849537	50.0000	51
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	358530	50.0000	54
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	197923	50.0000	55
	62 1,1,2-Trichloroethane	97	7.174	7.174	(1.370)	188680	50.0000	51
	63 Tetrachloroethene	164	7.342	7.342	(0.893)	213760	50.0000	51
	64 1,3-Dichloropropane	76	7.351	7.351	(0.894)	351857	50.0000	51
	65 2-Hexanone	43	7.435	7.435	(0.904)	272692	50.0000	46
	66 Dibromochloromethane	129	7.596	7.596	(0.923)	269826	50.0000	52
	67 1,2-Dibromoethane	107	7.728	7.728	(0.939)	214406	50.0000	51
	69 1-Chlorohexane	91	8.213	8.213	(0.998)	272949	50.0000	49
*	68 Chlorobenzene-d5	117	8.226	8.226	(1.000)	589827	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	551603	50.0000	51
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	244714	50.0000	50
	72 Ethylbenzene	106	8.371	8.371	(1.018)	289151	50.0000	52
	73 m,p-Xylene	106	8.496	8.496	(1.033)	709124	100.000	100
	74 o-Xylene	106	8.946	8.946	(1.088)	347272	50.0000	54
	75 Styrene	104	8.959	8.959	(1.089)	544660	50.0000	53
	76 Bromoform	173	9.165	9.165	(1.114)	164475	50.0000	53

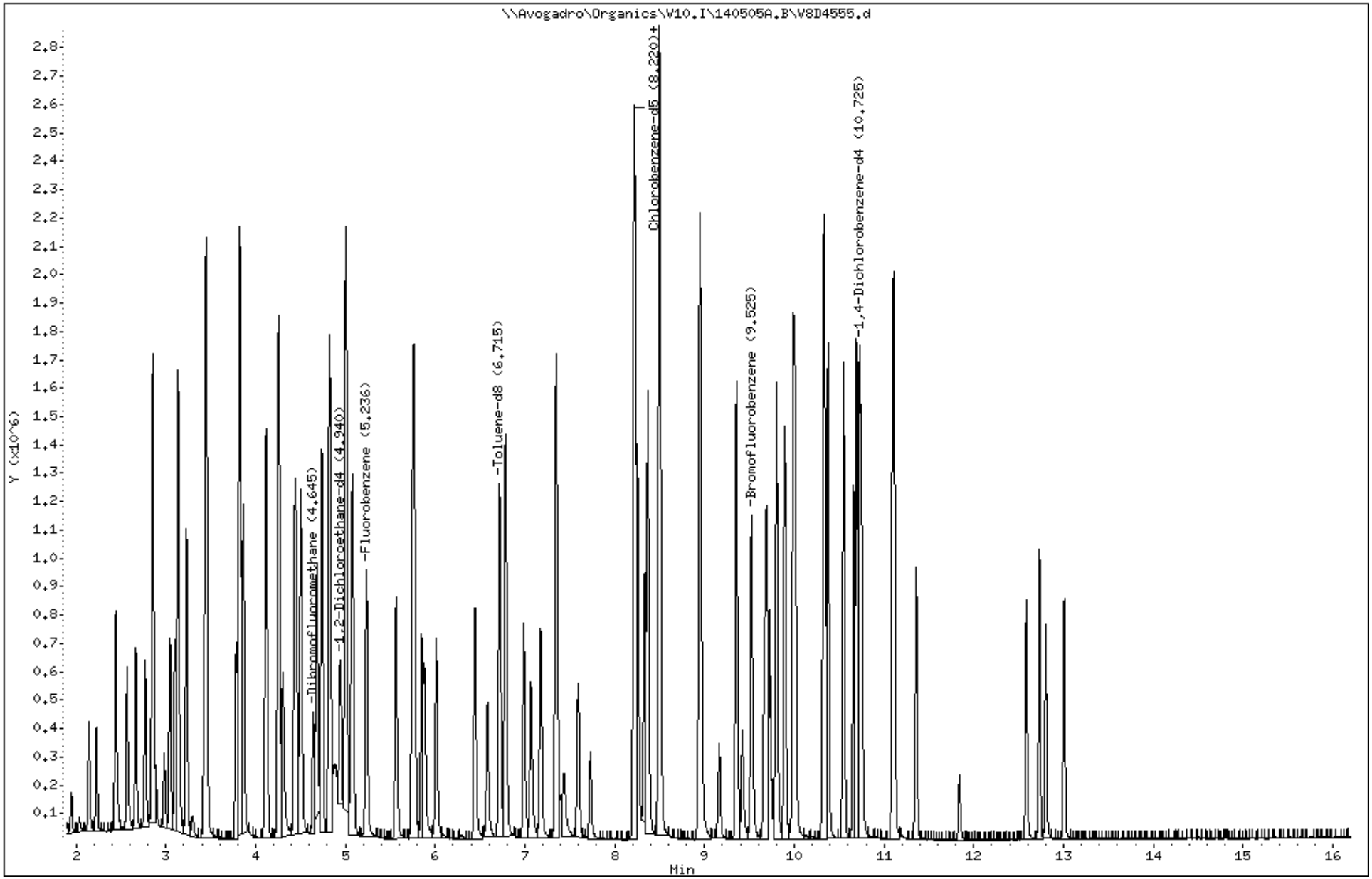
Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4555.d
Report Date: 07-May-2014 09:51

		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	(1.137)	994572	50.0000	54
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.145)	51638	50.0000	50(Q)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	355850	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	9.663	9.663	(0.901)	249364	50.0000	48
	81	Bromobenzene	156	9.689	9.689	(0.903)	251663	50.0000	52
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	311167	50.0000	50
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	231288	50.0000	51
	84	2-Chlorotoluene	126	9.898	9.898	(0.923)	216649	50.0000	49
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	857736	50.0000	51
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	219408	50.0000	50
M	94	Xylene (Total)	106				1056396	150.000	160
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	896874	50.0000	52
	88	1,2,4-Trimethylbenzene	105	10.374	10.374	(0.967)	864236	50.0000	51
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	980200	50.0000	49
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	412293	50.0000	50
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	831454	50.0000	51
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	327353	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	439543	50.0000	52
	95	n-Butylbenzene	91	11.094	11.094	(1.034)	746704	50.0000	52
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	414415	50.0000	52
	97	Hexachloroethane	117	11.358	11.358	(1.059)	144492	50.0000	50
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.843	(1.104)	54221	50.0000	55(Q)
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	199756	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.583	12.583	(1.173)	205644	50.0000	49
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	160811	50.0000	50
	101	Naphthalene	128	12.801	12.801	(1.194)	431623	50.0000	47
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	203306	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.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140505A.B\V8D4555.d
Date : 05-MAY-2014 17:29
Client ID: LCSD-76949
Instrument: V10.i
Sample Info: 5ML,LCSD-76949,LCSD-76949,76949
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 4-28-14

ANALYST: [signature]

BATCH: 140428.B

Start: 28-APR-14 09:29
End: 28-APR-14 14:51

Comments:

Standards: RFB VW140428A 2 uL
IS/SS VW140409A AUTO uL
STD VW140428A ___ uL
_____ ___ uL

Reviewed By: [signature] 4/29/14

Manual Integration: _____

MI Review: _____

ICV: VW140428B

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D4262	09:29	BFB10Z	BFB10Z		AQ									1		[signature]	
V8D4263	09:57	VSTD02010Z	VSTD02010Z		AQ		108	104	101					1		[signature] MI_12	
V8D4264	10:24	VSTD00510Z	VSTD00510Z		AQ		104	99	89					1		[signature] MI_12	
V8D4265	10:51	VSTD00110Z	VSTD00110Z		AQ		101	101	86					1		[signature]	
V8D4266	11:19	VSTD00110Z	VSTD00110Z		AQ		101	99	84					1		[signature] NOT USED	
V8D4267	11:46	VSTD20010Z	VSTD20010Z		AQ		102	102	106					1		[signature]	
V8D4268	12:14	VSTD10010Z	VSTD10010Z		AQ		103	101	103					1		[signature]	
V8D4269	12:41	VBLK	VBLK		AQ		103	98	82	100	100	100	95	1		[signature] NOT USED	
V8D4270	13:08	VBLK	VBLK		AQ		102	98	82	101	102	100	95	1		[signature]	
V8D4271	13:36	VSTD00110Z	VSTD00110Z		AQ		101	99	83					1		[signature]	
V8D4272	14:13	VSTD05010Z	VSTD05010Z		AQ		100	100	100					1		[signature]	
V8D4273	14:51	VICV05010Z	VICV05010Z		AQ		100	98	100	102	103	102	100	1	E	[signature] MI_12	

* - 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

4-29-14

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W ANALYST: MS BATCH: 140503A.B
ICAL DATE: 4/24/14

Start: 04-MAY-14 02:20
End: 04-MAY-14 14:40

Comments:

Standards: ~~SB~~ VW140238A 2 uL
~~SMS~~ VW140423C 400 uL
~~SIS~~ VW140423A 200 uL
uL

Reviewed By: JJ 5/6/14 Manual Integration: MA 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
V8D4466	02:20	BFB10H	BFB10H		AQ									1		OK	
V8D4467	02:47	VSTD05010H	VSTD05010H		AQ		100	100	100					1		RR	
V8D4468	03:14	VSTD05010H	VSTD05010H		AQ		100	100	100					1		OK CCV	
V8D4469	03:41	LCS-76932	LCS-76932	76932	AQ		102	102	100	114	105	93	104	1	ER	OK	
V8D4470	04:08	LCSD-76932	LCSD-76932	76932	AQ		104	101	100	112	106	95	106	1	ER	OK	
V8D4471	04:35	MB-76932	MB-76932	76932	AQ		101	97	74	113	102	96	96	1		Dm 4/24/14	
V8D4472	05:02	MB-76932	MB-76932	76932	AQ		99	96	71	113	104	94	95	1		OK	
V8D4473	05:29	N0665-12A	TRIP BLANK 4/25	76932	AQ	1	99	96	70	114	108	95	93	1		OK	2
V8D4474	05:57	N0665-01A	GW042514VW025	76932	AQ	1	100	94	69	112	105	94	96	1	E	OK DLx2 Vinyl Chloride = 356	2
V8D4475	06:24	N0665-02A	GW042514VW026	76932	AQ	1	95	91	67	114	109	96	96	1		OK NO C.O.	2
V8D4476	06:51	N0665-03A	GW042514VW027	76932	AQ	1	95	93	70	114	108	94	95	1		OK	2
V8D4477	07:19	N0665-04A	GW042514VW028	76932	AQ	1	96	90	67	113	105	96	93	1		OK	2
V8D4478	07:46	N0665-05A	GW042514VW029	76932	AQ	1	94	91	67	114	111	96	94	1		OK	2
V8D4479	08:14	N0665-06A	GW042514VW030	76932	AQ	1	94	90	66	114	106	95	95	1		OK	2
V8D4480	08:40	N0665-07A	GW042514VW031	76932	AQ	1	93	89	66	116*	109	94	96	1		OK	2
V8D4481	09:08	N0665-08A	GW042514VW032	76932	AQ	1	91	90	67	113	106	95	94	1		OK	2
V8D4482	09:36	N0665-09A	GW042514VW033	76932	AQ	1	92	90	66	114	108	94	95	1		OK	2
V8D4483	10:03	N0665-10A	GW042514VW034	76932	AQ	1	93	89	66	113	106	95	96	1		OK	2
V8D4484	10:31	N0665-11A	GW042514VW035	76932	AQ	1	92	87	66	112	111	96	98	1		OK	2
V8D4485	10:59	N0695-01A	MW-3R-043014	76932	AQ	1	92	86	63	114	109	98	98	1		OK	2
V8D4486	11:26	N0695-02A	MW-4-043014	76932	AQ	1	90	88	65	115	113	93	95	1		OK	2
V8D4487	11:54	N0695-03A	MW-5-043014	76932	AQ	1	89	87	63	115	109	94	95	1		OK	2
V8D4488	12:22	N0695-04A	DUP-1-043014	76932	AQ	1	88	87	63	116*	112	94	96	1		OK	2
V8D4489	12:49	N0695-05A	MW-7-043014	76932	AQ	1	88	87	63	116*	109	95	93	1		OK	2
V8D4490	13:17	N0695-06A	MW-8-043014	76932	AQ	1	87	85	62	117*	113	95	96	1		OK	2
V8D4491	13:44	N0695-03AMS	MW-5-043014MS	76932	AQ	2	91	92	95	117*	109	91	106	1	ER	OK	2
V8D4492	14:12	N0695-03AMSD	MW-5-043014MSD	76932	AQ	3	92	92	92	115	106	92	105	1	ER	OK	2
V8D4493	14:40	VBLK	VBLK		AQ		90	88	69	114	109	94	97	1	T	BLK	2

* - 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

MS 5/5/14

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 5-5-14

ANALYST: [illegible]

BATCH: 140505.B

Start: 05-MAY-14 11:41
End: 05-MAY-14 15:40

Comments:

Standards: DFB VW140228A 2 uL
ISTS VW140428C AMP uL
STM VW140428A 20 uL
_____ ____ uL

Reviewed By: [illegible] 5/7/14

Manual Integration: _____

MI Review: _____

ICV: VW140428D

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
V8D4543	11:41	BFB10I	BFB10I		AQ									1			
V8D4544	12:27	VSTD05010I	VSTD05010I		AQ		100	100	100					1		MI_55	
V8D4545	12:55	VSTD02010I	VSTD02010I		AQ		99	99	96					1		MI_41	
V8D4546	13:22	VSTD00510I	VSTD00510I		AQ		97	98	85					1		MI_41_55_60	
V8D4547	13:50	VSTD00110I	VSTD00110I		AQ		94	96	74					1			
V8D4549	14:45	VSTD20010I	VSTD20010I		AQ		102	108	114					1			
V8D4550	15:12	VSTD10010I	VSTD10010I		AQ		105	107	108					1			
V8D4551	15:40	VICV05010I	VICV05010I		AQ		103	106	104	100	98	99	99	1	E		

* - 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

5-6-14

[redacted]NST[redacted]ENT[redacted] [redacted]ctrum [redacted]alytic[redacted]c. RI [redacted]ion [redacted]

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 5-5-14

ANALYST: JLW

BATCH: 140505A.B

Start: 05-MAY-14 16:07
End: 06-MAY-14 03:00

Comments:

Standards: BFB VW140205A 2 uL
ISTD VW140428C 400 uL
SMO VW140428A 20 uL
_____ ___ uL

Reviewed By: [signature] 5/7/14

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
V8D4552	16:07	BFB10J	BFB10J		AQ									1		OK	
V8D4553	16:35	VSTD05010J	VSTD05010J		AQ		100	100	100					1		OK	
V8D4554	17:02	LCS-76949	LCS-76949	76949	AQ		102	102	99	101	97	100	101	1	ER	OK	
V8D4555	17:29	LCSD-76949	LCSD-76949	76949	AQ		103	102	102	99	99	99	99	1	ER	OK	
V8D4556	17:57	MB-76949	MB-76949	76949	AQ		100	98	77	99	102	100	91	1		NOT USED	
V8D4557	18:24	MB-76949	MB-76949	76949	AQ		95	96	72	104	104	100	92	1		OK	
V8D4558	18:52	N0695-11A	TRIP BLANK	76949	AQ	1	95	93	70	104	104	103	92	1		OK	2
V8D4559	19:19	N0635-17A	GW042414VW016	76949	AQ	2	94	93	64	104	100	101	90	1		OK	
V8D4560	19:46	N0635-19A	GW042414VW018	76949	AQ	2	96	93	66	101	102	101	90	1	F	OK	
V8D4561	20:14	N0686-01A	PS-6-2Q14	76949	AQ	2	94	92	65	101	103	101	91	100	E	TCE=354 RR@500X	
V8D4562	20:41	N0686-03A	PS-13-2Q14	76949	AQ	2	92	90	65	105	105	101	93	20		TCE=194 OK	
V8D4563	21:08	N0686-04A	PS-12-2Q14	76949	AQ	2	91	89	65	103	101	102	91	20		TCE=137 OK	
V8D4564	21:35	N0686-05A	PS-15-2Q14	76949	AQ	2	90	88	62	104	103	100	90	5		CIS1,2=149 OK	
V8D4565	22:02	N0686-06A	PS-21-2Q14	76949	AQ	2	90	88	62	103	102	100	89	5		CIS1,2=111 OK	
V8D4566	22:30	N0686-07A	PS-18-2Q14	76949	AQ	2	86	87	61	108	102	101	90	10		CIS1,2=76 OK	
V8D4567	22:57	N0686-09A	S-6-2Q14	76949	AQ	2	85	85	60	108	103	101	91	5	F	CIS1,2=125 OK	
V8D4568	23:24	N0686-11A	S-2-2Q14	76949	AQ	2	85	85	60	107	101	102	90	10	F	CIS1,2=105 OK	
V8D4569	23:51	N0686-12A	DUP	76949	AQ	2	85	86	60	107	101	100	89	20		TCE=148 OK	
V8D4570	00:18	N0665-01ADL	GW042514VW025DL	76949	AQ	2	83	83	58	108	104	101	93	2	F	VINYL=136 OK	
V8D4571	00:45	N0695-07A	MW-9-050114	76949	AQ	1	82	83	58	109	102	99	90	1		OK	
V8D4572	01:12	N0695-08A	MW-6-050114	76949	AQ	1	81	81	58	106	102	97	89	1	F	OK	
V8D4573	01:39	N0695-09A	MW-2-050114	76949	AQ	1	81	82	57	106	105	99	91	1	F	OK	
V8D4574	02:07	N0695-10A	MW-1-050114	76949	AQ	1	79	78	57	109	104	103	96	1	F	OK	2
V8D4575	02:33	N0623-01A	WETWELL GRAB	76955	AQ	14	80	80	63	109	104	100	96	10		OK - FOAMABLE	
V8D4576	03:00	VBLK	VBLK		AQ		81	105	83	107	192*	103	79	1	E	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

5/6/14

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
04/30/14	S010603	RIRRC	01	WJL	✱	H	R10	
↓	N0688	CRA	01 - 11	↓	↓	H	R10	
↓	N0681	EPA	11 - 20	↓	↓	T	R4	
↓	N0693	EPA	01 - 05	↓	↓	T	R4	
↓	N0680	EPA	03 - 07	↓	↓	H	R13	
04/30/14	N0689	LABELLA	04, 07-16, 18-22, 24, 25	WJL	↓	US	R10	
04/30/14	N0692	PHENOVA	01	WJL	↓	AMPUL	R13	
5/1/14	N0695	EGZA	01 - 02	VBB	↓	H	R9	
5/1/14	N0696	VBB 5/1/14 EPA	01 - 20	VBB	↓	T	R4	
↓	N0697	↓	01 - 20	WJL	↓	T	R4	
↓	N0700	↓	01 - 06	↓	↓	T	R4	
↓	N0701	↓	01 - 20	↓	↓	H	R13	
↓	N0702	EPA	01 - 02	↓	↓	H	R13	
5/1/14	N0698	ENSAFE	01	WJL	✱	H	R10	

Logbook ID 90.0191-10/13

Reviewed By: ✱ 5-8-14

"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

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
5/1/14	S0106OS	RRRC	01	WJL	WL	H	R10	
5/2/14	NO695	GZA	07 - 11	VEB		H	R9	
5/2/14	NO700	EPA	07 - 20	VEB		T	R4	
	NO702	EPA	03 - 20	WJL		H	R13	
	NO703	EARTH	03 - 05			H	R10	
	NO711	EPA	01 - 05			H	R13	
	NO710	EPA	01 - 20			T	R4	
	NO717	EPA	01 - 06			T	R4	
	NO718	EPA	01 - 05			H	R13	
5/2/14	NO706	LABELLA	01, 04 - 09	WJL		US	R10	
5/2/14	NO719	RIRRC	01 - 06	WJL		H	R10	
5/5/14	NO703	Earth	06 - 10	VEB		H	R10	
5/5/14	NO724	Labella	01 - 07	VEB		US	R3	
5/5/14	NO719	RIRRC	07 - 09	VEB	WL	~~H~~ VEB 5/15/14	R10	

Logbook ID 90.0191-10/13

Reviewed By: WL 5/9/14

"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



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www.spectrum-analytical.com

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: N0695

SM 3500D

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: SM 3500D

IV. PREPARATION

Samples were prepared following procedures in laboratory test code: SM 3500D

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: SPEC2
Instrument Type: SP

Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on sample: MW-5-043014 (N0695-03BMS).

Percent recoveries were within the QC limits.

D. Duplicate sample:

Duplicate analyses were performed on sample: MW-5-043014 (N0695-03BDUP).

Relative percent differences were within the QC limits.

E. Dilutions:

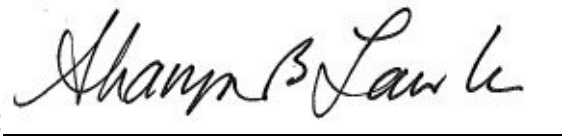
No sample required dilution in this SDG.

F. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and

for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 05/09/2014

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

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-043014
Lab ID: N0695-01
Project: Maple Street
Collection Date: 04/30/14 11:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:39	76899

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-043014 **Project:** Maple Street
Lab ID: N0695-02 **Collection Date:** 04/30/14 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:41	76899

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-043014
Lab ID: N0695-03
Project: Maple Street
Collection Date: 04/30/14 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:43	76899

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-043014
Lab ID: N0695-04
Project: Maple Street
Collection Date: 04/30/14 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:50	76899

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-043014
Lab ID: N0695-05
Project: Maple Street
Collection Date: 04/30/14 13:55

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:53	76899

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-043014
Lab ID: N0695-06
Project: Maple Street
Collection Date: 04/30/14 15:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:55	76899

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-050114
Lab ID: N0695-07
Project: Maple Street
Collection Date: 05/01/14 11:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:15	76920

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-050114 **Project:** Maple Street
Lab ID: N0695-08 **Collection Date:** 05/01/14 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:18	76920

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-050114
Lab ID: N0695-09
Project: Maple Street
Collection Date: 05/01/14 11:25

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:21	76920

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-050114
Lab ID: N0695-10
Project: Maple Street
Collection Date: 05/01/14 11:05

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:24	76920

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: GZA GeoEnvironmental of NY Buffalo

Work Order: N0695

Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+

SM 3500D -- CR VI by Colorimetric Method

Sample ID: **MB-76899** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **05/01/14 14:30** Run ID: **SPEC2_140501C**

Client ID: **MB-76899** Batch ID: **76899** Units: **mg/L** Analysis Date: **05/01/14 14:34** SeqNo: **2083167**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030									

Sample ID: **LCS-76899** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **05/01/14 14:30** Run ID: **SPEC2_140501C**

Client ID: **LCS-76899** Batch ID: **76899** Units: **mg/L** Analysis Date: **05/01/14 14:36** SeqNo: **2083168**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3870	0.030	0.030	0.4000	0	96.7	80	120	0			

Sample ID: **N0695-03BDUP** SampType: **DUP** TestCode: **SM3500_CR+** Prep Date: **05/01/14 14:30** Run ID: **SPEC2_140501C**

Client ID: **MW-5-043014** Batch ID: **76899** Units: **mg/L** Analysis Date: **05/01/14 14:46** SeqNo: **2083172**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030	0	0	0	0	0	0	0	20	

Sample ID: **N0695-03BMS** SampType: **MS** TestCode: **SM3500_CR+** Prep Date: **05/01/14 14:30** Run ID: **SPEC2_140501C**

Client ID: **MW-5-043014** Batch ID: **76899** Units: **mg/L** Analysis Date: **05/01/14 14:48** SeqNo: **2083173**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3999	0.030	0.030	0.4000	0	100	75	125	0			

SPEC2-140501C

Spectrum Analytical, Inc. RI Div. **Hexavalent Chromium Colorimetric Analysis Logbook** SPEC2

Analysis Date: 5/1/14 14:30 - 15:00 **Analyst:** RB

Sample ID		pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
RB 5/1/14 MSO		1	25	0.000	-0.002	—	ND		
SO.2			0.4/25	0.157	0.202		0.202	101%	
MB-76899			25	0.000	-0.002		ND		
LCS-76899			0.1/25	0.300	0.387		0.387	97%	
NO695-01B			25	0.009	0.010		ND	~~97%~~ RB 5/1/14	
NO695-02B				0.014	0.016		ND		
NO695-03S				0.011	0.013		ND		
NO695-03B	DUP			0.010	0.011		ND		
NO695-03B	MS			0.310	0.400		<SAMP=0.011 MS=0.389	97%	
NO695-04B				~~0.030~~ 0.010	0.011		ND		
NO695-05B			↓	0.020	0.024		ND		
NO695-06B		↓	25	0.023	0.028		ND		
SO.4		1	0.8/25	0.302	~~0.340~~ 0.390 RB 5/1/14	↓	0.390	98%	
					RB 5/1/14				

Wavelength= 540 nm
Pathlength= 10cm
MRL= 0.03
ChromaVer 3 Lot #: A3233
Diphenylcarbizide Solution ID: —

Method#: SM3500 Cr B / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

CURVE-IWP120607A
LCS/MS-IWW140~~1~~501

m= 0.77197
b= 0.00127
r= 0.999929
3/25/14

TV= 0.4 mg/L

Logbook ID: 100.0056-10/13

LIMS entry: RB 5/8/14

Reviewed By: JBL 5/7/14

SPEC 2 - 140502A

Spectrum Analytical, Inc. RI Div. **Hexavalent Chromium Colorimetric Analysis Logbook** SPEC 2 -

Analysis Date: 5/2/14 14:00-14:30 **Analyst:** RMF

Sample ID	pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
S0	1	25	0.000	-0.002	—	ND		
S0.2		0.4/25	0.159	0.204		0.204	102%	
MB-76920		25	0.000	-0.002		ND		
LCS-76920		25	0.295	0.380		0.380 RMF 5/2/14	95%	
LCSD-76920		25	0.293	0.378		0.378	95%	
NO695-07B		25	0.001	0.000		ND		
NO695-08B		25	0.005	0.005		ND		
NO695-09B		25	0.003	0.002		ND		
NO695-10B	↓	25	0.000	-0.002	↓	ND		
S0.4	1	0.8/25	0.300	0.387	—	0.387	97%	

RMF 5/2/14

Wavelength= 540 nm
Pathlength= 1.0 cm
MRL= 0.03
ChromaVer 3 Lot #: A3233
Diphenylcarbizide Solution ID: —

Method# : (SM3500 Cr B) / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

CURVE-IWP120607A
LCS-IWW140501B1
TV=0.4mg/L

m= 0.77197
b= 0.00127
r= 0.99929
3/25/14

Logbook ID: 100.0056-10/13

LIMS entry: [illegible] 5/8/14

Reviewed By: SBL 9/7/14

Internal Chain of Custody

Client: GZA_BUFFALO

Work Order: N0695 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
01A	002	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
01B	001	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
02A	001	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
02A	002	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
02B	001	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03A	001	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03A	002	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03A	003	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03A	004	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03A	005	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03A	006	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03B	001	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03B	002	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
03B	003	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
04A	001	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
04A	002	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
04B	001	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
05A	001	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
05A	002	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
05B	001	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
06A	001	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
06A	002	SW8260_W	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
06B	001	SM3500_CR+	In	LOGIN: vbrizard	5/1/2014 11:32:00 AM
07A	001	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
07A	002	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
07B	001	SM3500_CR+	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
08A	001	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
08A	002	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
08B	001	SM3500_CR+	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
09A	001	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
09A	002	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM

Internal Chain of Custody

Client: GZA_BUFFALO

Work Order: N0695 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
09B	001	SM3500_CR+	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
10A	001	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
10A	002	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
10B	001	SM3500_CR+	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
11A	001	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM
11A	002	SW8260_W	In	LOGIN: wlafferty	5/2/2014 9:52:00 AM

Last Page of Data Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
Facsimile 518-251-4428

July 5, 2014

Daniel Troy
GZA GeoEnvironmental of New York
535 Washington St. 11th Floor
Buffalo, NY 14203

RE: DUSR Validation of Data Packages for the 312 Maple Street Site
Spectrum Analytical, Inc SDG No. N0695

Dear Mr. Troy:

Review has been completed for the data package generated by Spectrum Analytical, Inc that pertain to samples collected 04/30/14 and 05/01/14 at the 312 Maple Street site. Nine aqueous samples and a field duplicate were processed for a full list of volatile analytes, and hexavalent chromium. The analytical methodologies utilized are those of the USEPA SW846 method 8260B and the Standard Methods SM3200B.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Case Narratives
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Preparation/Calibration Blanks
* Laboratory Control Samples
* Instrumental Tunes and IDLs
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR review level.

In summary, sample results are usable either as reported or with minor edit/qualification.

Copies of the NYSDEC Sample Identification and Analytical Requirement Summary Forms are attached to this text. Included with this report are qualified laboratory results forms.

The following text discusses quality issues of concern.

Field Duplicates

The blind field duplicate evaluation was performed on MW-3R-043014. Correlations are within validation guidelines.

Volatiles by EPA 8260B

Samples MW-7-043014, MW-8-043014, and DUP-1-043014 produced elevated recoveries for surrogate standard dibromofluoromethane (111% and 117%). Contrary to the laboratory case narrative statement, the samples should have been reanalyzed to confirm matrix effect. The results for the detected analytes in these samples are qualified as estimated, and may have a slightly high bias.

Matrix spikes of MW-5-042313 show acceptable recoveries and duplicate correlations.

Internal standard recoveries are within required ranges. Blanks show no contamination.

Calibrations standards showed responses within analytical protocol and validation guidelines, with the exception of the following, results for which are qualified as estimated in the indicated samples:

- 2-butanone (low RRF), 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene (22%D and 27%D) in MW-3R-043014, MW-4-043014, MW-5-043014, DUP-1-043014, MW-7-043014, and MW-8-043014
- naphthalene (25%D) in MW-9-050114, MW-6-050114, MW-2-50114, MW-1-050114, and Trip Blank

Hexavalent Chromium by SM3200B

Matrix spike/laboratory duplicate evaluations were performed on MW-3R-043014 show recoveries and correlations within recommended ranges.

Blanks show no contamination above the reporting limits, and calibration standards show compliant responses.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs and LABORATORY CASE NARRATIVES

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

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

Project Name : Maple Street **SDG :** N0695

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-3R-043014	N0695-01	SW8260_W				SEE DATA
MW-4-043014	N0695-02	SW8260_W				SEE DATA
MW-5-043014	N0695-03	SW8260_W				SEE DATA
DUP-1-043014	N0695-04	SW8260_W				SEE DATA
MW-7-043014	N0695-05	SW8260_W				SEE DATA
MW-8-043014	N0695-06	SW8260_W				SEE DATA
MW-9-050114	N0695-07	SW8260_W				SEE DATA
MW-6-050114	N0695-08	SW8260_W				SEE DATA
MW-2-050114	N0695-09	SW8260_W				SEE DATA
MW-1-050114	N0695-10	SW8260_W				SEE DATA
TRIP BLANK	N0695-11	SW8260_W				

Report Date:
21-May-14 09:58

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: N0695
Project : Maple Street
Project #:

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N0695-01	MW-3R-043014	Aqueous	30-Apr-14 11:10	01-May-14 11:20
N0695-02	MW-4-043014	Aqueous	30-Apr-14 12:00	01-May-14 11:20
N0695-03	MW-5-043014	Aqueous	30-Apr-14 12:50	01-May-14 11:20
N0695-04	DUP-1-043014	Aqueous	30-Apr-14 00:00	01-May-14 11:20
N0695-05	MW-7-043014	Aqueous	30-Apr-14 13:55	01-May-14 11:20
N0695-06	MW-8-043014	Aqueous	30-Apr-14 15:20	01-May-14 11:20
N0695-07	MW-9-050114	Aqueous	01-May-14 08:40	02-May-14 09:36
N0695-07	MW-9-050114	Aqueous	01-May-14 11:35	02-May-14 09:36
N0695-08	MW-6-050114	Aqueous	01-May-14 09:15	02-May-14 09:36
N0695-08	MW-6-050114	Aqueous	01-May-14 11:40	02-May-14 09:36
N0695-09	MW-2-050114	Aqueous	01-May-14 09:50	02-May-14 09:36
N0695-09	MW-2-050114	Aqueous	01-May-14 11:25	02-May-14 09:36
N0695-10	MW-1-050114	Aqueous	01-May-14 11:00	02-May-14 09:36
N0695-10	MW-1-050114	Aqueous	01-May-14 11:05	02-May-14 09:36
N0695-11	TRIP BLANK	Aqueous	01-May-14 00:00	02-May-14 09:36

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

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: N0695

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.

MW-4-043014 (N0695-02A), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

MW-5-043014 (N0695-03AMS), recovery is above criteria for Dibromofluoromethane at 117% with criteria of (85-115).

MW-5-043014 (N0695-03AMSD), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

DUP-1-043014 (N0695-04A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

MW-7-043014 (N0695-05A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

MW-8-043014 (N0695-06A), recovery is above criteria for Dibromofluoromethane at 117% 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-76932 in batch 76932, recovery is above criteria for Iodomethane at 145% with criteria of (72-121).

LCSD-76932 in batch 76932, recovery is above criteria for Iodomethane at 126% with criteria of (72-121).

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

Matrix spikes were performed on samples: MW-5-043014 (N0695-03AMS) and MW-5-043014 (N0695-03AMSD).

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

MW-5-043014 (N0695-03AMS), recovery is above criteria for 1,2-Dichloroethane at 133% with criteria of (70-130) and Iodomethane at 138% with criteria of (72-121).

MW-5-043014 (N0695-03AMSD), recovery is above criteria for 1,2-Dichloroethane at 132% with criteria of (70-130) and 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:**

No sample in this SDG required analysis at dilution.

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:

VSTD00510I 2-Chloroethyl vinyl ether , Isobutyl alcohol due to M6

VSTD00510I trans-1,3-Dichloropropene due to M7

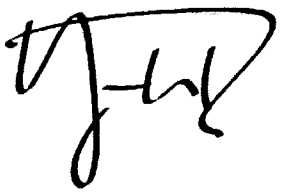
VSTD00510Z Acetone due to M3

VSTD02010I Isobutyl alcohol due to M6

VSTD02010Z Acetone due to M3

VSTD05010I 2-Chloroethyl vinyl ether 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:_____5/20/2014_____

REPORT NARRATIVE

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

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: N0695

SM 3500D

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: SM 3500D

IV. PREPARATION

Samples were prepared following procedures in laboratory test code: SM 3500D

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: SPEC2
Instrument Type: SP

Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on sample: MW-5-043014 (N0695-03BMS).

Percent recoveries were within the QC limits.

D. Duplicate sample:

Duplicate analyses were performed on sample: MW-5-043014 (N0695-03BDUP).

Relative percent differences were within the QC limits.

E. Dilutions:

No sample required dilution in this SDG.

F. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and

for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: Shawn B Lawler

Date: 05/09/2014

QUALIFIED RESULTS FORMS

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4485.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
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	1.2	J
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

EPA SAMPLE NO.

MW-3R-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4485.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U UJ
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4486.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
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	9.7	
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

EPA SAMPLE NO.

MW-4-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4486.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U UJ
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4487.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
156-59-2	cis-1,2-Dichloroethene	33	
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	31	
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

EPA SAMPLE NO.

MW-5-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4487.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U UJ
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4488.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
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	0.98	J J
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

EPA SAMPLE NO.

DUP-1-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4488.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U UJ
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4489.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
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	2.2	J J
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

EPA SAMPLE NO.

MW-7-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4489.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U UJ
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4490.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
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	0.98	J J
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	1.3	J J
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

EPA SAMPLE NO.

MW-8-043014

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4490.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/01/2014

% Moisture: not dec. Date Analyzed: 05/04/2014

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	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 UJ
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U UJ
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4571.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	0.88	J
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	2.3	J
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

EPA SAMPLE NO.

MW-9-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4571.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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 UJ

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4572.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	1.2	J
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

EPA SAMPLE NO.

MW-6-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4572.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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 UJ

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4573.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	0.74	J
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	36	
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

EPA SAMPLE NO.

MW-2-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4573.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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 UJ

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4574.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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	13	
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	3.6	J
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	2.3	J
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.

MW-1-050114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4574.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/06/2014

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	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 UJ

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.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4558.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/05/2014

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	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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0695 Mod. Ref No.: SDG No.: SN0695

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0695-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D4558.D

Level: (TRACE/LOW/MED) LOW Date Received: 05/02/2014

% Moisture: not dec. Date Analyzed: 05/05/2014

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	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 UJ

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-043014
Lab ID: N0695-01
Project: Maple Street
Collection Date: 04/30/14 11:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:39	76899

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-043014
Lab ID: N0695-02
Project: Maple Street
Collection Date: 04/30/14 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:41	76899

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-043014
Lab ID: N0695-03

Project: Maple Street
Collection Date: 04/30/14 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:43	76899

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-043014
Lab ID: N0695-04
Project: Maple Street
Collection Date: 04/30/14 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:50	76899

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-043014
Lab ID: N0695-05

Project: Maple Street
Collection Date: 04/30/14 13:55

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:53	76899

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- DF - Dilution Factor
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range
- RL - Reporting Limit

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

05/09/2014

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-043014
Lab ID: N0695-06
Project: Maple Street
Collection Date: 04/30/14 15:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/01/2014 14:55	76899

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-050114
Lab ID: N0695-07

Project: Maple Street
Collection Date: 05/01/14 11:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:15	76920

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-050114 **Project:** Maple Street
Lab ID: N0695-08 **Collection Date:** 05/01/14 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:18	76920

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-050114
Lab ID: N0695-09

Project: Maple Street
Collection Date: 05/01/14 11:25

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:21	76920

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-050114
Lab ID: N0695-10
Project: Maple Street
Collection Date: 05/01/14 11:05

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	05/02/2014 14:24	76920

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

2015 POST-BIOREMEDIATION APPLICATION GROUNDWATER SAMPLING AND DATA REPORT 312 MAPLE STREET SITE ENDICOTT, NEW YORK NYSDEC SITE # B-00168-7

PREPARED FOR:
Broome County Department of Planning
and Economic Development
Binghamton, New York

PREPARED BY:
GZA GeoEnvironmental of New York
Buffalo, New York

June 2015
GZA File No. 21.0056127.10

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GZA
GeoEnvironmental
of New York

*Engineers and
Scientists*

June 5, 2015
File No. 21.0056127.10

Mr. Frank Evangelisti
Chief Planner
Broome Co. Dept. of Planning and Economic Development
44 Hawley Street, 5th Floor
Binghamton, New York 13902

Re: Post-Bioremediation Application Groundwater Monitoring
ERP#B00168-7
312 Maple St., Endicott, NY

Dear Mr. Evangelisti:

535 Washington Street
11th Floor
Buffalo, New York
14203
716-685-2300
Fax: 716-685-3629
www.gza.com

GZA GeoEnvironmental of New York (GZA) submits this report summarizing the analytical results of the groundwater sampling event conducted in April 2015 at the above referenced Site. The objective of the sampling event was to collect and analyze groundwater samples from the on-site and off-site monitoring wells associated with the 312 Maple Street Site in Endicott, NY (Site) about three years after the enhanced anaerobic bioremediation application was done at the Site. Post-application sampling is required to compare groundwater conditions to pre-application conditions at the Site in accordance with the New York State Department of Environmental Conservation (NYSDEC), Record of Decision (ROD) dated January 2011.

The Post-Bioremediation Application sampling event identified only two (2) volatile organic compounds (VOCs), specifically trichloroethene (TCE) and cis-1,2-dichloroethene (DCE) detected at concentrations above respective NYSDEC Class GA criteria[1]. Hexavalent chromium (Cr^{+6}) was detected at concentrations above its NYSDEC Class GA criteria during this groundwater monitoring event at two locations. The most prominently detected VOC was TCE although mostly at concentrations less than those identified from the pre-application sampling done in April 2012 and after the first and second years of application in 2013 and 2014. One exception was from an upgradient well that was identified with TCE at a slightly higher concentration than previous events, although within the same order of magnitude. Additionally, the presence of DCE, a daughter compound of TCE was again identified in select wells but generally at lesser concentrations than previous sampling events with two locations slightly exceeding its groundwater criteria. In general, the concentration decrease of TCE and Cr^{+6} and presence of DCE, with mostly decreasing concentrations identified after the remediation activities implies the bioremediation application has been working as designed.

[1] Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

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This round of post application groundwater sampling was the last scheduled groundwater monitoring event to be completed. Should you have any questions or require additional information following your review, please contact Daniel Troy at 716-844-7034.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

John Beninati
Project Manager

Daniel J. Troy, P.E.
Senior Project Manager

Bart A. Klettke, P.E.
Principal

TABLE OF CONTENTS

1.00 INTRODUCTION 1

1.10 BACKGROUND AND SITE HISTORY 1

2.00 PURPOSE AND SCOPE OF WORK 1

3.00 FIELD STUDIES 2

3.10 GROUNDWATER SAMPLING PROCEDURES 2

3.20 GROUNDWATER COLLECTION 3

4.00 ANALYTICAL LABORATORY TESTING 4

5.00 ANALYTICAL TEST RESULTS 4

6.00 SUMMARY 6

TABLES

TABLE 1	SUMMARY OF PRE- AND POST-BIOREMEDIATION APPLICATION GROUNDWATER ANALYTICAL TEST RESULTS (2012 THROUGH 2015)
TABLE 2	GRAPHICAL SUMMARY OF TCE AND DCE CONCENTRATION TRENDS FROM 2012 TO 2015

FIGURES

FIGURE 1	SITE PLAN

APPENDICES

APPENDIX A	LIMITATIONS
APPENDIX B	2015 WATER QUALITY DATA FORMS
APPENDIX C	2015 ANALYTICAL TEST RESULTS AND DATA USABILITY SUMMARY REPORT

1.00 INTRODUCTION

In accordance with the January 2011 Record of Decision (ROD) established by the New York State Department of Environmental Conservation (NYSDEC) for the 312 Maple Street site in Endicott, New York (Site), GZA GeoEnvironmental of New York (GZA) collected groundwater samples at nine (9) monitoring wells associated with the Site. The sampling was done on April 21th and 22nd, 2015 and was completed about three years after implementation of remedial activities (i.e., enhanced anaerobic bioremediation applications) were completed at the Site. A Site Plan is attached as Figure 1.

1.10 BACKGROUND AND SITE HISTORY

The chosen remedial option defined in the ROD included enhanced anaerobic bioremediation applications to remediate groundwater impacted with volatile organic compounds (VOCs) (specifically trichloroethene (TCE)) and hexavalent chromium (Cr^{+6}). As part of the remedial remedy, nine (9) groundwater monitoring wells were to be sampled and analyzed for VOCs and Cr^{+6} to assess the effectiveness of the bioremediation efforts on the Site groundwater. The assessment included a pre-remedial round of sampling done in 2012 for baseline conditions and annual sampling afterwards for a period of three years (years 2013, 2014 and 2015).

2.00 PURPOSE AND SCOPE OF WORK

The purpose of the post remediation sampling event was to collect groundwater samples from the nine (9) groundwater monitoring wells associated with the Site to assess conditions three years after completion of the enhanced anaerobic bioremediation application injections were completed at the Site. To accomplish this, the following activities were done.

- Coordinated with Spectrum Analytical Inc. located in North Kingstown, Rhode Island prior to the commencement of field activities to obtain the analytical sample containers.

- Collected one (1) groundwater sample from each of the nine (9) monitoring well locations for chemical analysis of VOCs via EPA Method 8260 Target Compound List and Cr^{+6} via Method SM3200D.

- Prepared this report, which summarizes the data collected during this sampling event. This data will be used as the final annual groundwater sampling event for comparative purposes to evaluate the effectiveness of the remedial activities at the Site.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in Appendix A and modifications if subsequent information is developed by GZA or any other party.

3.00 FIELD STUDIES

This section describes the field activities of GZA's groundwater sampling event.

3.10 GROUNDWATER SAMPLING PROCEDURES

Equipment Cleaning

Prior to GZA's arrival to the Site, the sampling equipment (water level indicator, water quality meter and flow-through cell) was cleaned by rinsing with potable water, washing with a solution of laboratory detergent (e.g., alconox) and potable water, and rinsing with de-ionized water.

New, disposable polyethylene tubing (for placement down into the respective wells and connecting to the water quality meter) and silicone tubing (for the peristaltic pump head) was used for groundwater sampling at each location. A variable speed peristaltic pump was used to purge groundwater from each monitoring well location. Groundwater remained within the polyethylene and silicone tubing and did not come in contact with the pump. Therefore, the tubing and pump did not require decontamination between sample locations.

Equipment Calibration

A water quality meter and turbidity meter were used during groundwater monitoring. Prior to use each day, the calibration of the water quality meter and turbidity meter were checked to verify that the equipment was in working order in accordance with manufacturer's specifications.

Monitoring & Purging Methodologies

Well purging and water quality measurements were done at each monitoring well location as discussed below. The nine (9) monitoring wells had measured water level depths generally less than 20 feet below top of each respective well riser.

Prior to the start of each monitoring and purge event, a static water level was measured from the top of the monitoring well riser and recorded on the monitoring well sampling log. A complete round of water level data was collected from the nine (9) monitoring wells on April 21, 2015 prior to groundwater purging and sampling activities. At each monitoring well location, new polyethylene tubing (0.25-inch O.D. by 0.17-inch I.D) was lowered into the monitoring well and positioned at the approximate center of the well screen. Information about the wells was taken from the monitoring well logs previously generated.

The peristaltic pump was started and operated at a flow rate that minimized draw-down of the water column within the well. The first set of water quality readings were collected when the flow-through cell was full and water began to flow out. Once a constant head was established, the pumping flow rate was not altered. Sampling flow rates were kept consistent with purging/monitoring flow rates. Readings were recorded on well development forms in the field, once a constant head had been established. Readings were continuously recorded every four to five minutes, until water quality readings stabilized for three successive readings, which generally consisted of ± 0.1 for pH, ±3% for conductivity, ± 10 mV for oxidation reduction potential (ORP) and ± 10% for turbidity, temperature and dissolved oxygen (DO). Copies of the water quality data forms are included in Appendix B.

Groundwater analytical samples were collected once a constant head was established, the water quality readings had stabilized and/or at least one well volume was removed. Disposable silicon tubing from the peristaltic pump was disconnected from the polyethylene tubing attached to the water quality meter, and used to fill the appropriate groundwater sample containers provided by the laboratory. Groundwater collected for analysis did not enter the flow-through cell.

After the appropriate sample containers were filled, the pump was shut off and the tubing was removed from the monitoring well and pump head, and disposed of as a solid waste. The flow-through cell and water quality meter were then rinsed with de-ionized water. Water generated during the purging/monitoring and equipment decontamination was placed on the ground in the vicinity of the monitoring well from which it was generated.

3.20 GROUNDWATER DATA COLLECTION

GZA collected groundwater samples from the nine (9) monitoring wells (designated as MW-1 through MW-9). In addition, a duplicate sample (from MW-6), and matrix spike/matrix spike duplicate (MS/MSD) sample (from MW-9) were collected.

Static groundwater level measurements, referencing the top of well riser were made from the nine (9) monitoring wells listed in the table below prior to sampling. Monitoring point elevation data was available from previous reports completed at the Site. From this data, a groundwater contour map was generated as shown on Figure 1. Based on the available information, groundwater elevations within the Site area are similar to many well locations and is indicative of a flat or level groundwater table with slightly lower elevations observed at the eastern and western most measured wells. Based on previous data collected in April 2012, April 2013 and April 2014, it appears that the Site groundwater flow direction has maintained a slight northwesterly flow direction towards Nanticoke Creek. However, it should be noted that the monitoring well MW-9 located southeast of the Site appears to have groundwater elevations lower than those measured at the Site implying an easterly trending groundwater flow for some upgradient located groundwater. This flow direction may be influenced a New York State Department of Transportation sump pump reportedly located in the vicinity of the Norfolk Southern

railroad track overpass over South Nanticoke Street, located east of the Site. Based on the groundwater measurements, the groundwater table at the vicinity of the Site appears to resemble a saddle-like configuration with evidence of a flat surface (i.e., minimal gradient) within the Site and increasing gradients to the east and west.

Monitoring Well Location	Top of Riser (TOR) Elevation (ft.)	Groundwater Depth below TOR (ft.)	Groundwater Elevation (ft.)
MW-1	102.4	18.8	83.6
MW-2	100.0	16.5	83.5
MW-3R	97.5	14.1	83.4
MW-4	100.0	16.5	83.5
MW-5	97.2	13.8	83.4
MW-6	96.4	12.7	83.7
MW-7	97.5	13.0	83.4
MW-8	96.4	13.1	83.3
MW-9	99.2*	15.8	83.4

* It should be noted that the protective road box for MW-9 appeared to have impact damage possibly from winter snow plowing activities. As a result, the PVC well riser inside was observed to have been damaged. For the 2015 monitoring event, the groundwater measurement from this location was taken from the highest remaining portion of riser pipe.

4.00 ANALYTICAL LABORATORY TESTING

Nine (9) groundwater samples, one (1) duplicate sample (MW-6), and one (1) matrix spike/matrix spike duplicate (MW-9), were submitted for analytical testing. The samples were packed in an ice-filled cooler and, following typical chain-of-custody procedures, sent to Spectrum Analytical Laboratories in North Kingstown, Rhode Island. Table 1 presents a summary of the samples collected and the analyses completed.

5.00 ANALYTICAL TEST RESULTS

Discussion of the laboratory results for the groundwater samples is presented below. The laboratory report and associated third party Data User Summary Report (completed by Data Validation Services of North Creek, New York) is provided in Appendix C and the data is summarized on Table 1.

The analytical test results for the groundwater samples were compared to NYSDEC Class GA criteria presented in the Division of Water Technical and Operational Guidance Series (TOGS 1.1.), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

The analytical data generated as part of this sampling event has also been provided to NYSDEC electronically for their Environmental Information Management System (EIMS). The data was provided in a standardized electronic data deliverable (EDD) format that uses the database software application EQuIS™ (EQuIS) from EarthSoft® Inc. The laboratory data and required information were imported into the EQuIS Data Processor (EDP) and submitted to NYSDEC.

- MW-1: Three VOCs; TCE (1.7 ppb), cis-1,2-dichloroethene (cis-1,2-DCE) (8.8 ppb), and toluene (1.4 ppb) were the only VOCs detected above method detection limits (MDLs). Of these detections, only cis-1,2-DCE was identified at a concentration that exceeded its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-2: Two (2) VOCs; TCE (52 ppb) and cis-1,2-DCE (1.3 ppb) were detected above MDLs of which only TCE was identified at a concentration exceeding its respective Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-3R: TCE (1.5 ppb) was the only VOC detected above MDLs although at a concentration below its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-4: TCE (3.4 ppb) was the only VOC detected above MDLs and at a concentration below its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-5: Two (2) VOCs; TCE (29 ppb) and cis-1,2-DCE (15 ppb) were detected above MDLs, both of which were identified at concentrations exceeding their respective Class GA criteria of 5 ppb. Cr^{+6} was detected at a concentration of 1,500 ppb in this sample which exceeds its NYSDEC Class GA criteria of 50 ppm.

- MW-6: TCE (3.8 ppb) was the only VOC detected above MDLs although at a concentration below its respective NYSDEC Class GA criteria of 5 ppb. Cr^{+6} was not detected in this sample.

- MW-7: VOCs were not detected above respective MDLs. Cr^{+6} was not detected in this sample.

- MW-8: Three (3) VOCs; TCE (1.3 ppb), 1,1,1-trichloroethane (1.1 ppb) and cis-1,2-DCE (1.1 ppb) were detected above MDLs although detected compounds were identified at concentrations below their respective Class GA criteria of 5 ppb. Cr^{+6} was detected at a concentration of 60 ppb which exceeds its NYSDEC Class GA criteria of 50 ppb.

- MW-9: TCE (2.3 ppb) was the only compound detected above MDLs although the detection was identified below its respective Class GA criteria. Cr^{+6} was not detected in this sample.

6.00 SUMMARY

GZA was retained to collect and analyze groundwater samples from nine (9) monitoring wells associated with the 312 Maple Street Site in Endicott New York as required by the January 2011 ROD established for the ERP Site No. B-00168-7. A summary of our findings follows.

- Static groundwater level measurements indicate that groundwater elevations at the Site are consistent between several of the monitoring wells which are indicative of a flat or low gradient. However, based on historic data, groundwater flow direction at the Site is predominantly believed to be in a northwesterly direction although groundwater elevation in MW-9 implies a slight easterly flowing gradient. The groundwater flow direction is anticipated to have some variability between wetter months as compared to during periods of dryer conditions although the overall flow direction is not expected to change. It does not appear that the slight easterly groundwater gradient observed in MW-9 has a significant impact on the Site groundwater flow direction.

- TCE and cis-1,2-DCE were the only VOCs detected at concentrations above their respective NYSDEC Class GA criteria value of 5 ppb in three (3) of the nine (9) monitoring wells sampled. Specifically, DCE was identified with concentration exceedances at MW-1 (8.8 ppb) and MW-5 (15 ppb) and TCE was identified with concentration exceedances at MW-2 (52 ppb) and MW-5 (29 ppb). Toluene and 1,1,1-trichloroethane were the only other VOCs detected at select monitoring wells at concentrations above their MDLs but at concentrations below their respective Class GA criteria. Cr^{+6} was detected at two of the nine wells sampled, specifically at MW-5 (1,500 ppb) and MW-8 (60 ppb) both of which exceed its NYSDEC Class GA criteria of 50 ppb.

The enhanced anaerobic bioremediation application remediation work was completed in May 2012. This work included injections of the enhanced anaerobic bioremediation applications along the western property boundry and within the central portion of the Site. This remedial option was chosen to enhance the anaerobic breakdown of the “parent” chlorinated compounds present (specifically TCE) via reductive dehalogenation into the “daughter” breakdown products (cis-1,2-DCE) and vinyl chloride (VC), which further degrades under aerobic conditions. Additionally, this application was also designed to assist in the remediation of Cr^{+6} into the less hazardous chromium (trivalent chromium) analyte.

As part of the enhanced anerobic bioremediation application, groundwater samples from the nine wells were to be collected and tested for VOCs and Cr^{+6} annually for three years after injection work was completed. This third and final annual groundwater sampling event has identified that TCE concentrations have been reduced to values below its Class GA guidance value at 7 of the 9 well locations, and is a continued improvement from 2014. MW-5 had a TCE concentrations of 29 ppb exceeding its Class GA Groundwater

Criteria and appears to be similar to the respective concentrations identified during the previous two sampling events. MW-2 was identified with a TCE concentration of 52 ppb which is an increase from the previous three sample events, although within the same order of magnitude. This location appears to be situated at the outer perimeter or edge of the apparent TCE plume and may be influenced from slight fluctuations of Site groundwater with residual contaminant located up-gradient or adjacent to the enhanced anaerobic bioremediation application. MW-2 was also identified with an estimated concentration of cis-1,2DCE (TCE daughter compound) below its 5 ppb Class GA Groundwater Criteria implying the groundwater from this well had some exposure to the enhanced anaerobic bioremediation application. Additionally, cis-1,2 DCE concentration was identified at 15 ppb from MW-5 and 8.8 ppb from MW-1, both of which at lesser concentrations identified during 2014 sampling (although exceeding its 5 ppb Class GA groundwater criteria) suggesting that the concentration reduction for the TCE daughter compound is on-going.

Table 2 shows graphical representation of the TCE and cis-1,2-DCE concentration trends between the years 2012 (pre-remediation injection) and 2013 through 2015 (post-remediation injections). Completion of the remedial injections at the Site is anticipated to result in a decreased TCE and Cr^{+6} impact to Site groundwater which is verified by the general trends observed in a majority of the on-Site wells. The increase in cis-1,2-DCE concentrations between 2012 and 2013 followed by a general decrease in 2014 and 2015 in select well locations are indicative of the enhanced anaerobic bioremediation chemical injections breaking down the TCE into its respective daughter compound. It should be noted that vinyl chloride was not detected in the 2015 samples.

Two other VOCs (toluene and 1,1,1-trichloroethane) were detected within the 2015 round of groundwater sampling although at concentrations below their respective Class GA criteria. These compounds have historically been identified in their respective wells, although typically at concentrations below their respective Class GA groundwater criteria. Previously identified VOCs, other than those discussed above, during the previous 2013 and 2014 sampling event were not detected during this 2015 event.

The concentrations of Cr^{+6} have also been reduced to non-detect in all but two of the wells sampled. Wells MW-5 (1,500 ppb) and MW-8 (60 ppb) were the only detections during this event, both of which exceed their respective Class GA Criteria of 50 ppb. Although there appears to be a rebounding within these two wells, the concentrations are below previously identified high concentrations for the respective wells which may suggest that remediation for this analyte is on-going.

TABLES

TABLE 1

Summary Of Pre and Post-Bioremediation Application Groundwater Analytical Test Results (2012 through 2015)

312 Maple Street

Endicott, New York

ERP Site No. B-00168-7

Parameter	Class GA Criteria (ug/L)	MW-1 Year Sampled				MW-2 Year Sampled				MW-3R Year Sampled				MW-4 Year Sampled				MW-5 Year Sampled			
		2012 [4]	2013	2014	2015	2012	2013	2014	2015	2012	2013	2014 [4]	2015	2012	2013	2014	2015	2012	2013	2014	2015
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																					
Acetone	50		17			6.6															
Bromomethane	5						0.81														
Carbon Disulfide																					
1,1-Dichloroethene	5																		0.96		
trans-1,2-DCE	5																		0.78		
cis-1,2-Dichloroethene	5		87	13	8.8		0.67		1.3J										130	33	15
Chloroform	7																				
Iodomethane	5						0.78														
MTBE	10																		4.1		
Toluene	5		8.9 J	2.3J	1.4																
1,1,1-Trichloroethane	5					0.97	1	0.74 J										1.8			
Trichloroethene	5	40	1.1	3.6	1.7J	23	35	36	52	21	1.2	1.2	1.5 J	9.6	9.7	9.7	3.4 J	110	20	31	29
Vinyl Chloride	2		0.86																		
Hexavalent Chromium - SM 3500D by colorimetric method (mg/L)																					
Hexavalent Chromium	0.05																	2.9	0.92		1.5

Parameter	Class GA Criteria (ug/L)	MW-6 Year Sampled				MW-7 Year Sampled				MW-8 Year Sampled				MW-9 Year Sampled			
		2012	2013	2014	2015 [4]	2012	2013	2014	2015	2012	2013	2014	2015	2012	2013 [4]	2014	2015
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)																	
Acetone	50					5.9				9.6							
Bromomethane	5																
Carbon Disulfide																	
1,1-Dichloroethene	5																
trans-1,2-DCE	5																
cis-1,2-Dichloroethene	5												1.1 J				
Chloroform	7													0.72	0.93	0.88J	
Iodomethane	5																
MTBE	10										0.6						
Toluene	5																
1,1,1-Trichloroethane	5									1.2	0.66	0.98J	1.1J				
Trichloroethene	5	5.8		1.2	3.8J	13	1.7	2.2		130	37	1.3	1.3J	1.5	1.8	2.3	2.3 J
Vinyl Chloride	2																
Hexavalent Chromium - SM 3500D by colorimetric method (mg/L)																	
Hexavalent Chromium	0.05						0.05			0.04	0.17		0.06				

Notes:

1. Compounds detected in one or more samples are presented on this table. Refer to attached laboratory report for list of all compounds included in analysis.
2. Analytical testing completed by Spectrum Analytical Laboratory of Kingstown, Rhode Island, data validation completed by Data Validation Services of North Creek, NY.
3. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
4. Results presented for MW-1 (2012), MW-9 (2013), MW-3(2014)and MW-6 (2015) are the higher of the sample and its respective duplicate (i.e., Dup-1-041612, Dup-1-042313, DUP-1-043014, DUP-1 042115, respectively).
5. ug/L = part per billion, mg/L = part per million, J= estimated concentration of analyte.
6. Blank cell indicates compound was not detected above respective method detection limit.
7. Shaded cell indicates concentration exceeds the respective NYSDEC Groundwater Class GA Criteria.

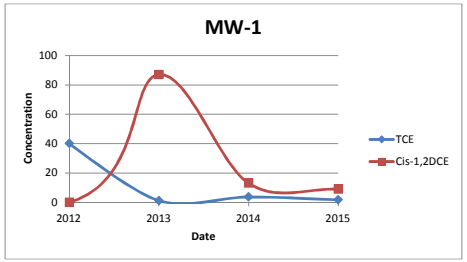
TABLE 2

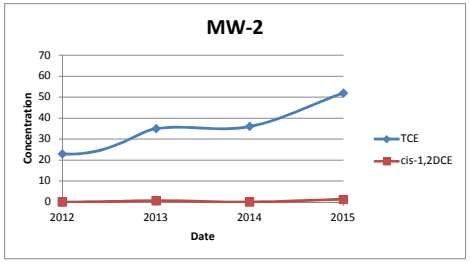
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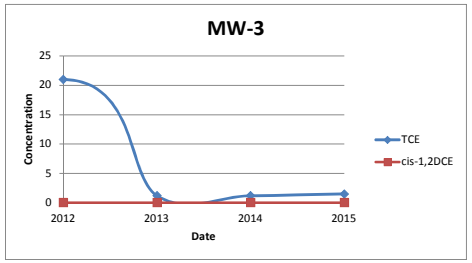
312 Maple Street

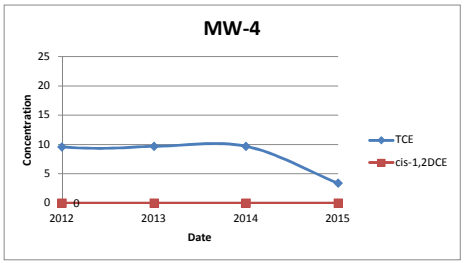
Endicott, New York

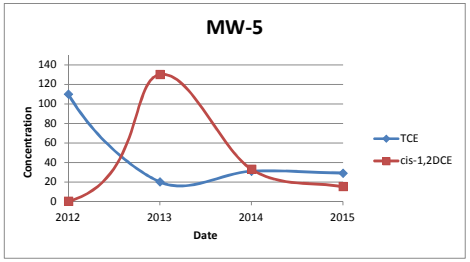
ERP Site No. B-00168-7

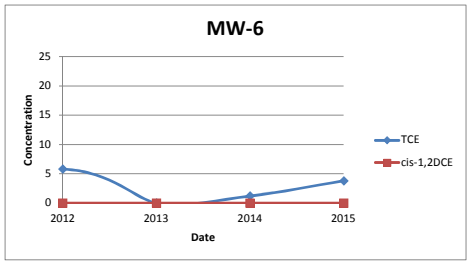


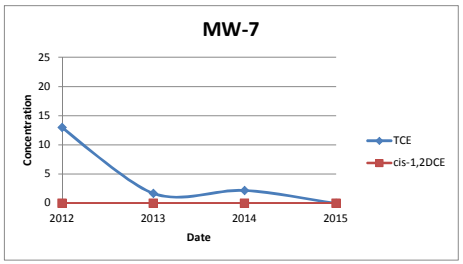


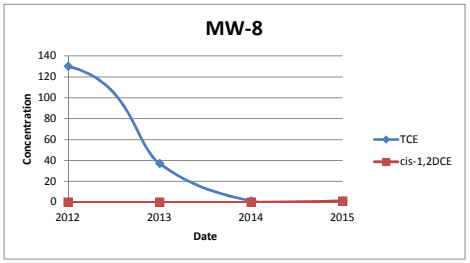


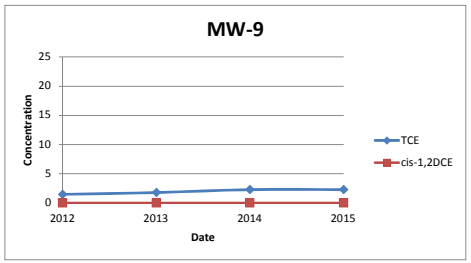








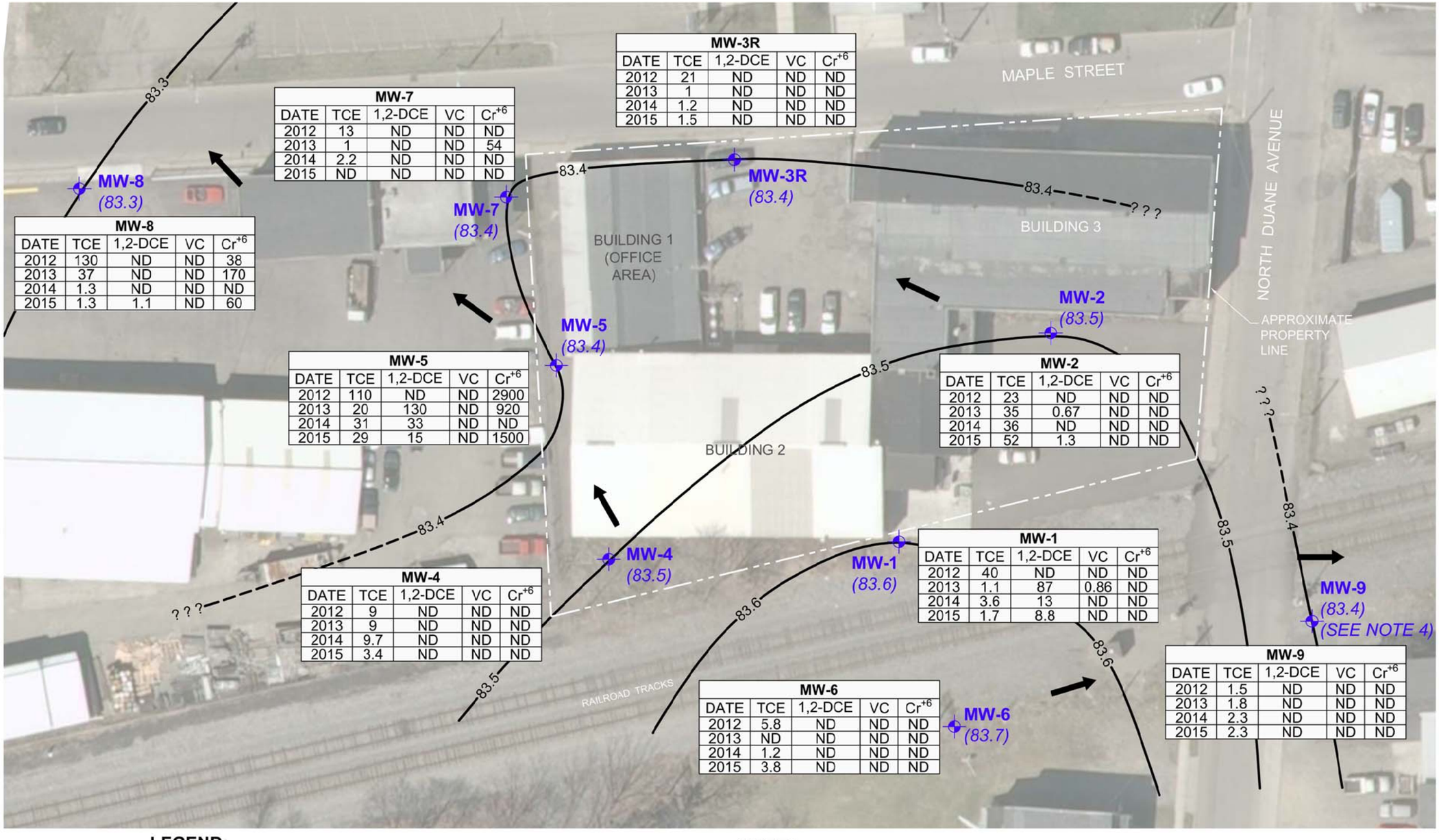




Notes:

1) Concentrations shown in parts per billion (ppb)
2) NYSDEC Class GA groundwater Criteria for TCE and cis-1,2,DCE equals 5 ppb.
3) On-Site IRM completed 2006, Off-Site IRM completed in 2011 and On-Site Insitu Enhanced Bioremediation completed in 2012.
4) Concentrations shown above reflect pre-enhanced bioremediation injections (2102) and post injection results (2013 through 2015).

FIGURES



MW-8				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	130	ND	ND	38
2013	37	ND	ND	170
2014	1.3	ND	ND	ND
2015	1.3	1.1	ND	60

MW-7				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	13	ND	ND	ND
2013	1	ND	ND	54
2014	2.2	ND	ND	ND
2015	ND	ND	ND	ND

MW-3R				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	21	ND	ND	ND
2013	1	ND	ND	ND
2014	1.2	ND	ND	ND
2015	1.5	ND	ND	ND

MW-5				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	110	ND	ND	2900
2013	20	130	ND	920
2014	31	33	ND	ND
2015	29	15	ND	1500

MW-2				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	23	ND	ND	ND
2013	35	0.67	ND	ND
2014	36	ND	ND	ND
2015	52	1.3	ND	ND

MW-4				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	9	ND	ND	ND
2013	9	ND	ND	ND
2014	9.7	ND	ND	ND
2015	3.4	ND	ND	ND

MW-1				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	40	ND	ND	ND
2013	1.1	87	0.86	ND
2014	3.6	13	ND	ND
2015	1.7	8.8	ND	ND

MW-6				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	5.8	ND	ND	ND
2013	ND	ND	ND	ND
2014	1.2	ND	ND	ND
2015	3.8	ND	ND	ND

MW-9				
DATE	TCE	1,2-DCE	VC	Cr^{+6}
2012	1.5	ND	ND	ND
2013	1.8	ND	ND	ND
2014	2.3	ND	ND	ND
2015	2.3	ND	ND	ND

LEGEND:

MW-1 *(83.6)* — APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELL, SHOWN WITH GROUNDWATER ELEVATION IN FEET, GROUNDWATER MEASUREMENTS MADE ON 04/21/2015

83.3 — APPROXIMATE GROUNDWATER CONTOUR

PRESUMED GROUNDWATER FLOW DIRECTION

TCE = Trichloroethene
1,2-DCE = cis 1,2 - Dichloroethene
VC = Vinyl Chloride
Cr^{+6} = Hexavalent Chromium

NOTES:

1. BASE MAP ADAPTED FROM AN AERIAL PHOTOGRAPH DOWNLOADED FROM http://www.bing.com AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

3. UNITS ARE LISTED IN MICROGRAMS PER LITER (µg/l) OR PARTS PER BILLION (ppb). ND INDICATES COMPOUND NOT DETECTED ABOVE METHOD DETECTION LIMIT.

4. THE PVC MONITORING WELL DESIGNATED AS MW-9 WAS OBSERVED DURING APRIL 2015 SITE VISIT TO HAVE BEEN DAMAGED (LIKELY FROM SNOW PLOWING ACTIVITIES). WATER LEVEL MEASUREMENTS WERE MADE FROM HIGHEST REMAINING PORTION OF PVC RISER.

NORTH

DRAWN BY: DEW

DATE: JUNE 2015

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET
0 20 40 80

BROOME COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
312 MAPLE STREET
VILLAGE OF ENDICOTT, NEW YORK
ERP SITE No. B-00168-7
POST REMEDIAL ACTION GROUNDWATER MONITORING YEAR-3 (2015)

PROJECT No.
21.0056127.10

FIGURE No.
1

© 2015 GZA GeoEnvironmental of New York

GZA-K:\PROJECTS\56100s\56127.1 Broome Co 312 Maple Street\GW Monitoring\2015\Figure 1 Concentration plan.dwg [Figure 1] June 04, 2015 - 1:35pm daniel.wulf

APPENDIX A

LIMITATIONS

LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs.

6. Water level readings have been made in test holes (as described in the Report) and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge

rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

2015 WATER QUALITY DATA FORMS

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-1**	Ground Surface Elevation:	Approx. 100.0 ft.	Riser/Screen Material:	PVC
Installation Date:	7/28/1998	Protective Casing Elevation:	102.6 ft.	Top of Screen Depth:	10 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation:	102.4 ft.	Bottom of Screen Depth:	25 ft.
		Elevation Datum:	100.0 ft.		

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
18.22	6.93	0.405	11.9	17.9	Cloudy

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition. Surface seal disturbed.	pH	+/- 0.1	Sample ID: MW-1-042115
	Surface seal sits approximately 8 inches above ground surface.	Conductivity	+/- 3%	Sample Time: 11:55
Interior Observations	Slowest setting on low-flow pump was used to obtain static water level.	Temperature	+/- 10%	# of Sample Containers: 3
	Visible suspended solids in turbidity sample.	Turbidity	+/- 10%	Duplicate Sample ID:
		ORP	+/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/21/2015	10:23	18.81	0	7.09	0.459	11.2	38.8	Cloudy	1.59	161.6	Depth of Water: 18.81
	10:30	20.13	0.4	6.58	0.429	12	30.5	Cloudy	0.91	39.1	Length of Water Column: 8.79
	10:35	20.15	0.5	6.54	0.436	11.6	25.2	Cloudy	0.55	16.3	Depth of Well: **27.60**
	10:40	20.13	0.6	6.54	0.431	11.2	21.6	Cloudy	0.44	7.9	Sheen Observed: Y **N**
	10:45	20.11	0.7	6.52	0.435	11.2	18.8	Cloudy	0.36	5.7	DNAPL Observed: Y **N**
	10:50	20.11	0.8	6.51	0.432	11.1	18.4	Cloudy	0.31	5.1	Did Well Go Dry: Y **N**
	10:55	20.1	0.9	6.55	0.433	11.1	22.6	Cloudy	0.33	-2.4	Other: Well volume = 1.4 gallons.
	11:00	20.1	1	6.55	0.437	11.1	21.8	Cloudy	0.31	-2.1	

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-2**	Ground Surface Elevation: Approx. 100.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/29/1998	Protective Casing Elevation: Not applicable	Top of Screen Depth: 10 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 100.02 ft.	Bottom of Screen Depth: 25 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
15.82	7.04	0.99	11.1	2.33	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-2-042115
	Minor cracking in concrete surface seal.	Conductivity +/- 3%	Sample Time: 11:40
Interior Observations		Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/21/2015	11:15	16.59	0	6.94	0.94	11.1	9.61	Clear	0.65	145.8	Depth of Water: 16.57
	11:20	16.59	0.3	7	0.95	11.1.	7.23	Clear	0.53	125.4	Length of Water Column: 8.58
	11:25	16.59	0.6	6.98	0.94	11.2	6.11	Clear	0.3.7	95.1	Depth of Well: **25.55**
	11:30	16.59	0.9	6.97	0.93	11	5.43	Clear	0.44	88.7	Sheen Observed: Y **N**
	11:35	16.59	1.2	6.97	0.92	11.1	4.88	Clear	0.46	90.4	DNAPL Observed: Y **N**
	11:40	16.59	1.5	6.96	0.91	11.1	3.67	Clear	0.42	91.6	Did Well Go Dry: Y **N**
											Other: Well volume = 1.4 gallons

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-3R**	Ground Surface Elevation: Approx. 97.6 ft.	Riser/Screen Material: PVC
Installation Date:	4/17/2012	Protective Casing Elevation: Not applicable	Top of Screen Depth: 10 ft.
Installed By:	Nature's Way	Monitoring Point Elevation: 97.46 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.25	6.93	1.61	10.2	0	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-3R-042115
	Minor cracking in concrete surface seal.	Conductivity +/- 3%	Sample Time: 14:30
Interior Observations		Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/21/2015	9:51	14.06	0	7.11	1.5	10.3	3.25	Clear	14.11	169.4	Depth of Water: 14.05
	9:56	14.06	0.4	7.01	1.29	10.1	2.61	Clear	11.56	186.4	Length of Water Column: 6.0
	10:00	14.06	0.7	7.01	1.29	10.1	2.29	Clear	11.36	197.2	Depth of Well: **20.05**
	10:04	14.06	1	7.05	1.29	10.1	1.66	Clear	11.35	210.7	Sheen Observed: Y **N**
	10:08	14.06	1.3	7.02	1.29	10.1	1.44	Clear	11.39	211.6	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1 gallon.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-4**	Ground Surface Elevation: Approx. 97.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/29/1998	Protective Casing Elevation: 100.2 ft.	Top of Screen Depth: 8 ft.
Installed By:	LYON DRILLING CO.	Monitoring Point Elevation: 100.0 ft.	Bottom of Screen Depth: 23 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
15.82	7.31	0.455	9.6	1.77	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH	+/- 0.1	Sample ID: MW-4-042215
		Conductivity	+/- 3%	Sample Time: 11:30
Interior Observations	Groundwater drawdown could not be obtained at highest purge rate setting.	Temperature	+/- 10%	# of Sample Containers: 3
		Turbidity	+/- 10%	Duplicate Sample ID:
		ORP	+/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance 0.396	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/22/2015	7:06	16.44	0	8.1	0.403	8.7	9.09	Clear	9.39	314.2	Depth of Water: 16.42
	7:11	16.44	0.4	7.45	0.411	9.5	3.61	Clear	9.11	309.9	Length of Water Column: 8.61
	7:15	16.44	0.8	7.37	0.411	9.5	2.59	Clear	8.89	308.9	Depth of Well: **25.03**
	7:19	16.44	1.2	7.35	0.411	9.4	1.14	Clear	8.78	307.8	Sheen Observed: Y **N**
	7:23	16.44	1.6	7.34	0.414	9.4	1.09	Clear	8.68	307.1	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1.4 gallons

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-5**	Ground Surface Elevation: Approx. 97.5 ft.	Riser/Screen Material: PVC
Installation Date:	7/25/06	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 97.21 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.1	7.24	0.95	10.3	2.1	Light Yellow

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-5-042215
	Surface seal/asphalt raised due to apparent frost-heave.	Conductivity +/- 3%	Sample Time: 11:35
Interior Observations		Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/22/2015	7:39	13.81	0	7.58	0.361	11.1	11.1	Clear	9.42	352.6	Depth of Water: 13.79
	7:44	13.81	0.4	7.33	0.476	9.7	3.3	Lt. Yellow	6.33	279.8	Length of Water Column: 6.05
	7:48	13.81	0.8	7.29	0.541	9.6	2.11	Lt. Yellow	4.66	264.1	Depth of Well: **19.84**
	7:52	13.81	1.2	7.29	0.561	9.5	1.16	Lt. Yellow	4.38	259.4	Sheen Observed: Y **N**
	7:56	13.81	1.6	7.28	0.568	9.6	1.08	Lt. Yellow	4.14	254.5	DNAPL Observed: Y **N**
	8:00	13.81	2	7.29	0.561	9.6	1.04	Lt. Yellow	4.15	253.1	Did Well Go Dry: Y **N**
											Other: Well volume = 1 gallon

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-6**	Ground Surface Elevation: Approx. 96.5 ft.	Riser/Screen Material: PVC
Installation Date:	4/28/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 96.43 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
12.14	7.51	0.551	9.8	0	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-6-042115
		Conductivity +/- 3%	Sample Time: 14:10
Interior Observations		Temperature +/- 10%	# of Sample Containers: 6
		Turbidity +/- 10%	Duplicate Sample ID: DUP-1-042115
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/21/2015	13:50	12.81	0	7.51	0.657	11.2	11.6	Clear	8.91	248.9	Depth of Water: 12.79
	13:55	12.81	0.3	7.34	0.643	10.8	10.6	Clear	7.49	184.1	Length of Water Column: 6.41
	13:59	12.81	0.6	7.31	0.643	10.7	8.4	Clear	7.75	184.1	Depth of Well: **19.2**
	14:03	12.81	0.9	7.29	0.641	10.7	9.65	Clear	7.82	189.4	Sheen Observed: Y **N**
	14:07	12.81	1.2	7.28	0.639	10.6	9.23	Clear	7.99	194.4	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 1 gallon.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-7**	Ground Surface Elevation: Approx. 98.0 ft.	Riser/Screen Material: PVC
Installation Date:	4/28/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 97.47 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
13.31	7.86	0.448	10.8	1.12	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH +/- 0.1	Sample ID: MW-7-042215
		Conductivity +/- 3%	Sample Time: 11:40
Interior Observations		Temperature +/- 10%	# of Sample Containers: 3
		Turbidity +/- 10%	Duplicate Sample ID:
		ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tamp`		DO +/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/22/2015	8:11	14.02	0	7.66	0.524	10	8.46	Clear	10.36	283.2	Depth of Water: 14.00
	8:15	14.02	0.4	7.64	0.526	10.2	6.48	Clear	10.12	276.5	Length of Water Column: 5.2
	8:19	14.02	0.8	7.64	0.524	10.2	5.75	Clear	10.41	276.6	Depth of Well: **19.2**
	8:23	14.02	1.2	7.64	0.525	10.2	4.36	Clear	10.33	276.4	Sheen Observed: Y **N**
	8:27	14.02	1.6	7.64	0.526	10.2	3.81	Clear	10.38	276.1	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 0.8 gallons

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-8**	Ground Surface Elevation: Approx. 96.5 ft.	Riser/Screen Material: PVC
Installation Date:	4/29/08	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Geologic, NY	Monitoring Point Elevation: 96.4 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (**yes**/no/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
12.39	7.33	0.71	10.7	0	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	Monitoring well appeared to be in good condition.	pH	+/- 0.1	Sample ID: MW-8-042115
		Conductivity	+/- 3%	Sample Time: 15:15
Interior Observations	Groundwater drawdown could not be obtained at highest purge rate setting.	Temperature	+/- 10%	# of Sample Containers: 3
		Turbidity	+/- 10%	Duplicate Sample ID:
		ORP	+/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO	+/- 10%	

Locked (**yes**/no)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/21/2015	14:55	13.18	0	7.43	0.69	10.7	44.5	Clear	5.51	268.2	Depth of Water: 13.14
	14:59	13.19	0.4	7.33	0.69	10.7	18.1	Clear	4.93	188.8	Length of Water Column: 5.24
	15:03	13.19	0.8	7.31	0.69	10.7	12.1	Clear	4.65	184.4	Depth of Well: **18.38**
	15:07	13.19	1.2	7.31	0.69	10.7	8.43	Clear	4.63	187.7	Sheen Observed: Y **N**
	15:11	13.19	1.6	7.31	0.69	10.7	6.62	Clear	4.61	185.8	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 0.8 gallons.

File: 21.0056127.1

312 MAPLE STREET ANNUAL GROUNDWATER MONITORING EVENT
WATER QUALITY DATA FORM
ENDICOTT, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MW-9**	Ground Surface Elevation: Approx. 99.4 ft.	Riser/Screen Material: PVC
Installation Date:	9/7/07	Protective Casing Elevation: Not applicable.	Top of Screen Depth: 10 ft.
Installed By:	Nature's Way	Monitoring Point Elevation: 99.22 ft.	Bottom of Screen Depth: 20 ft.
		Elevation Datum: 100.0 ft.	

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
15.25	7.39	1.08	9.7	7.6	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	Concrete seal around road box may have been replaced since last purge event.	pH +/- 0.1	Sample ID: MW-9-042115
		Conductivity +/- 3%	Sample Time: 13:00
Interior Observations	Top-of-PVC riser was cracked. Riser may have shifted due to frost heave/damage	Temperature +/- 10%	# of Sample Containers: 3
	from driveway usage.	Turbidity +/- 10%	Duplicate Sample ID: MS/MSD
	Annulus too small to monitor groundwater fluctuations while purging.	ORP +/- 10mV	Sample Analysis: VOCs 8260, Cr^{+6}
Signs of Damage/Tampering:		DO +/- 10%	

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: not measured	Odors: none noted.

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (gals)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen	Oxygen Reduction Potential	Notes
4/21/2015	12:40	15.88	0	7.46	1.19	10.1	79.5	Lt. Brown	13.06	308.9	Depth of Water: 15.88
	12:44	15.88	0.3	7.41	1.15	10.2	25.2	Clear	9.18	224.1	Length of Water Column: 3.65
	12:48	15.88	0.6	7.41	1.17	10.1	21.1	Clear	9.14	216.4	Depth of Well: **19.53**
	12:52	15.88	0.9	7.36	1.21	10.1	16.4	Clear	9.07	213.4	Sheen Observed: Y **N**
	12:56	15.88	1.2	7.36	1.23	10.2	13.1	Clear	9.01	211.8	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Well volume = 0.6 gallons.

APPENDIX C

2015 ANALYTICAL TEST RESULTS AND DATA USABILITY SUMMARY REPORT

Report Date:
05-May-15 14:07

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.

Laboratory Report

GZA GeoEnvironmental of NY Buffalo
535 Washington Street, 11th Floor
Buffalo, NY 14203

Work Order: P0622
Project : Maple Street
Project #: 21.0056127.10

Attn: Daniel Troy

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
P0622-01	MW-2-042115	Aqueous	21-Apr-15 11:40	22-Apr-15 09:50
P0622-02	MW-1-042115	Aqueous	21-Apr-15 11:55	22-Apr-15 09:50
P0622-03	MW-9-042115	Aqueous	21-Apr-15 13:00	22-Apr-15 09:50
P0622-04	MW-6-042115	Aqueous	21-Apr-15 14:10	22-Apr-15 09:50
P0622-05	MW-3R-042115	Aqueous	21-Apr-15 14:30	22-Apr-15 09:50
P0622-06	MW-8-042115	Aqueous	21-Apr-15 15:15	22-Apr-15 09:50
P0622-07	TRIP BLANK_04/21/15	Aqueous	21-Apr-15 00:00	22-Apr-15 09:50
P0622-08	DUP-1-042115	Aqueous	21-Apr-15 00:00	22-Apr-15 09:50
P0622-09	MW-4-042215	Aqueous	22-Apr-15 11:30	23-Apr-15 10:05
P0622-10	MW-5-042215	Aqueous	22-Apr-15 11:35	23-Apr-15 10:05
P0622-11	MW-7-042215	Aqueous	22-Apr-15 11:40	23-Apr-15 10:05
P0622-12	TRIP BLANK_04/22/15	Aqueous	22-Apr-15 00:00	23-Apr-15 10:05

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 : Maple Street -- 21.0056127.10 **SDG :** P0622

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-2-042115	P0622-01	SW8260_W				SEE DATA
MW-1-042115	P0622-02	SW8260_W				SEE DATA
MW-9-042115	P0622-03	SW8260_W				SEE DATA
MW-6-042115	P0622-04	SW8260_W				SEE DATA
MW-3R-042115	P0622-05	SW8260_W				SEE DATA
MW-8-042115	P0622-06	SW8260_W				SEE DATA
TRIP BLANK_04/21/15	P0622-07	SW8260_W				
DUP-1-042115	P0622-08	SW8260_W				SEE DATA
MW-4-042215	P0622-09	SW8260_W				SEE DATA
MW-5-042215	P0622-10	SW8260_W				SEE DATA
MW-7-042215	P0622-11	SW8260_W				SEE DATA
TRIP BLANK_04/22/15	P0622-12	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 : Maple Street -- 21.0056127.10 **SDG :** P0622

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
P0622-01A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-02A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-03A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-03AMS	AQ	4/21/2015	4/22/2015	NA	4/25/2015
P0622-03AMSD	AQ	4/21/2015	4/22/2015	NA	4/25/2015
P0622-04A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-05A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-06A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-07A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-08A	AQ	4/21/2015	4/22/2015	NA	4/24/2015
P0622-09A	AQ	4/22/2015	4/23/2015	NA	4/24/2015
P0622-10A	AQ	4/22/2015	4/23/2015	NA	4/24/2015
P0622-11A	AQ	4/22/2015	4/23/2015	NA	4/24/2015
P0622-12A	AQ	4/22/2015	4/23/2015	NA	4/24/2015

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

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

Project Name : Maple Street -- 21.0056127.10 **SDG :** P0622

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
P0622-01A	AQ	SW8260_W	NA	LOW	1
P0622-02A	AQ	SW8260_W	NA	LOW	1
P0622-03A	AQ	SW8260_W	NA	LOW	1
P0622-03AMS	AQ	SW8260_W	NA	LOW	1
P0622-03AMSD	AQ	SW8260_W	NA	LOW	1
P0622-04A	AQ	SW8260_W	NA	LOW	1
P0622-05A	AQ	SW8260_W	NA	LOW	1
P0622-06A	AQ	SW8260_W	NA	LOW	1
P0622-07A	AQ	SW8260_W	NA	LOW	1
P0622-08A	AQ	SW8260_W	NA	LOW	1
P0622-09A	AQ	SW8260_W	NA	LOW	1
P0622-10A	AQ	SW8260_W	NA	LOW	1
P0622-11A	AQ	SW8260_W	NA	LOW	1
P0622-12A	AQ	SW8260_W	NA	LOW	1

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

WorkOrder: P0622

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE, 21.0056127.10
Comments: ADDED SAMPLES 09-12

Case:
SDG:
PO: 21.0056127.10

HC Due: 05/05/15
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
P0622-01A	MW-2-042115	04/21/2015 11:40	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-01B	MW-2-042115	04/21/2015 11:40	04/22/2015	Aqueous	SM3500_CR+	/					E3
P0622-02A	MW-1-042115	04/21/2015 11:55	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-02B	MW-1-042115	04/21/2015 11:55	04/22/2015	Aqueous	SM3500_CR+	/					E3
P0622-03A	MW-9-042115	04/21/2015 13:00	04/22/2015	Aqueous	SW8260_W	/			Y		VOA
P0622-03B	MW-9-042115	04/21/2015 13:00	04/22/2015	Aqueous	SM3500_CR+	/			Y		E3
P0622-04A	MW-6-042115	04/21/2015 14:10	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-04B	MW-6-042115	04/21/2015 14:10	04/22/2015	Aqueous	SM3500_CR+	/					E3
P0622-05A	MW-3R-042115	04/21/2015 14:30	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-05B	MW-3R-042115	04/21/2015 14:30	04/22/2015	Aqueous	SM3500_CR+	/					E3
P0622-06A	MW-8-042115	04/21/2015 15:15	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-06B	MW-8-042115	04/21/2015 15:15	04/22/2015	Aqueous	SM3500_CR+	/					E3
P0622-07A	TRIP BLANK_04/21/15	04/21/2015 00:00	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-08A	DUP-1-042115	04/21/2015 00:00	04/22/2015	Aqueous	SW8260_W	/					VOA
P0622-08B	DUP-1-042115	04/21/2015 00:00	04/22/2015	Aqueous	SM3500_CR+	/					E3
P0622-09A	MW-4-042215	04/22/2015 11:30	04/23/2015	Aqueous	SW8260_W	/					VOA
P0622-09B	MW-4-042215	04/22/2015 11:30	04/23/2015	Aqueous	SM3500_CR+	/					E3
P0622-10A	MW-5-042215	04/22/2015 11:35	04/23/2015	Aqueous	SW8260_W	/					VOA

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

HT = Test logged in but has been placed on hold

04/24/2015 13:24 Lab Client Rep: Veronica E Brizard

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

WorkOrder: P0622

Client ID: GZA_BUFFALO
Project: Maple Street
WO Name: Maple Street
Location: MAPLE, 21.0056127.10
Comments: ADDED SAMPLES 09-12

Case:
SDG:
PO: 21.0056127.10

HC Due: 05/05/15
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
P0622-10B	MW-5-042215	04/22/2015 11:35	04/23/2015	Aqueous	SM3500_CR+	/					E3
P0622-11A	MW-7-042215	04/22/2015 11:40	04/23/2015	Aqueous	SW8260_W	/					VOA
P0622-11B	MW-7-042215	04/22/2015 11:40	04/23/2015	Aqueous	SM3500_CR+	/					E3
P0622-12A	TRIP BLANK_04/22/15	04/22/2015 00:00	04/23/2015	Aqueous	SW8260_W	/					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

P0622

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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- 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: GZA GEOENVIRONMENTAL OF NEW YORK
Telephone #: 716-844-7034
Project Mgr. DANIEL TROY

Invoice To: GZA
P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: ENDICOTT State: NY
Sampler(s): JOHN BENINATI

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= _____

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

List preservative code below:

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards:
ASP CAT B

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Containers:	Analyses:							
											8260 VOCs	Ca +6						
C1	MW-2-042115	4/21/15	11:40	G	GW	2			1		X	X						
C2	MW-1-042115	4/21/15	11:55	G	GW	2			1		X	X						
C3	MW-9-042115	4/21/15	13:00	G	GW	2			1		X	X						MS/MSD
C4	MW-6-042115	4/21/15	14:10	G	GW	2			1		X	X						
C5	MW-3R-042115	4/21/15	14:30	G	GW	2			1		X	X						
C6	MW-8-042115	4/21/15	15:15	G	GW	2			1		X	X						
C7	TRIP BLANK	4/21/15	—	—	—	2					X							
C8	DUP-1-042115	4/21/15	—	G	GW	2			1		X	X						

Relinquished by:	Received by:	Date:	Time:	Temp°C
	FEDEX	4/21/15	1630	
FEDEX		04/22/15	09:50	4.1°C IR

☑ EDD Format NYSDEC EQUIS
☑ E-mail to DANIEL.TROY@GZA.COM

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

Page 4 of 180

Revised Feb 2013

P0622

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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- 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: GZA GEOENVIRONMENTAL OF NEW YORK
535 WASHINGTON ST, 11TH FL
BUFFALO, NY 14203
Telephone #: 716-344-7034
Project Mgr. DANIEL TROY

Invoice To: GZA

P.O. No.: _____ RQN: _____

Project No.: 21.0056127.10
Site Name: 312 MAPLE STREET
Location: ENDICOTT State: NY
Sampler(s): JOHN BENWARE

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: 2

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

P0622

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 8260 VOCs	Ca++
09	MW-4-042215	4/22/15	1130	G	GW	2			1	X	X
10	MW-5-042215	4/22/15	1135	G	GW	2			1	X	X
11	MW-7-042215	4/22/15	1140	G	GW	2			1	X	X
12	TRIP BLANK	4/22/15	~	-	-	2				X	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards: ASP CAT B

Relinquished by:	Received by:	Date:	Time:	Temp°C
UPS	UPS	4/22/15	1215	
		4/23/15	10:05	4.7°c

☑ EDD Format NYSDEC EQUIS
☑ E-mail to DANIEL.TROY@GZA.COM

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

JR

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

Received By: WJL	Page 01 of 00
Reviewed By: KP	Log-in Date 04/22/2015
Work Order: P0622	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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. — UPS 1Z75R4V20193966729
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	4.1 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	04/22/2015
12. Time Received	09:50

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"
P0622-01						H	
P0622-02						H	
P0622-03						H	
P0622-04						H	
P0622-05						H	
P0622-06						H	
P0622-07						H	
P0622-08						H	

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

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

Received By: WJL	Page 01 of 00
Reviewed By: KP	Log-in Date 04/23/2015
Work Order: P0622	Client Name: GZA GeoEnvironmental, Inc.
Project Name/Event: Maple Street	

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.	UPS 1Z75R4V2019106
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	4.7 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	04/23/2015
12. Time Received	10:05

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
P0622-09						H	
P0622-10						H	
P0622-11						H	
P0622-12						H	

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. RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: P0622

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: V5
Instrument Type: GCMS-VOA

Description: HP6890 / HP6890
Manufacturer: Hewlett-Packard
Model: 6890 / 6890

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on samples: MW-9-042115 (P0622-03AMS) and MW-9-042115 (P0622-03AMSD).

Percent recoveries were within the QC limits.

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

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:

VSTD001B5 1,2-Dibromo-3-chloropropane 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: 05/05/2015

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.: P0622 Mod. Ref No.: SDG No.: SP0622

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-81892	98	94	87	103				0
02	MB-81892	104	91	86	95				0
03	MW-2-042115	105	97	87	96				0
04	MW-1-042115	106	99	87	96				0
05	MW-9-042115	107	99	91	99				0
06	MW-6-042115	103	99	91	102				0
07	MW-3R-042115	102	103	86	97				0
08	MW-8-042115	107	92	93	99				0
09	TRIP BLANK_04/21/15	104	96	89	98				0
10	DUP-1-042115	108	103	87	94				0
11	MW-4-042215	101	96	91	100				0
12	MW-5-042215	111	98	88	100				0
13	MW-7-042215	107	94	85	93				0
14	TRIP BLANK_04/22/15	102	105	86	91				0
15	MW-9-042115MS	108	96	85	99				0
16	MW-9-042115MSD	108	101	86	94				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

som14.10.02.1616

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix Spike - EPA Sample No.: MW-9-042115 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	54.5787	109		30-155
Chloromethane	50.0000	0.0000	50.0359	100		40-125
Vinyl chloride	50.0000	0.0000	53.2664	107		50-145
Bromomethane	50.0000	0.0000	53.7718	108		30-145
Chloroethane	50.0000	0.0000	57.0091	114		60-135
Trichlorofluoromethane	50.0000	0.0000	67.0056	134		60-145
1,1-Dichloroethene	50.0000	0.0000	59.4254	119		70-130
Acetone	50.0000	0.0000	52.2604	105		40-140
Iodomethane	50.0000	0.0000	56.1819	112		72-121
Carbon disulfide	50.0000	0.0000	54.4925	109		35-160
Methylene chloride	50.0000	0.0000	53.8978	108		55-140
trans-1,2-Dichloroethen	50.0000	0.0000	52.9660	106		60-140
Methyl tert-butyl ether	50.0000	0.0000	55.1870	110		65-125
1,1-Dichloroethane	50.0000	0.0000	53.3800	107		70-135
Vinyl acetate	50.0000	0.0000	51.8523	104		38-163
2-Butanone	50.0000	0.0000	50.6739	101		30-150
cis-1,2-Dichloroethene	50.0000	0.0000	53.5530	107		70-125
2,2-Dichloropropane	50.0000	0.0000	55.8443	112		70-135
Bromochloromethane	50.0000	0.0000	56.3557	113		65-130
Chloroform	50.0000	0.0000	54.2384	108		65-135
1,1,1-Trichloroethane	50.0000	0.0000	57.0860	114		65-130
1,1-Dichloropropene	50.0000	0.0000	56.6427	113		75-130
Carbon tetrachloride	50.0000	0.0000	61.7243	123		65-140
1,2-Dichloroethane	50.0000	0.0000	58.3124	117		70-130
Benzene	50.0000	0.0000	54.1650	108		80-120
Trichloroethene	50.0000	2.2838	57.7779	111		70-125
1,2-Dichloropropane	50.0000	0.0000	54.8128	110		75-125
Dibromomethane	50.0000	0.0000	54.2896	109		75-125
Bromodichloromethane	50.0000	0.0000	56.4288	113		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	56.6580	113		70-130
4-Methyl-2-pentanone	50.0000	0.0000	49.2978	99		60-135
Toluene	50.0000	0.0000	56.6090	113		75-120
trans-1,3-Dichloroprope	50.0000	0.0000	57.9075	116		55-140
1,1,2-Trichloroethane	50.0000	0.0000	53.7425	107		75-125
1,3-Dichloropropane	50.0000	0.0000	43.3899	87		75-125
Tetrachloroethene	50.0000	0.0000	46.2237	92		45-150
2-Hexanone	50.0000	0.0000	38.2305	76		55-130
Dibromochloromethane	50.0000	0.0000	46.6421	93		60-135
1,2-Dibromoethane	50.0000	0.0000	45.8076	92		80-120
Chlorobenzene	50.0000	0.0000	48.9880	98		80-120
1,1,1,2-Tetrachloroetha	50.0000	0.0000	52.0614	104		80-130
Ethylbenzene	50.0000	0.0000	52.2462	104		75-125
m,p-Xylene	100.0000	0.0000	99.6717	100		75-130
o-Xylene	50.0000	0.0000	50.0957	100		80-120

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix Spike - EPA Sample No.: MW-9-042115 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	149.7674	100		81-121
Styrene	50.0000	0.0000	50.5553	101		65-135
Bromoform	50.0000	0.0000	46.3411	93		70-130
Isopropylbenzene	50.0000	0.0000	49.1831	98		75-125
1,1,2,2-Tetrachloroetha	50.0000	0.0000	45.6016	91		65-130
Bromobenzene	50.0000	0.0000	51.4890	103		75-125
1,2,3-Trichloropropane	50.0000	0.0000	48.6473	97		75-125
n-Propylbenzene	50.0000	0.0000	53.5116	107		70-130
2-Chlorotoluene	50.0000	0.0000	51.1123	102		75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	52.3214	105		75-130
4-Chlorotoluene	50.0000	0.0000	52.8015	106		75-130
tert-Butylbenzene	50.0000	0.0000	54.1084	108		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	54.7490	109		75-130
sec-Butylbenzene	50.0000	0.0000	50.9825	102		70-125
4-Isopropyltoluene	50.0000	0.0000	52.0498	104		75-130
1,3-Dichlorobenzene	50.0000	0.0000	50.5808	101		75-125
1,4-Dichlorobenzene	50.0000	0.0000	49.8879	100		75-125
n-Butylbenzene	50.0000	0.0000	50.1073	100		70-135
1,2-Dichlorobenzene	50.0000	0.0000	51.5433	103		70-120
1,2-Dibromo-3-chloropro	50.0000	0.0000	45.2833	91		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	47.2937	95		65-135
Hexachlorobutadiene	50.0000	0.0000	54.0078	108		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	47.2195	94		55-140
Naphthalene	50.0000	0.0000	51.6472	103		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	45.1096	90		19		0-40	30-155
Chloromethane	50.0000	53.4949	107		7		0-40	40-125
Vinyl chloride	50.0000	50.6399	101		5		0-40	50-145
Bromomethane	50.0000	48.1640	96		11		0-40	30-145
Chloroethane	50.0000	53.6731	107		6		0-40	60-135
Trichlorofluoromethane	50.0000	62.5271	125		7		0-40	60-145
1,1-Dichloroethene	50.0000	54.7778	110		8		0-40	70-130
Acetone	50.0000	45.3423	91		14		0-40	40-140
Iodomethane	50.0000	49.9943	100		12		0-40	72-121
Carbon disulfide	50.0000	52.8885	106		3		0-40	35-160
Methylene chloride	50.0000	48.6061	97		10		0-40	55-140
trans-1,2-Dichloroethen	50.0000	49.6211	99		7		0-40	60-140
Methyl tert-butyl ether	50.0000	51.6812	103		7		0-40	65-125
1,1-Dichloroethane	50.0000	51.7880	104		3		0-40	70-135
Vinyl acetate	50.0000	42.8497	86		19		0-40	38-163
2-Butanone	50.0000	43.4427	87		15		0-40	30-150
cis-1,2-Dichloroethene	50.0000	50.0977	100		7		0-40	70-125
2,2-Dichloropropane	50.0000	41.1664	82		30		0-40	70-135
Bromochloromethane	50.0000	53.6428	107		5		0-40	65-130

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix Spike - EPA Sample No.: MW-9-042115 Level: (TRACE or LOW) LOW

Chloroform	50.0000	52.9771	106		2		0-40	65-135
1,1,1-Trichloroethane	50.0000	54.8502	110		4		0-40	65-130
1,1-Dichloropropene	50.0000	53.3949	107		6		0-40	75-130
Carbon tetrachloride	50.0000	58.0953	116		6		0-40	65-140
1,2-Dichloroethane	50.0000	53.4213	107		9		0-40	70-130
Benzene	50.0000	50.5607	101		7		0-40	80-120
Trichloroethene	50.0000	56.2024	108		3		0-40	70-125
1,2-Dichloropropane	50.0000	52.1551	104		5		0-40	75-125
Dibromomethane	50.0000	49.4131	99		9		0-40	75-125
Bromodichloromethane	50.0000	52.9519	106		6		0-40	75-120
cis-1,3-Dichloropropene	50.0000	49.1047	98		14		0-40	70-130
4-Methyl-2-pentanone	50.0000	39.1050	78		23		0-40	60-135
Toluene	50.0000	51.5610	103		9		0-40	75-120
trans-1,3-Dichloroprope	50.0000	53.1539	106		9		0-40	55-140
1,1,2-Trichloroethane	50.0000	47.2344	94		13		0-40	75-125
1,3-Dichloropropane	50.0000	40.1700	80		8		0-40	75-125
Tetrachloroethene	50.0000	42.8306	86		8		0-40	45-150
2-Hexanone	50.0000	30.6016	61		22		0-40	55-130
Dibromochloromethane	50.0000	44.4162	89		5		0-40	60-135
1,2-Dibromoethane	50.0000	42.4990	85		7		0-40	80-120
Chlorobenzene	50.0000	48.5985	97		1		0-40	80-120
1,1,1,2-Tetrachloroetha	50.0000	49.3547	99		5		0-40	80-130
Ethylbenzene	50.0000	50.1992	100		4		0-40	75-125
m,p-Xylene	100.0000	96.7329	97		3		0-40	75-130
o-Xylene	50.0000	49.2137	98		2		0-40	80-120
Xylene (Total)	150.0000	145.9466	97		3		0-40	81-121
Styrene	50.0000	49.0628	98		3		0-40	65-135
Bromoform	50.0000	43.1069	86		7		0-40	70-130
Isopropylbenzene	50.0000	47.6580	95		3		0-40	75-125
1,1,2,2-Tetrachloroetha	50.0000	42.2125	84		8		0-40	65-130
Bromobenzene	50.0000	48.5053	97		6		0-40	75-125
1,2,3-Trichloropropane	50.0000	40.4196	81		18		0-40	75-125
n-Propylbenzene	50.0000	49.1794	98		8		0-40	70-130
2-Chlorotoluene	50.0000	48.1071	96		6		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	49.2877	99		6		0-40	75-130
4-Chlorotoluene	50.0000	49.4332	99		7		0-40	75-130
tert-Butylbenzene	50.0000	51.3825	103		5		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	52.6742	105		4		0-40	75-130
sec-Butylbenzene	50.0000	48.9663	98		4		0-40	70-125
4-Isopropyltoluene	50.0000	49.6452	99		5		0-40	75-130
1,3-Dichlorobenzene	50.0000	48.7151	97		4		0-40	75-125
1,4-Dichlorobenzene	50.0000	46.2442	92		8		0-40	75-125
n-Butylbenzene	50.0000	49.1171	98		2		0-40	70-135
1,2-Dichlorobenzene	50.0000	50.7698	102		2		0-40	70-120
1,2-Dibromo-3-chloropro	50.0000	41.5296	83		9		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	47.9356	96		1		0-40	65-135
Hexachlorobutadiene	50.0000	52.2183	104		3		0-40	50-140

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix Spike - EPA Sample No.: MW-9-042115 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	43.3500	87		9		0-40	55-140
Naphthalene	50.0000	45.7408	91		12		0-40	55-140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 136 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Lab Sample ID: LCS-81892 LCS Lot No.:

Date Extracted: 04/24/2015 Date Analyzed (1): 04/24/2015

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	47.8490	96		30 - 155
Chloromethane	50.0000	0.0000	47.5671	95		40 - 125
Vinyl chloride	50.0000	0.0000	49.2387	98		50 - 145
Bromomethane	50.0000	0.0000	48.7697	98		30 - 145
Chloroethane	50.0000	0.0000	53.2319	106		60 - 135
Trichlorofluoromethane	50.0000	0.0000	51.4070	103		60 - 145
1,1-Dichloroethene	50.0000	0.0000	56.3514	113		70 - 130
Acetone	50.0000	0.0000	40.8956	82		40 - 140
Iodomethane	50.0000	0.0000	49.6707	99		72 - 121
Carbon disulfide	50.0000	0.0000	50.2915	101		35 - 160
Methylene chloride	50.0000	0.0000	47.0783	94		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.8941	98		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.7932	106		65 - 125
1,1-Dichloroethane	50.0000	0.0000	48.6514	97		70 - 135
Vinyl acetate	50.0000	0.0000	47.8936	96		38 - 163
2-Butanone	50.0000	0.0000	43.2262	86		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	49.7654	100		70 - 125
2,2-Dichloropropane	50.0000	0.0000	50.6567	101		70 - 135
Bromochloromethane	50.0000	0.0000	54.8504	110		65 - 130
Chloroform	50.0000	0.0000	51.9592	104		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	54.0089	108		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.6432	103		75 - 130
Carbon tetrachloride	50.0000	0.0000	54.9104	110		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.9767	102		70 - 130
Benzene	50.0000	0.0000	49.4678	99		80 - 120
Trichloroethene	50.0000	0.0000	53.4109	107		70 - 125
1,2-Dichloropropane	50.0000	0.0000	51.6452	103		75 - 125
Dibromomethane	50.0000	0.0000	49.7470	99		75 - 125
Bromodichloromethane	50.0000	0.0000	51.0576	102		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.0687	106		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	41.3495	83		60 - 135
Toluene	50.0000	0.0000	50.2138	100		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.1683	104		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	47.6590	95		75 - 125
1,3-Dichloropropane	50.0000	0.0000	42.8773	86		75 - 125
Tetrachloroethene	50.0000	0.0000	47.1249	94		45 - 150
2-Hexanone	50.0000	0.0000	35.0808	70		55 - 130
Dibromochloromethane	50.0000	0.0000	46.4867	93		60 - 135
1,2-Dibromoethane	50.0000	0.0000	45.3741	91		80 - 120
Chlorobenzene	50.0000	0.0000	49.1232	98		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.2466	100		80 - 130
Ethylbenzene	50.0000	0.0000	51.1915	102		75 - 125
m,p-Xylene	100.0000	0.0000	100.4476	100		75 - 130
o-Xylene	50.0000	0.0000	51.1975	102		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Lab Sample ID: LCS-81892 LCS Lot No.:

Date Extracted: 04/24/2015 Date Analyzed (1): 04/24/2015

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	151.6451	101		81 - 121
Styrene	50.0000	0.0000	51.6422	103		65 - 135
Bromoform	50.0000	0.0000	46.1002	92		70 - 130
Isopropylbenzene	50.0000	0.0000	49.6218	99		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	43.3609	87		65 - 130
Bromobenzene	50.0000	0.0000	49.6215	99		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	41.6839	83		75 - 125
n-Propylbenzene	50.0000	0.0000	52.1019	104		70 - 130
2-Chlorotoluene	50.0000	0.0000	52.1847	104		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	51.5817	103		75 - 130
4-Chlorotoluene	50.0000	0.0000	51.0988	102		75 - 130
tert-Butylbenzene	50.0000	0.0000	52.3239	105		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	53.3715	107		75 - 130
sec-Butylbenzene	50.0000	0.0000	50.2466	100		70 - 125
4-Isopropyltoluene	50.0000	0.0000	50.9387	102		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	50.5252	101		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.9115	96		75 - 125
n-Butylbenzene	50.0000	0.0000	50.5356	101		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	52.7609	106		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	43.6202	87		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	48.5234	97		65 - 135
Hexachlorobutadiene	50.0000	0.0000	54.9186	110		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	47.5479	95		55 - 140
Naphthalene	50.0000	0.0000	50.2518	101		55 - 140

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Lab File ID: V5Q0346.D Lab Sample ID: MB-81892

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 04/24/2015

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:15

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-81892	LCS-81892	V5Q0344.D	16:24
02	MW-2-042115	P0622-01A	V5Q0347.D	17:40
03	MW-1-042115	P0622-02A	V5Q0348.D	18:05
04	MW-9-042115	P0622-03A	V5Q0349.D	18:31
05	MW-6-042115	P0622-04A	V5Q0350.D	18:56
06	MW-3R-042115	P0622-05A	V5Q0351.D	19:21
07	MW-8-042115	P0622-06A	V5Q0352.D	19:47
08	TRIP BLANK_04/21/15	P0622-07A	V5Q0353.D	20:12
09	DUP-1-042115	P0622-08A	V5Q0354.D	20:38
10	MW-4-042215	P0622-09A	V5Q0355.D	21:04
11	MW-5-042215	P0622-10A	V5Q0356.D	21:30
12	MW-7-042215	P0622-11A	V5Q0357.D	21:55
13	TRIP BLANK_04/22/15	P0622-12A	V5Q0358.D	22:20
14	MW-9-042115MS	P0622-03AMS	V5Q0367.D	2:10
15	MW-9-042115MSD	P0622-03AMSD	V5Q0368.D	2:35

COMMENTS:

som14.10.02.1616

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

EPA SAMPLE NO.
BFBB5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Lab File ID: V5Q0160.D BFB Injection Date: 04/20/2015

Instrument ID: V5 BFB Injection Time: 16:28

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	42.1
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	88.5
175	5.0 - 9.0% of mass 174	7.5 (8.4)1
176	95.0 - 101.0% of mass 174	89.1 (100.7)1
177	5.0 - 9.0% of mass 176	5.8 (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	VSTD001B5	VSTD001B5	V5Q0161.D	04/20/2015	16:53
02	VSTD005B5	VSTD005B5	V5Q0162.D	04/20/2015	17:19
03	VSTD020B5	VSTD020B5	V5Q0163.D	04/20/2015	17:44
04	VSTD050B5	VSTD050B5	V5Q0164.D	04/20/2015	18:10
05	VSTD100B5	VSTD100B5	V5Q0165.D	04/20/2015	18:36
06	VSTD200B5	VSTD200B5	V5Q0166.D	04/20/2015	19:01

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

EPA SAMPLE NO.
BFBJ5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Lab File ID: V5Q0342.D BFB Injection Date: 04/24/2015

Instrument ID: V5 BFB Injection Time: 15:33

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.0
75	30.0 - 60.0% of mass 95	51.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	71.9
175	5.0 - 9.0% of mass 174	5.5 (7.7)1
176	95.0 - 101.0% of mass 174	68.8 (95.7)1
177	5.0 - 9.0% of mass 176	6.1 (8.9)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	VSTD050J5	VSTD050J5	V5Q0343.D	04/24/2015	15:58
02	LCS-81892	LCS-81892	V5Q0344.D	04/24/2015	16:24
03	MB-81892	MB-81892	V5Q0346.D	04/24/2015	17:15
04	MW-2-042115	P0622-01A	V5Q0347.D	04/24/2015	17:40
05	MW-1-042115	P0622-02A	V5Q0348.D	04/24/2015	18:05
06	MW-9-042115	P0622-03A	V5Q0349.D	04/24/2015	18:31
07	MW-6-042115	P0622-04A	V5Q0350.D	04/24/2015	18:56
08	MW-3R-042115	P0622-05A	V5Q0351.D	04/24/2015	19:21
09	MW-8-042115	P0622-06A	V5Q0352.D	04/24/2015	19:47
10	TRIP BLANK_04/21/15	P0622-07A	V5Q0353.D	04/24/2015	20:12
11	DUP-1-042115	P0622-08A	V5Q0354.D	04/24/2015	20:38
12	MW-4-042215	P0622-09A	V5Q0355.D	04/24/2015	21:04
13	MW-5-042215	P0622-10A	V5Q0356.D	04/24/2015	21:30
14	MW-7-042215	P0622-11A	V5Q0357.D	04/24/2015	21:55
15	TRIP BLANK_04/22/15	P0622-12A	V5Q0358.D	04/24/2015	22:20
16	MW-9-042115MS	P0622-03AMS	V5Q0367.D	04/25/2015	2:10
17	MW-9-042115MSD	P0622-03AMSD	V5Q0368.D	04/25/2015	2:35

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/20/2015 04/20/2015

EPA Sample No.(VSTD#####): VSTD050J5 Date Analyzed: 04/24/2015

Lab File ID (Standard): V5Q0343.D Time Analyzed: 15:58

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	168364		5.561		132356		9.033		67095		12.192	
	UPPER LIMIT	336728		6.061		264712		9.533		134190		12.692	
	LOWER LIMIT	84182		5.061		66178		8.533		33548		11.692	
	EPA SAMPLE NO.												
01	LCS-81892	172679		5.566		127365		9.039		66977		12.197	
02	MB-81892	161218		5.565		121003		9.037		58606		12.196	
03	MW-2-042115	162719		5.571		124800		9.043		58400		12.202	
04	MW-1-042115	158419		5.571		118829		9.032		57241		12.191	
05	MW-9-042115	157982		5.571		117300		9.043		58044		12.202	
06	MW-6-042115	161822		5.564		118149		9.037		55859		12.195	
07	MW-3R-042115	161060		5.566		119672		9.038		57070		12.197	
08	MW-8-042115	155594		5.570		112402		9.043		57313		12.201	
09	TRIP BLANK_04/21/15	158486		5.565		113819		9.037		52870		12.196	
10	DUP-1-042115	157786		5.565		118125		9.037		58080		12.196	
11	MW-4-042215	158025		5.572		112692		9.032		56163		12.191	
12	MW-5-042215	156716		5.566		116324		9.038		55467		12.197	
13	MW-7-042215	155727		5.571		120175		9.043		57104		12.202	

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.: P0622 Mod. Ref No.: SDG No.: SP0622

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/20/2015 04/20/2015

EPA Sample No.(VSTD#####): VSTD050J5 Date Analyzed: 04/24/2015

Lab File ID (Standard): V5Q0343.D Time Analyzed: 15:58

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	168364		5.561		132356		9.033		67095		12.192	
	UPPER LIMIT	336728		6.061		264712		9.533		134190		12.692	
	LOWER LIMIT	84182		5.061		66178		8.533		33548		11.692	
	EPA SAMPLE NO.												
14	TRIP BLANK_04/22/15	156461		5.562		118059		9.035		54386		12.193	
15	MW-9-042115MS	153581		5.565		125507		9.037		62891		12.196	
16	MW-9-042115MSD	164910		5.566		128959		9.038		65460		12.197	

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.

MW-2-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0347.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.3	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	52	
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

EPA SAMPLE NO.

MW-2-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0347.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0347.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0347.D
Lab Smp Id: P0622-01A Client Smp ID: MW-2-042115
Inj Date : 24-APR-2015 17:40
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-01A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

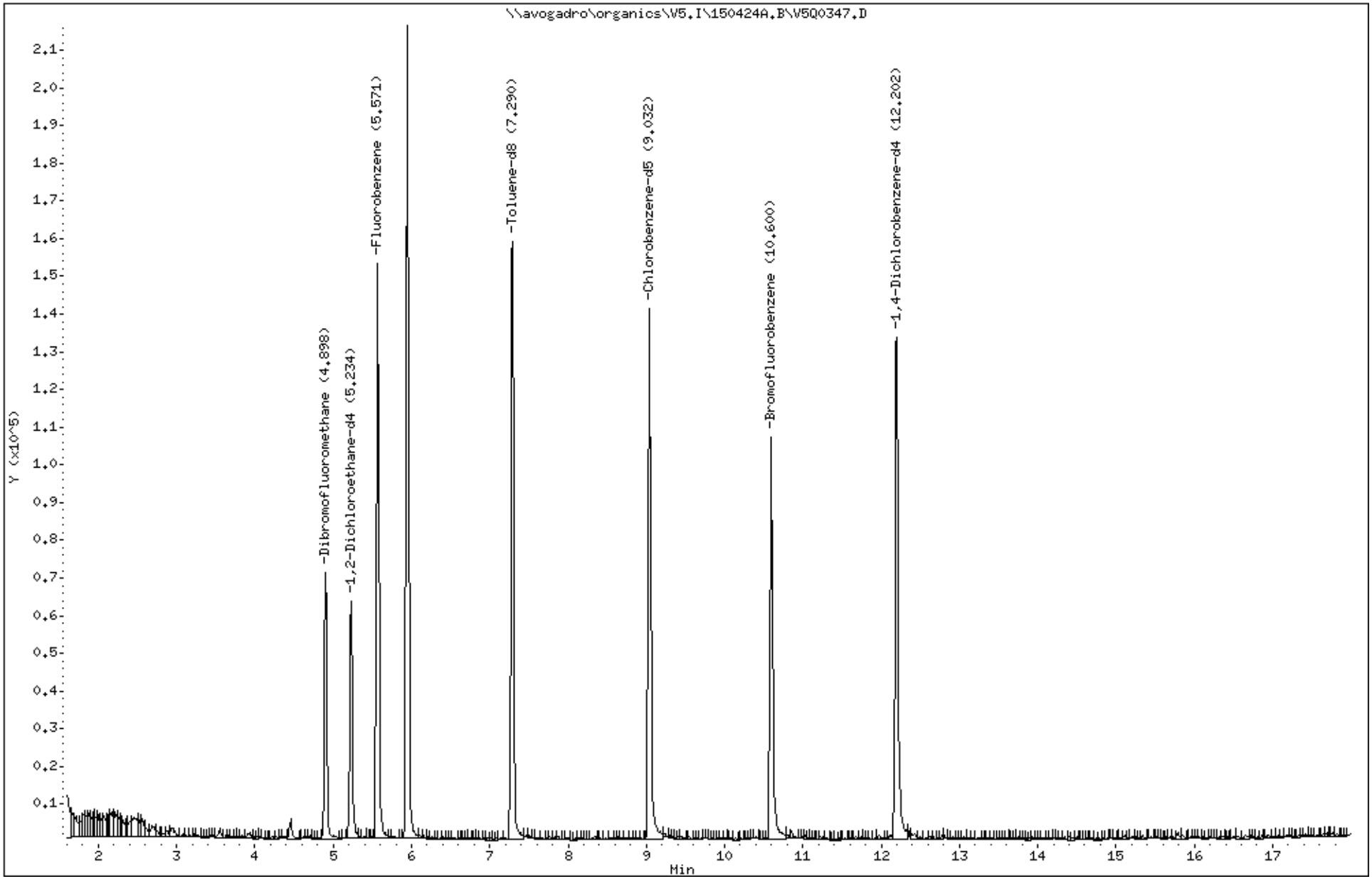
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	29 cis-1,2-Dichloroethene	96	4.456	4.445	(0.800)	2741	1.33913	1(Q)
$	37 Dibromofluoromethane	113	4.897	4.886	(0.879)	51039	52.5186	52
$	43 1,2-Dichloroethane-d4	102	5.234	5.223	(0.940)	10794	48.2626	48
*	47 Fluorobenzene	96	5.571	5.560	(1.000)	162719	50.0000	
	48 Trichloroethene	130	5.942	5.943	(1.067)	94627	51.5521	52
M	56 1,2-Dichloroethene (Total)	96				2741	1.33913	1
$	60 Toluene-d8	98	7.289	7.279	(0.806)	142133	43.5256	44
*	70 Chlorobenzene-d5	117	9.043	9.032	(1.000)	124800	50.0000	
$	81 Bromofluorobenzene	95	10.599	10.588	(1.172)	55260	48.1917	48
*	94 1,4-Dichlorobenzene-d4	152	12.202	12.191	(1.000)	58400	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0347.D
Date : 24-APR-2015 17:40
Client ID: MW-2-042115
Instrument: V5.i
Sample Info: 5ML,P0622-01A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0347.D

Date : 24-APR-2015 17:40

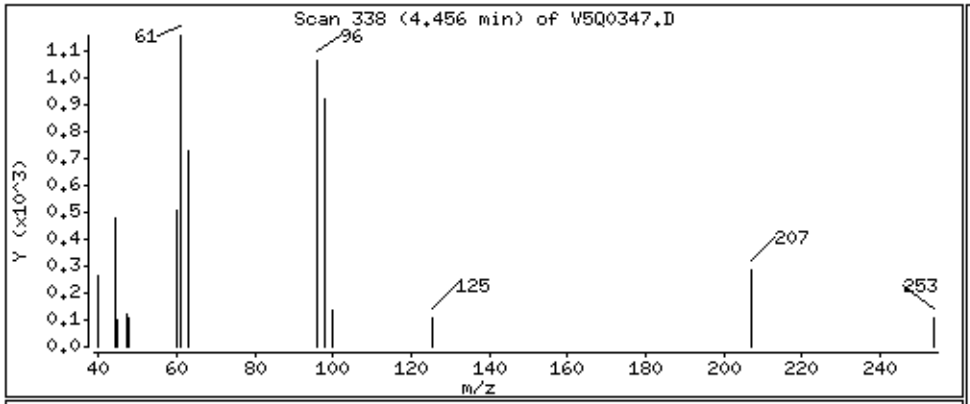
Client ID: MW-2-042115 Instrument: V5.i

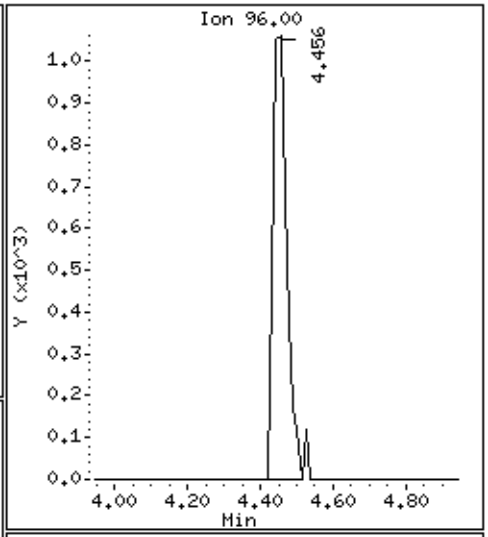
Sample Info: 5ML,P0622-01A,,81892

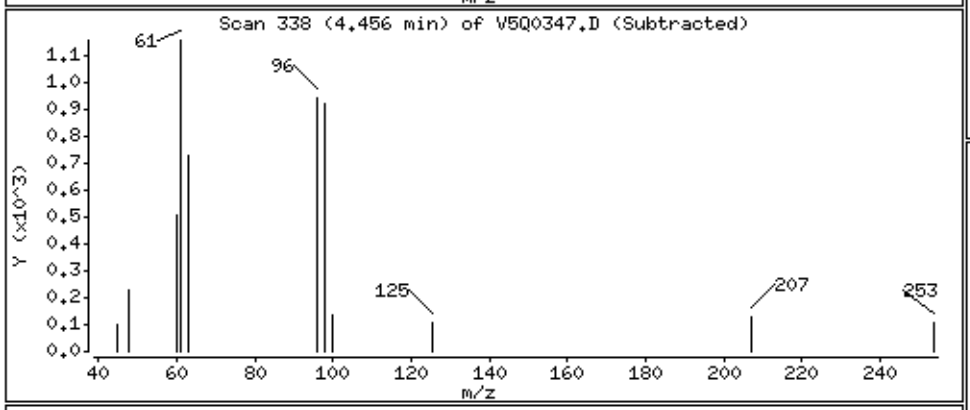
Purge Volume: 5.0 Operator: WL SRC: LIMS

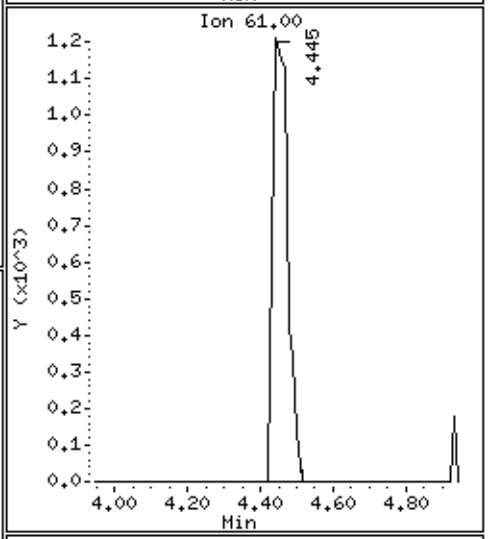
Column phase: DB-624 Column diameter: 0.25

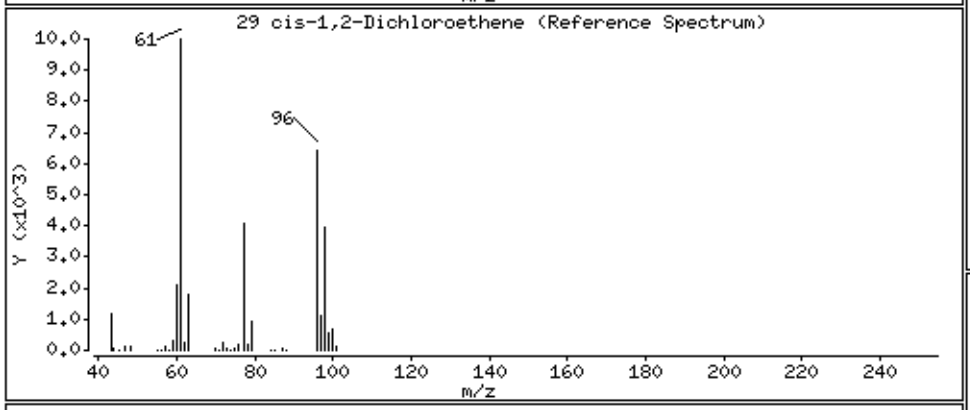
29 cis-1,2-Dichloroethene Concentration: 1 ug/L

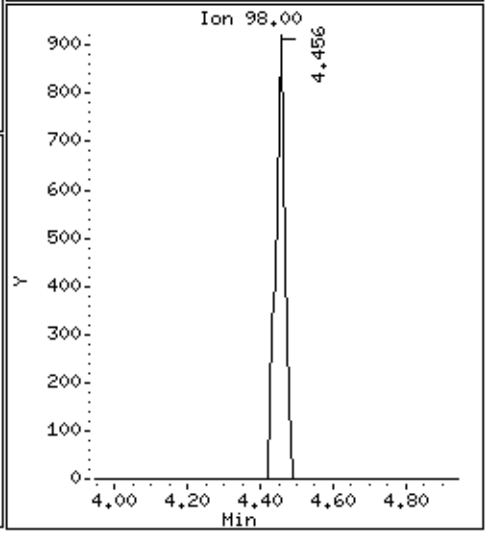


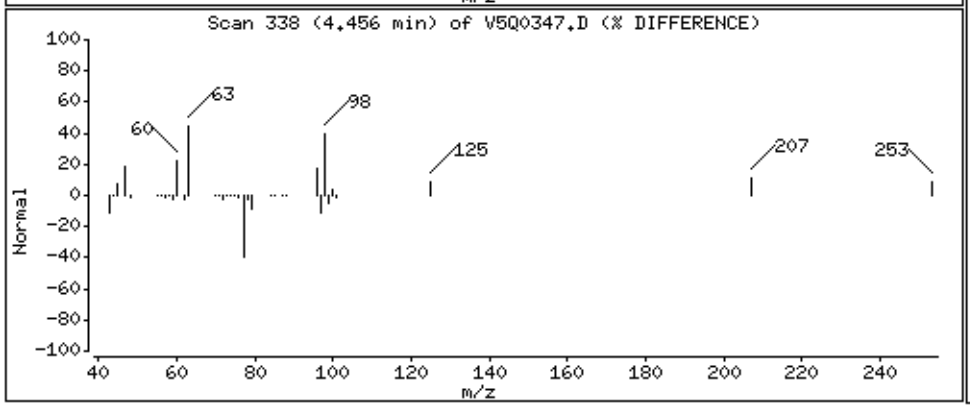












Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0347.D

Date : 24-APR-2015 17:40

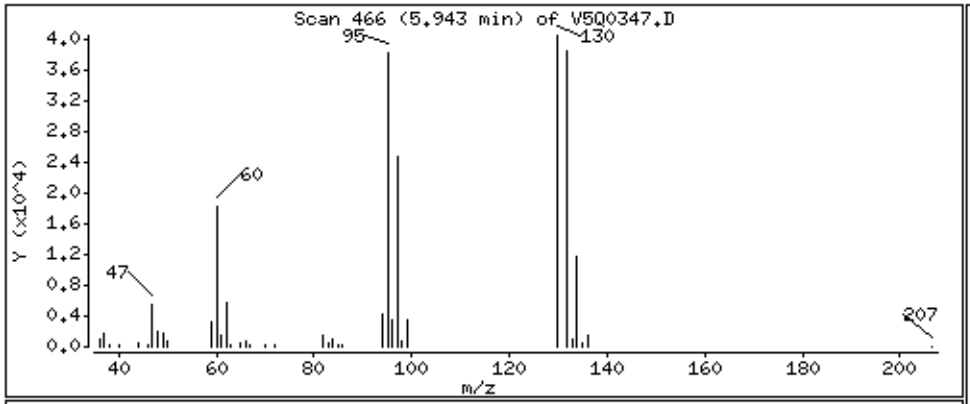
Client ID: MW-2-042115 Instrument: V5.i

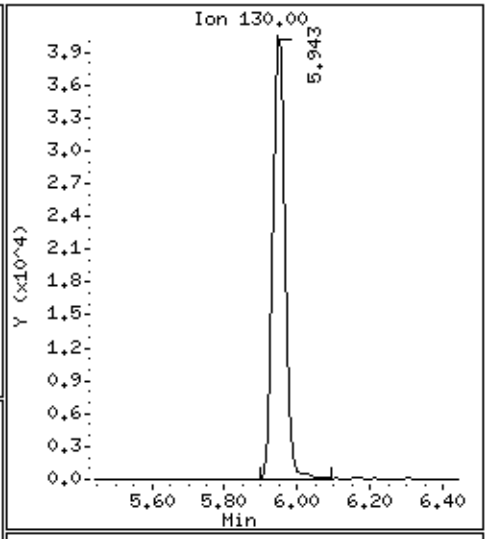
Sample Info: 5ML,P0622-01A,,81892

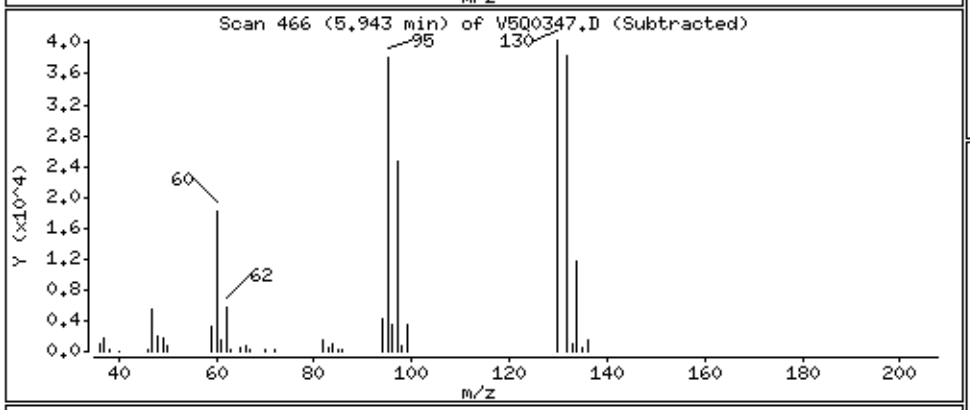
Purge Volume: 5.0 Operator: WL SRC: LIMS

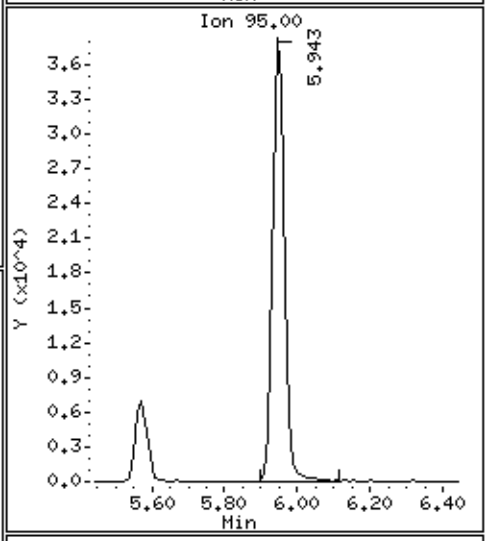
Column phase: DB-624 Column diameter: 0.25

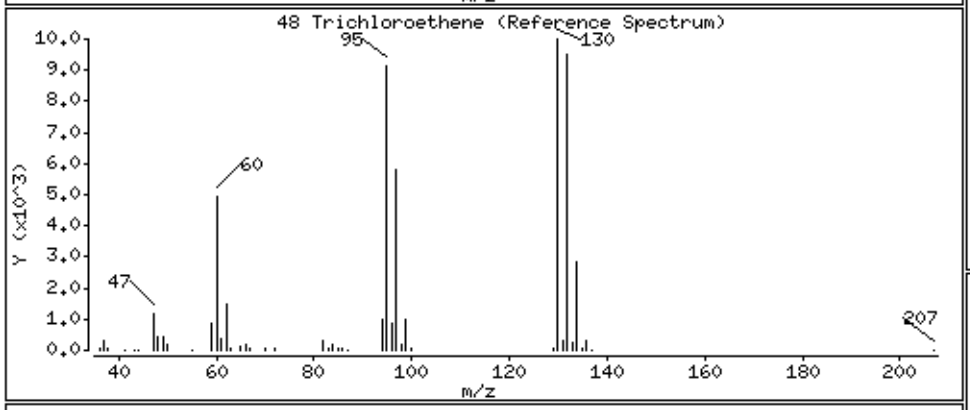
48 Trichloroethene Concentration: 52 ug/L

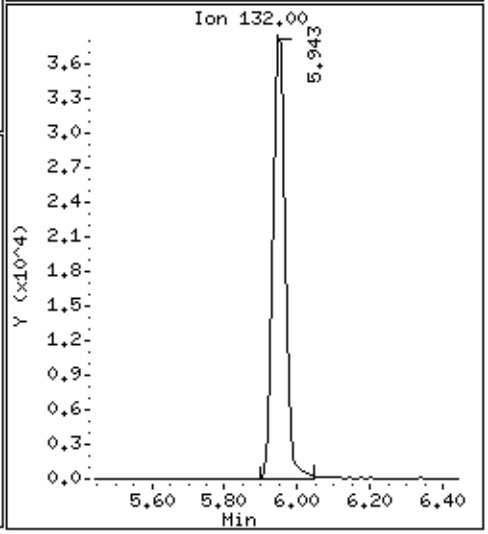


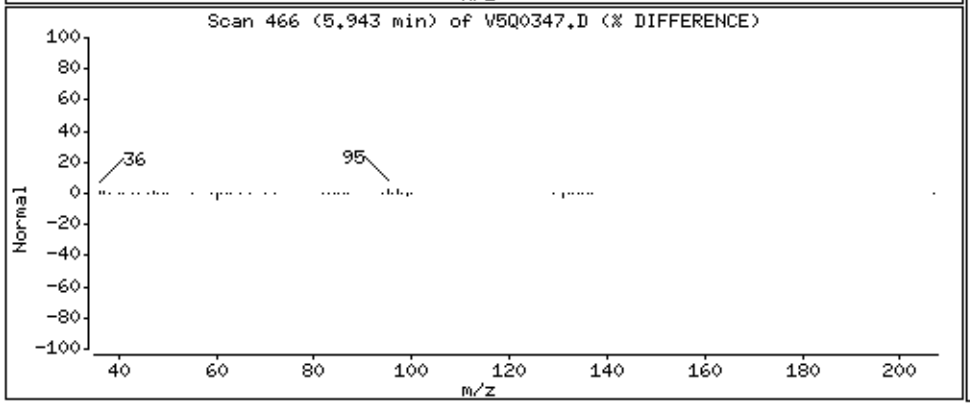












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0348.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	8.8	
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	1.7	J
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	1.4	J
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.

MW-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0348.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0348.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0348.D
Lab Smp Id: P0622-02A Client Smp ID: MW-1-042115
Inj Date : 24-APR-2015 18:05
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-02A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

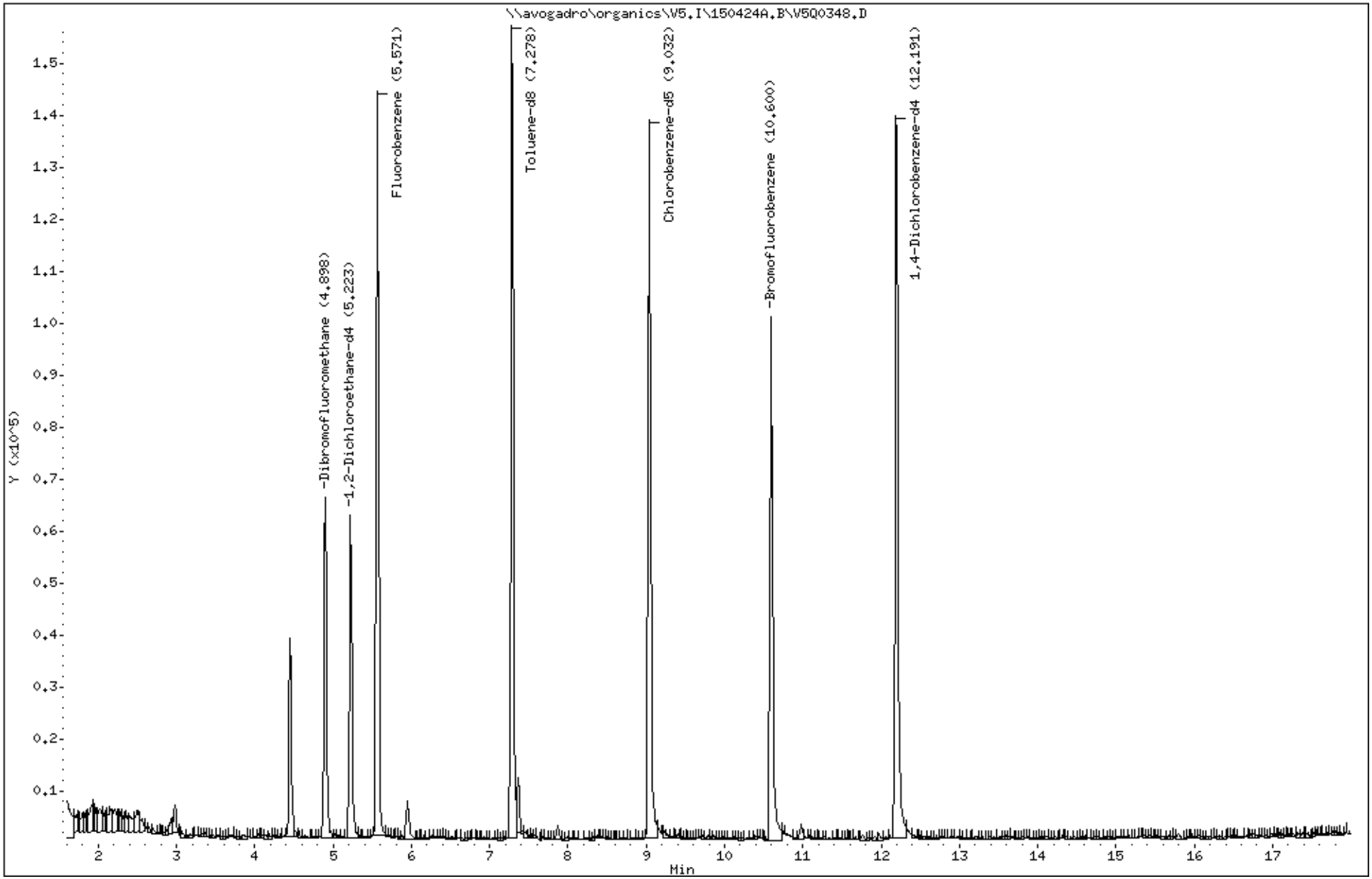
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	29 cis-1,2-Dichloroethene	96	4.444	4.445	(0.798)	17484	8.77378	9
$	37 Dibromofluoromethane	113	4.897	4.886	(0.879)	49945	52.7878	53
$	43 1,2-Dichloroethane-d4	102	5.222	5.223	(0.937)	10813	49.6599	50
*	47 Fluorobenzene	96	5.571	5.560	(1.000)	158419	50.0000	
	48 Trichloroethene	130	5.954	5.943	(1.069)	3123	1.74757	2
M	56 1,2-Dichloroethene (Total)	96				17484	8.77378	9
$	60 Toluene-d8	98	7.278	7.279	(0.806)	135586	43.6071	44
	61 Toluene	91	7.359	7.360	(1.321)	8544	1.39633	1
*	70 Chlorobenzene-d5	117	9.032	9.032	(1.000)	118829	50.0000	
$	81 Bromofluorobenzene	95	10.599	10.588	(1.174)	52177	47.7895	48
*	94 1,4-Dichlorobenzene-d4	152	12.190	12.191	(1.000)	57241	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0348.D
Date : 24-APR-2015 18:05
Client ID: MW-1-042115
Instrument: V5.i
Sample Info: 5ML,P0622-02A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0348.D

Date : 24-APR-2015 18:05

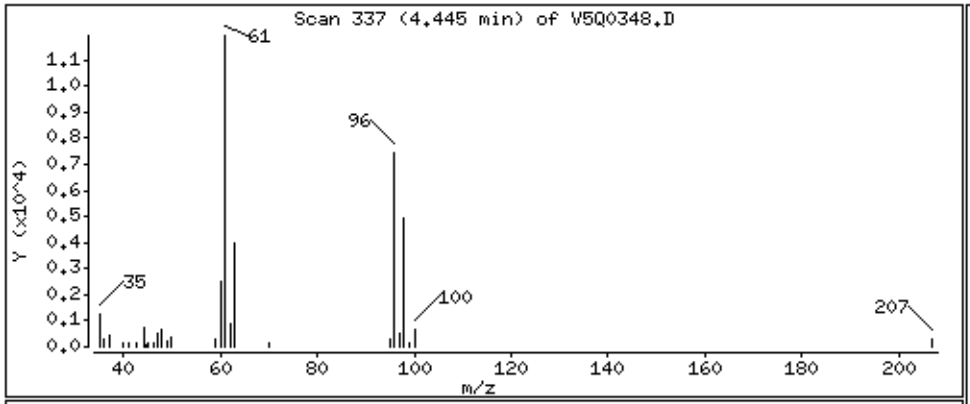
Client ID: MW-1-042115 Instrument: V5.i

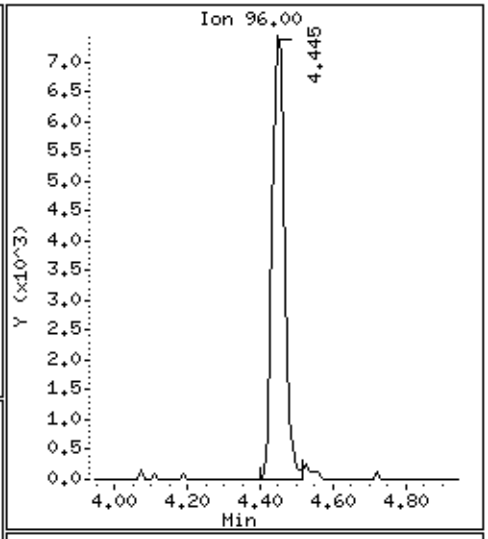
Sample Info: 5ML,P0622-02A,,81892

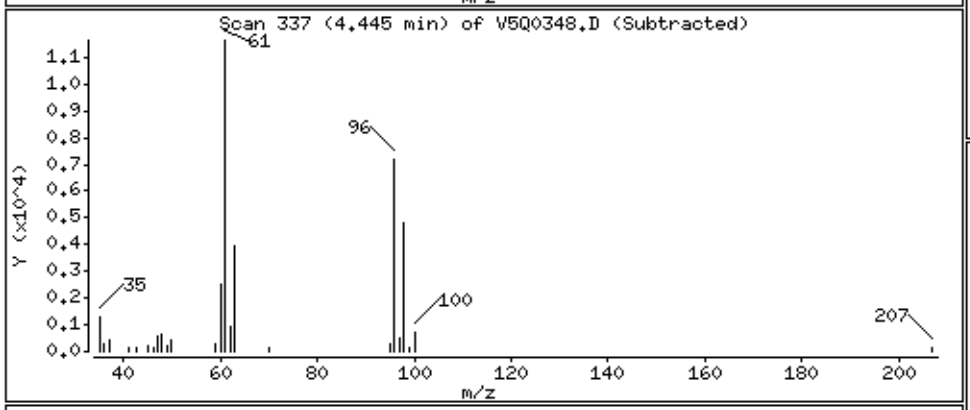
Purge Volume: 5.0 Operator: WL SRC: LIMS

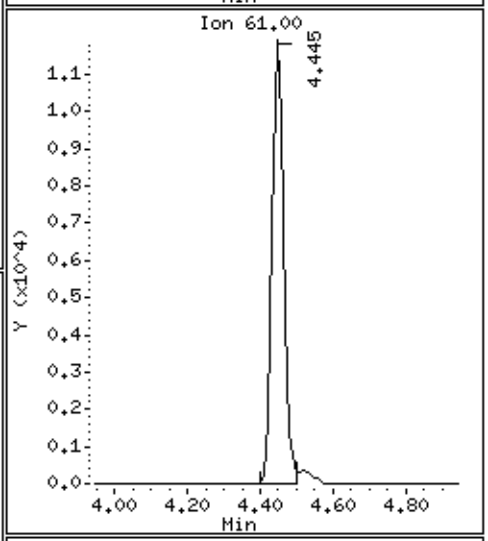
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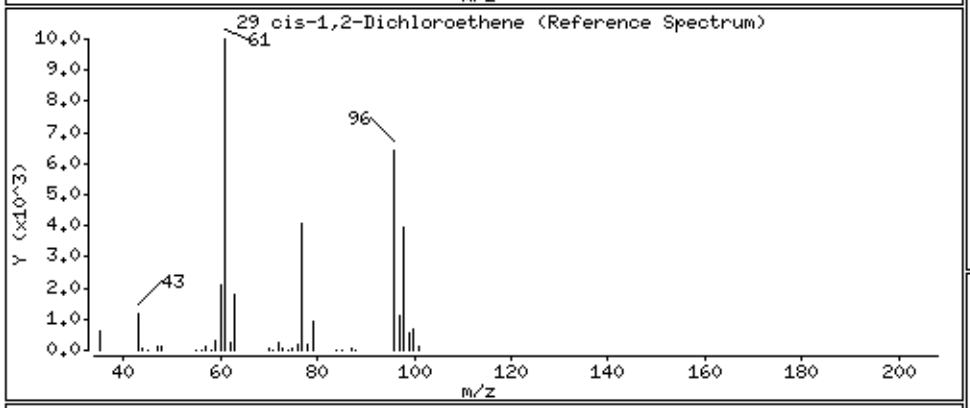
29 cis-1,2-Dichloroethene Concentration: 9 ug/L

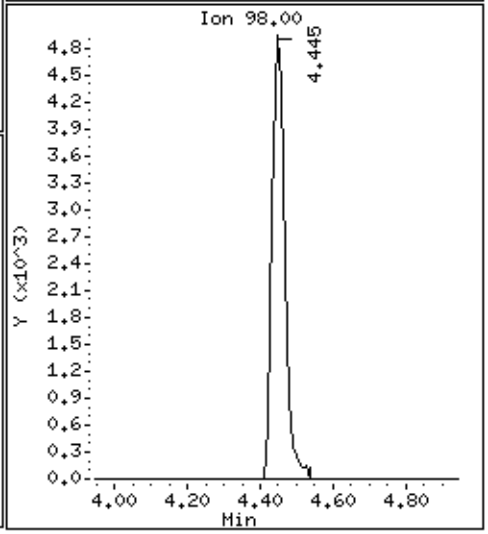


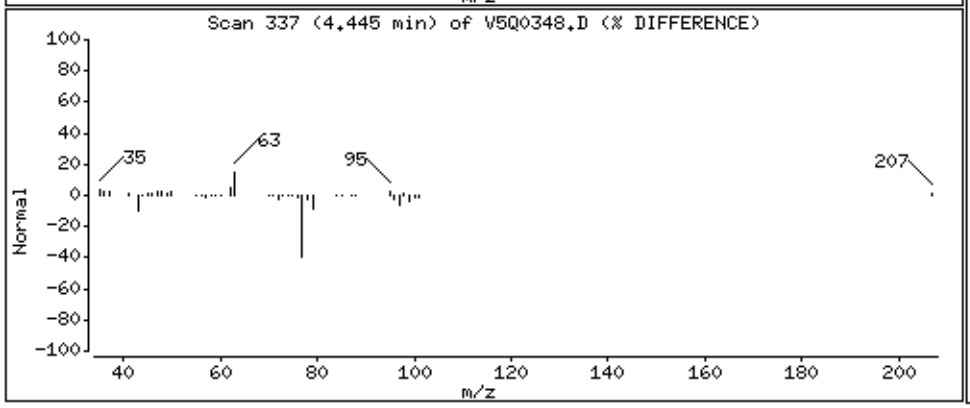












Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0348.D

Date : 24-APR-2015 18:05

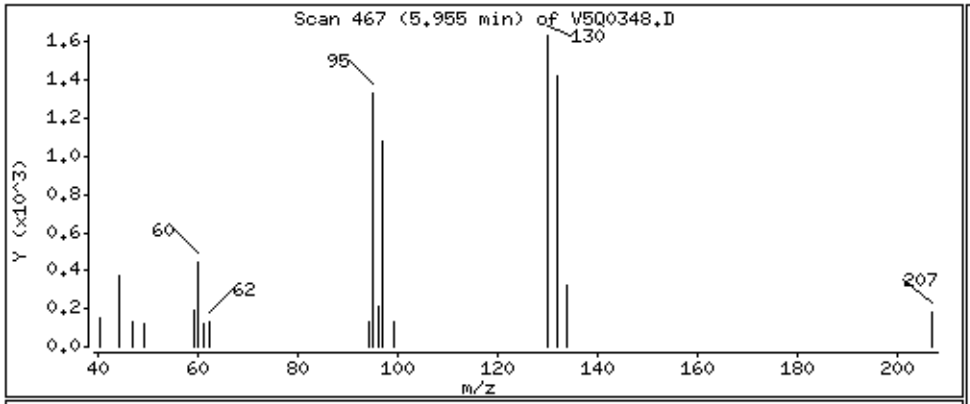
Client ID: MW-1-042115 Instrument: V5.i

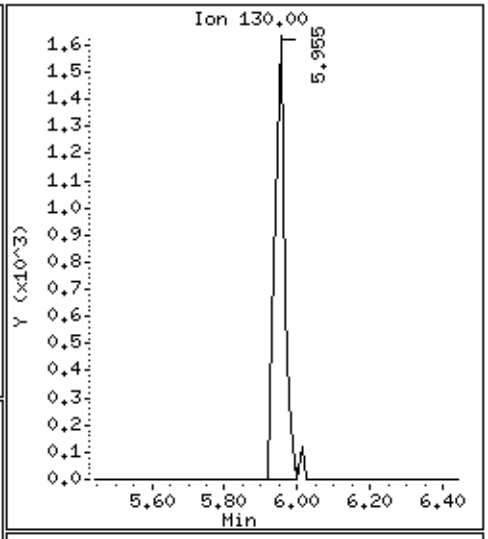
Sample Info: 5ML,P0622-02A,,81892

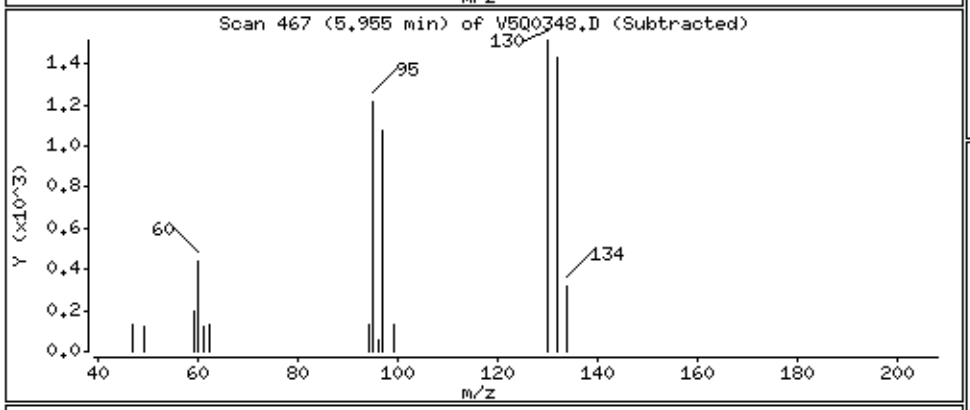
Purge Volume: 5.0 Operator: WL SRC: LIMS

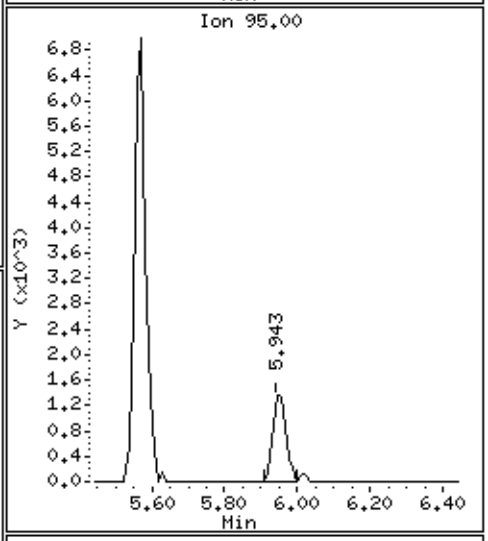
Column phase: DB-624 Column diameter: 0.25

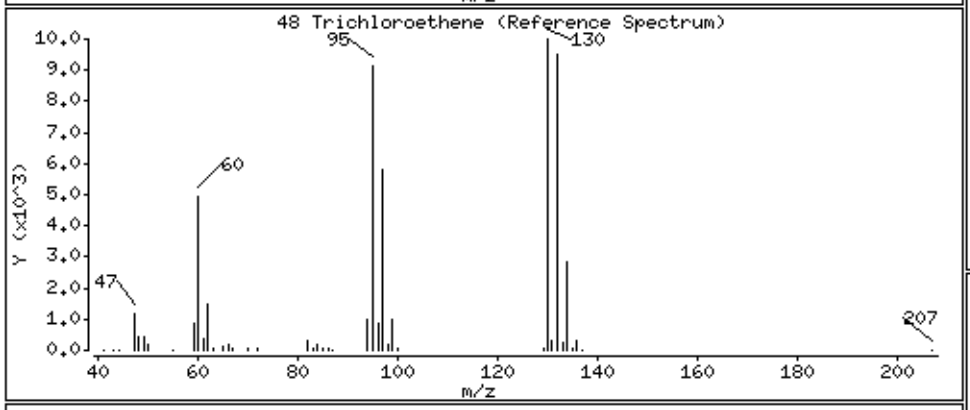
48 Trichloroethene Concentration: 2 ug/L

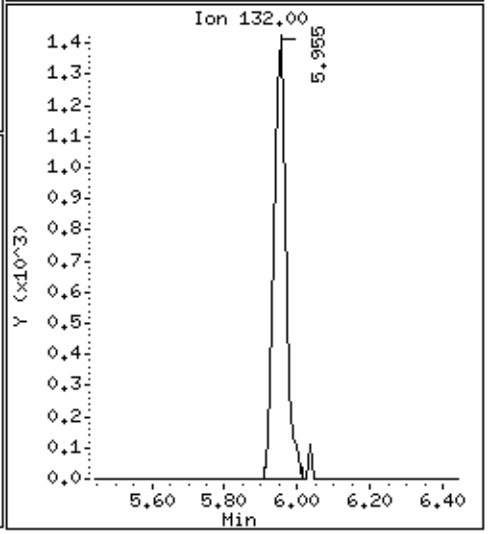


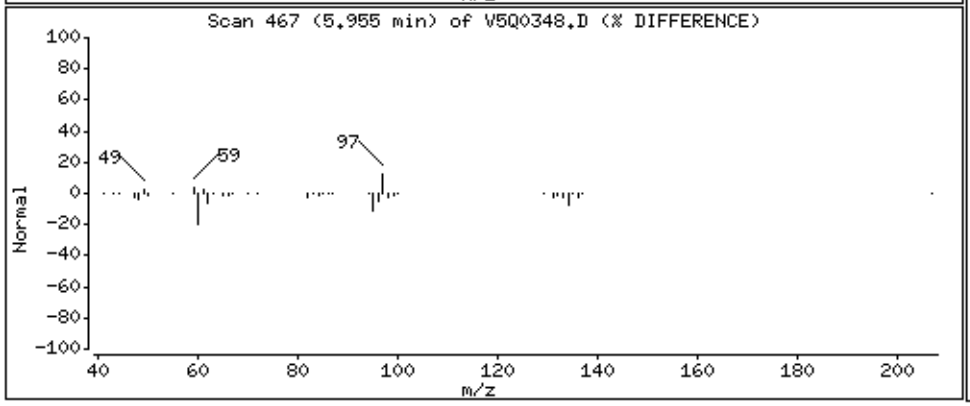












Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0348.D

Date : 24-APR-2015 18:05

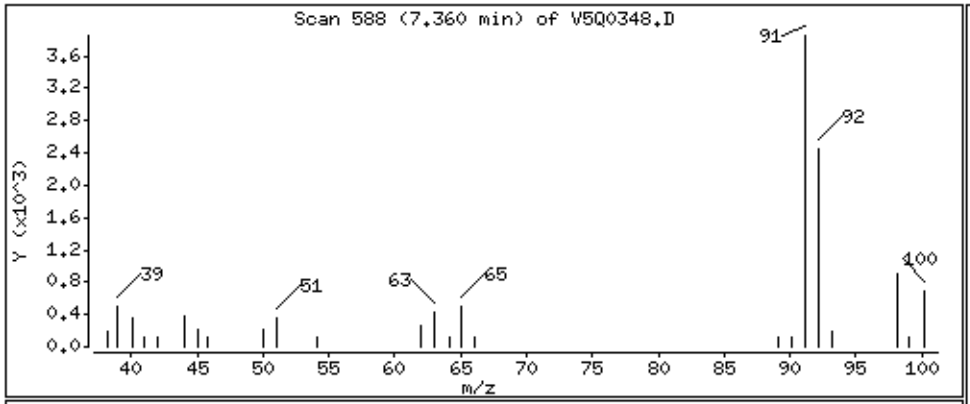
Client ID: MW-1-042115 Instrument: V5.i

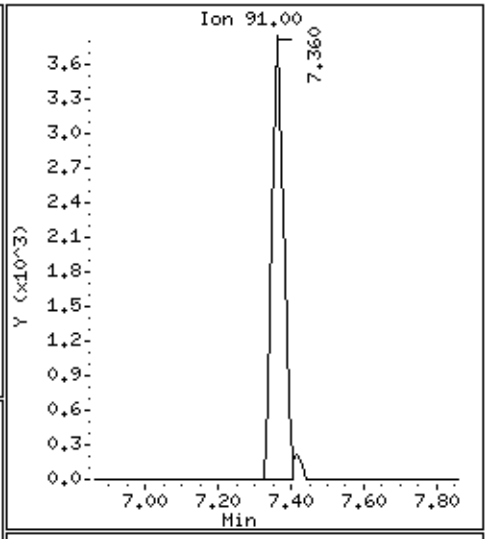
Sample Info: 5ML,P0622-02A,,81892

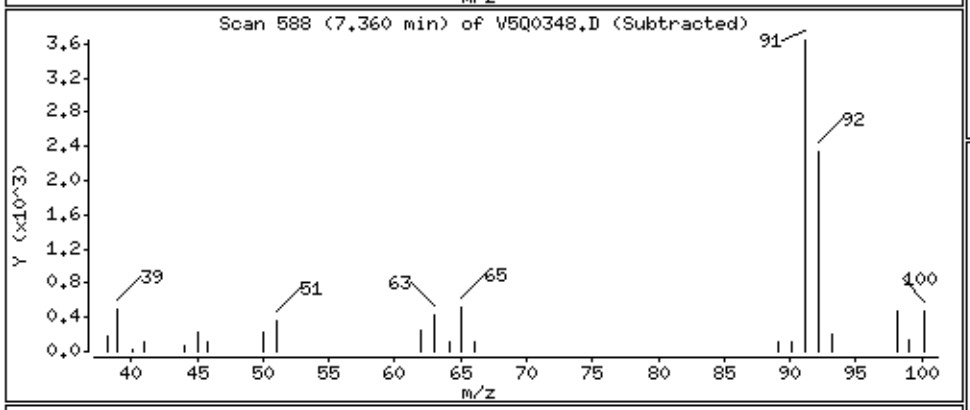
Purge Volume: 5.0 Operator: WL SRC: LIMS

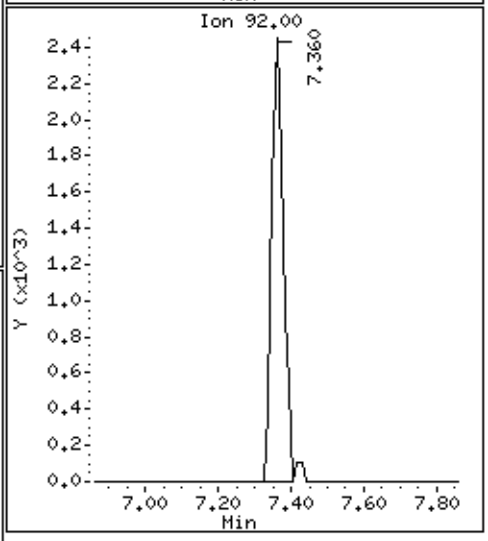
Column phase: DB-624 Column diameter: 0.25

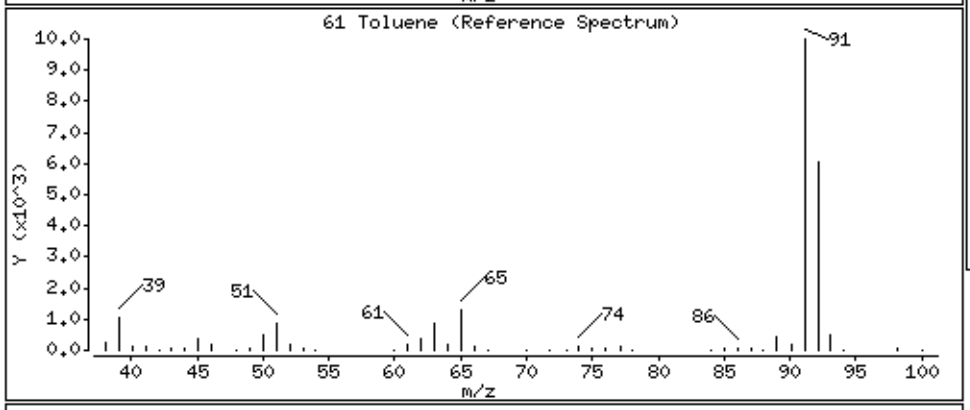
61 Toluene Concentration: 1 ug/L

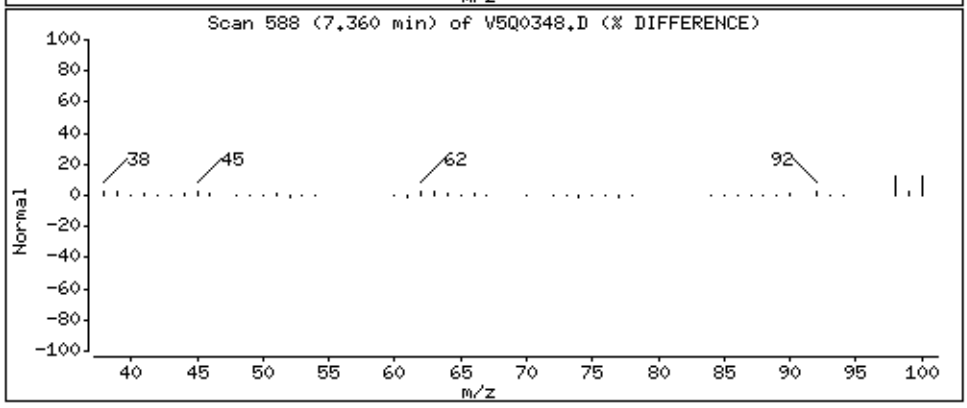












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0349.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	2.3	J
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

EPA SAMPLE NO.

MW-9-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0349.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0349.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0349.D
Lab Smp Id: P0622-03A Client Smp ID: MW-9-042115
Inj Date : 24-APR-2015 18:31
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-03A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

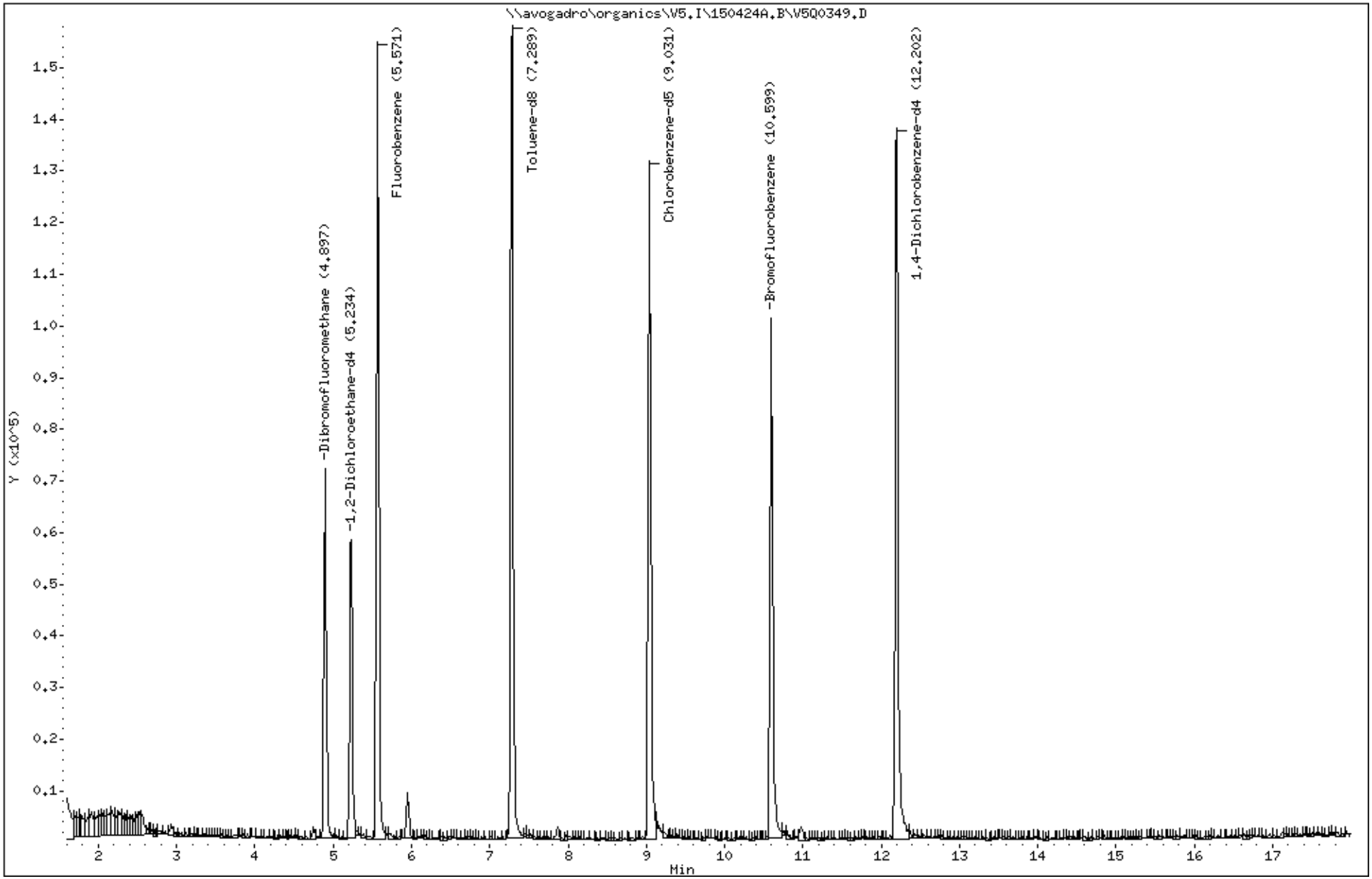
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.897	4.886	(0.879)	50386	53.4012	53
$ 43 1,2-Dichloroethane-d4	102	5.233	5.223	(0.940)	10703	49.2906	49
* 47 Fluorobenzene	96	5.570	5.560	(1.000)	157982	50.0000	
48 Trichloroethene	130	5.953	5.943	(1.069)	4070	2.28379	2
$ 60 Toluene-d8	98	7.289	7.279	(0.806)	139632	45.4938	45
* 70 Chlorobenzene-d5	117	9.042	9.032	(1.000)	117300	50.0000	
$ 81 Bromofluorobenzene	95	10.599	10.588	(1.172)	53221	49.3811	49
* 94 1,4-Dichlorobenzene-d4	152	12.201	12.191	(1.000)	58044	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0349.D
Date : 24-APR-2015 18:31
Client ID: MW-9-042115
Instrument: V5.i
Sample Info: 5ML,P0622-03A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0349.D

Date : 24-APR-2015 18:31

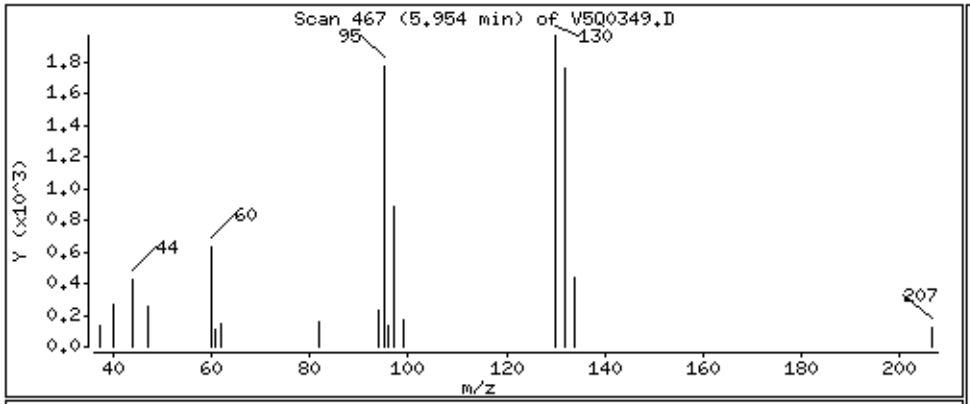
Client ID: MW-9-042115 Instrument: V5.i

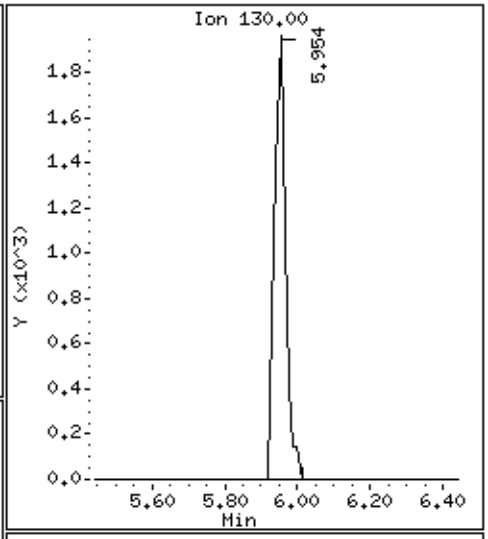
Sample Info: 5ML,P0622-03A,,81892

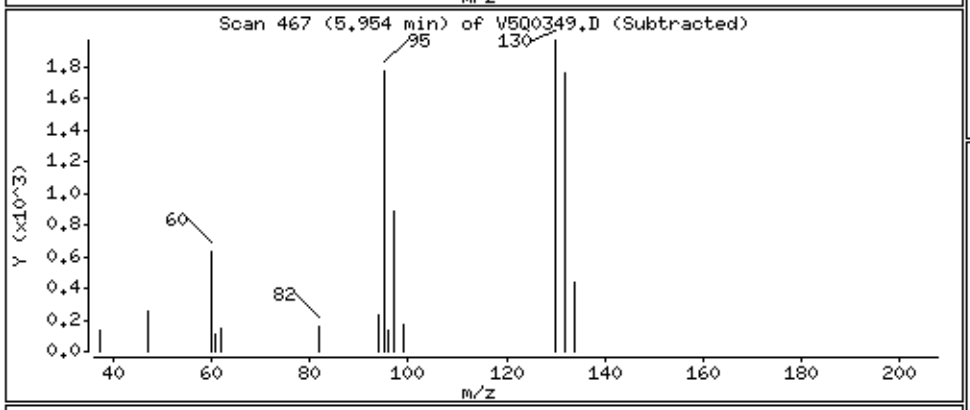
Purge Volume: 5.0 Operator: WL SRC: LIMS

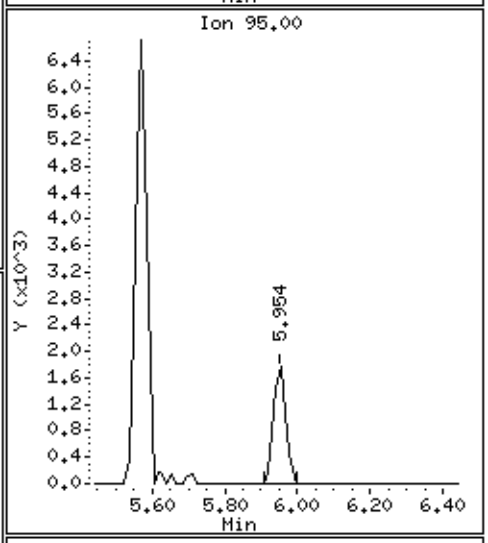
Column phase: DB-624 Column diameter: 0.25

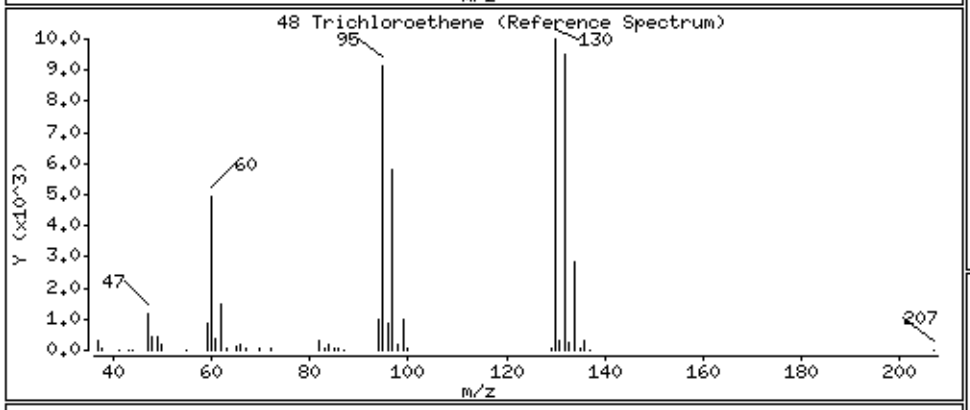
48 Trichloroethene Concentration: 2 ug/L

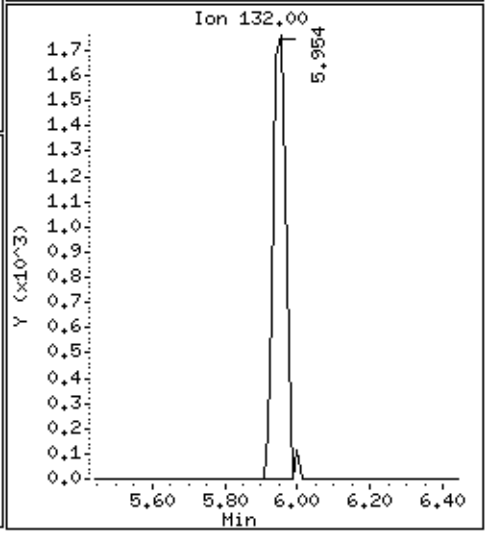


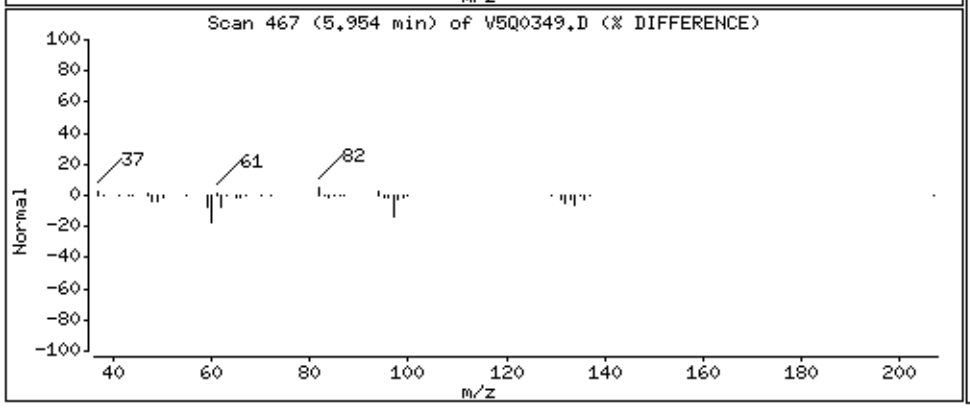












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0350.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.8	J
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

EPA SAMPLE NO.

MW-6-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0350.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0350.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0350.D
Lab Smp Id: P0622-04A Client Smp ID: MW-6-042115
Inj Date : 24-APR-2015 18:56
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-04A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

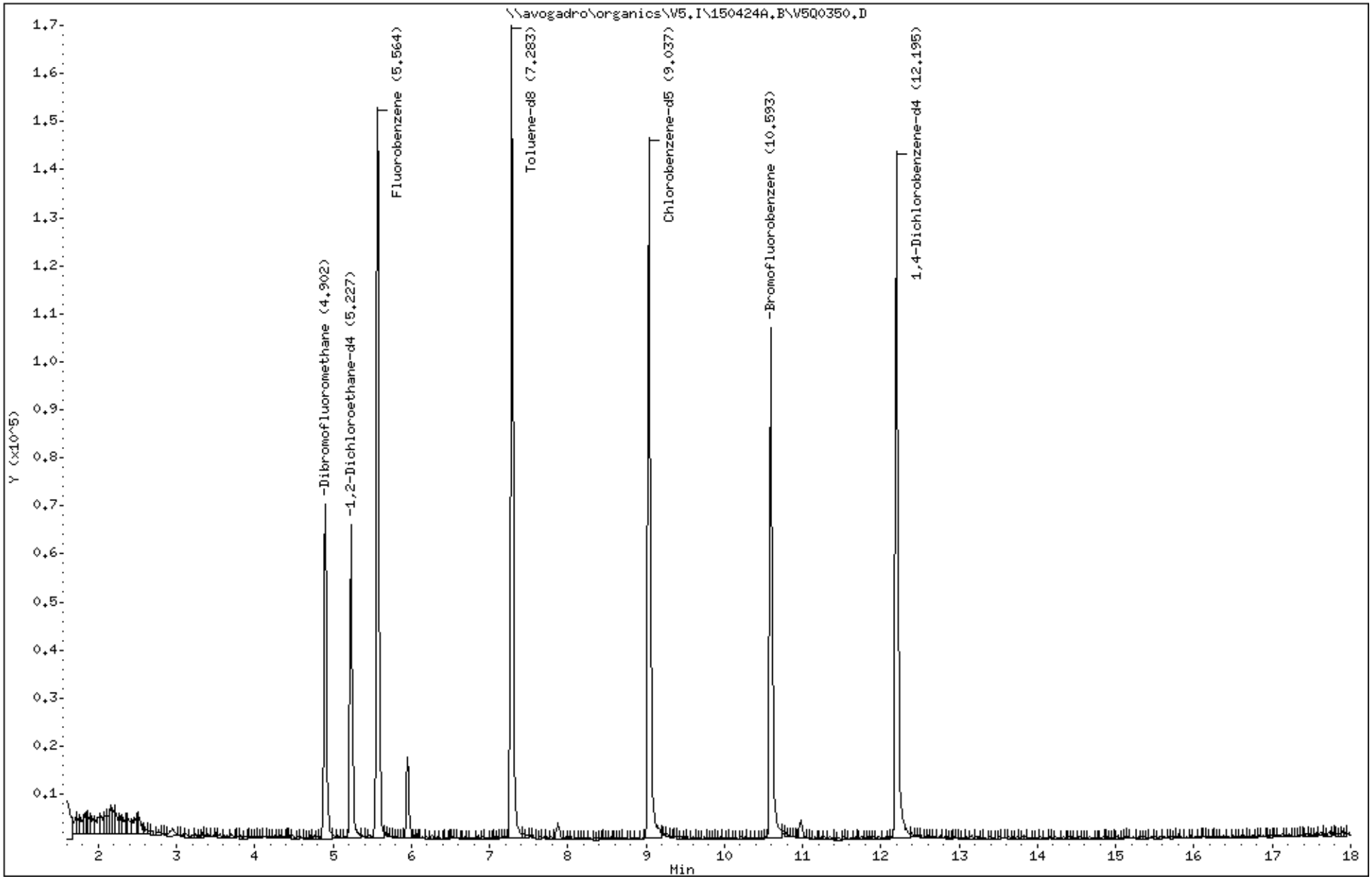
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.902	4.886	(0.881)	49816	51.5443	52
$ 43 1,2-Dichloroethane-d4	102	5.227	5.223	(0.939)	11003	49.4698	49
* 47 Fluorobenzene	96	5.564	5.560	(1.000)	161822	50.0000	
48 Trichloroethene	130	5.947	5.943	(1.069)	6912	3.78648	4
$ 60 Toluene-d8	98	7.282	7.279	(0.806)	140222	45.3577	45
* 70 Chlorobenzene-d5	117	9.036	9.032	(1.000)	118149	50.0000	
$ 81 Bromofluorobenzene	95	10.592	10.588	(1.172)	55427	51.0584	51
* 94 1,4-Dichlorobenzene-d4	152	12.195	12.191	(1.000)	55859	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0350.D
Date : 24-APR-2015 18:56
Client ID: MW-6-042115
Instrument: V5.i
Sample Info: 5ML,P0622-04A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0350.D

Date : 24-APR-2015 18:56

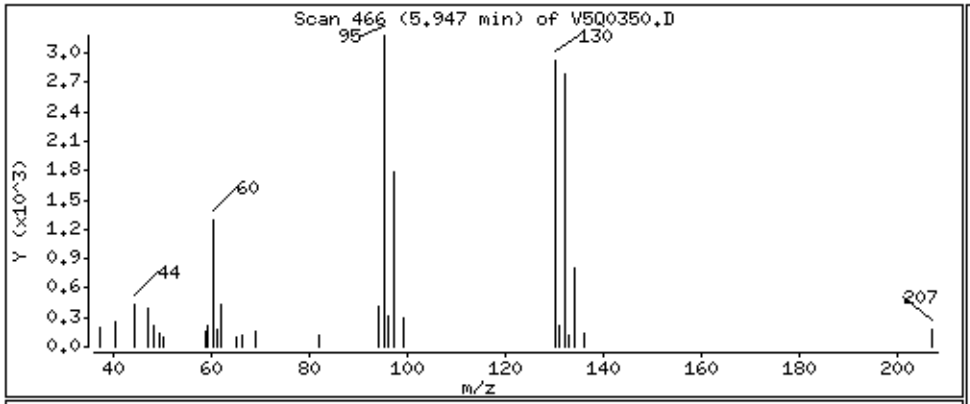
Client ID: MW-6-042115 Instrument: V5.i

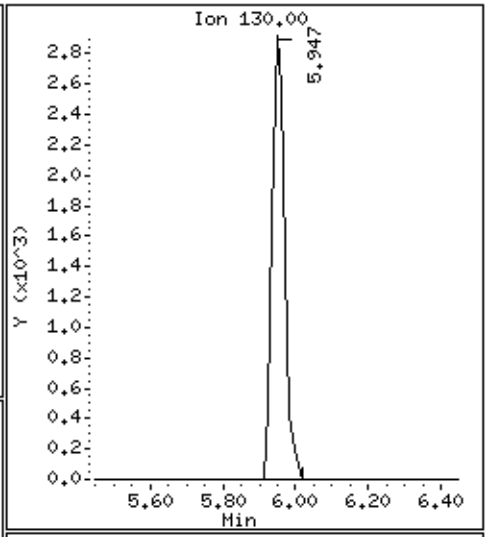
Sample Info: 5ML,P0622-04A,,81892

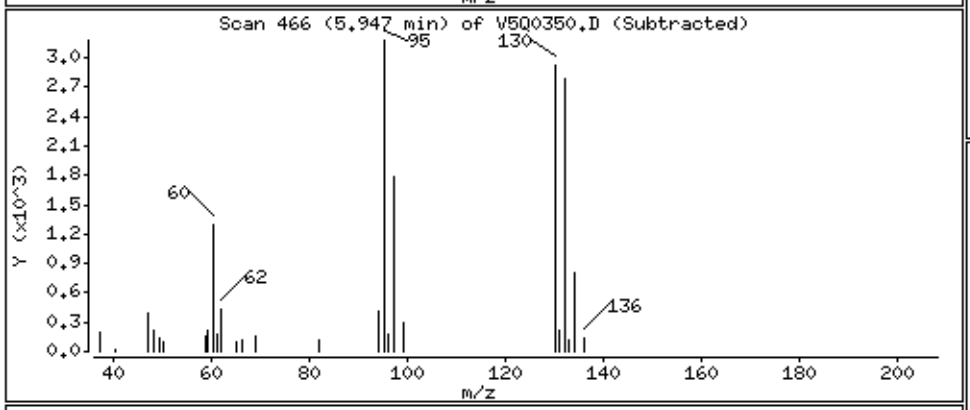
Purge Volume: 5.0 Operator: WL SRC: LIMS

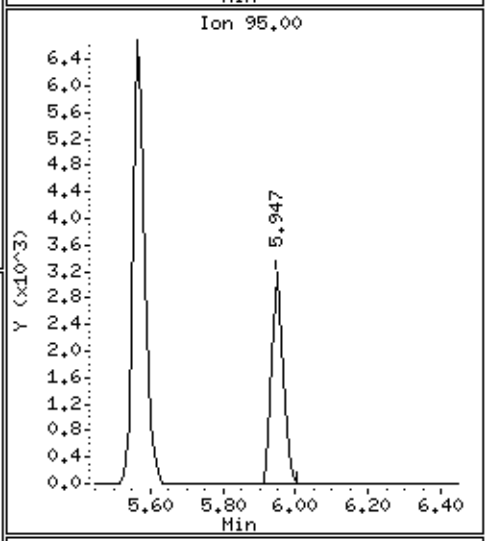
Column phase: DB-624 Column diameter: 0.25

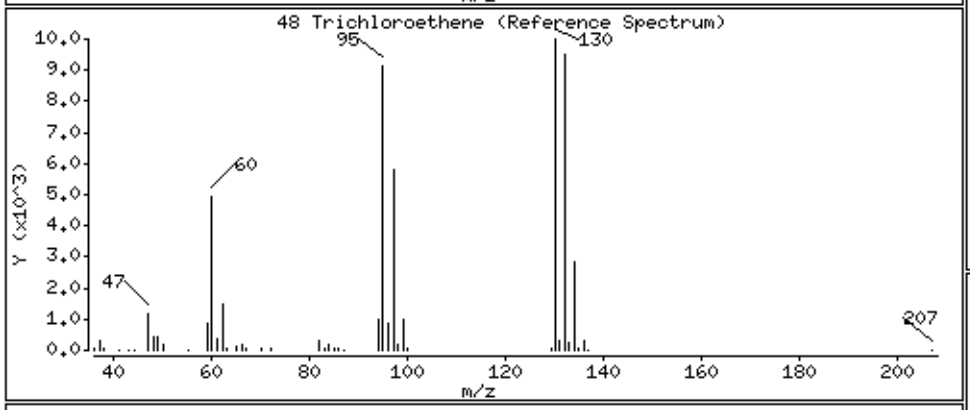
48 Trichloroethene Concentration: 4 ug/L

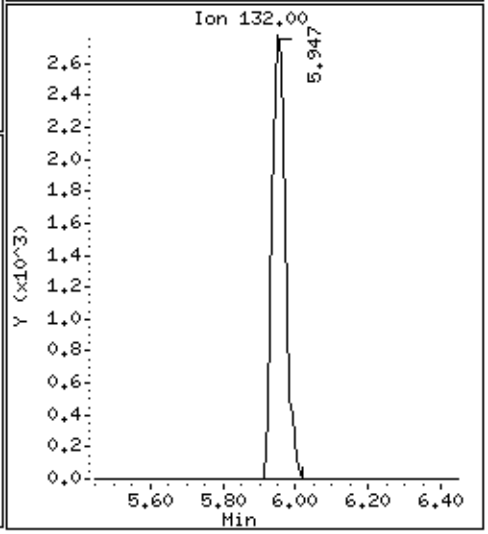


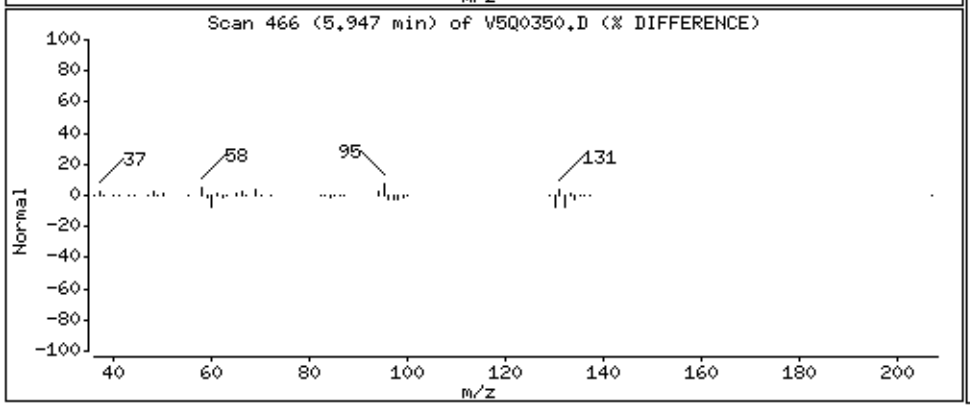












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0351.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

EPA SAMPLE NO.

MW-3R-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0351.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0351.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0351.D
Lab Smp Id: P0622-05A Client Smp ID: MW-3R-042115
Inj Date : 24-APR-2015 19:21
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-05A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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

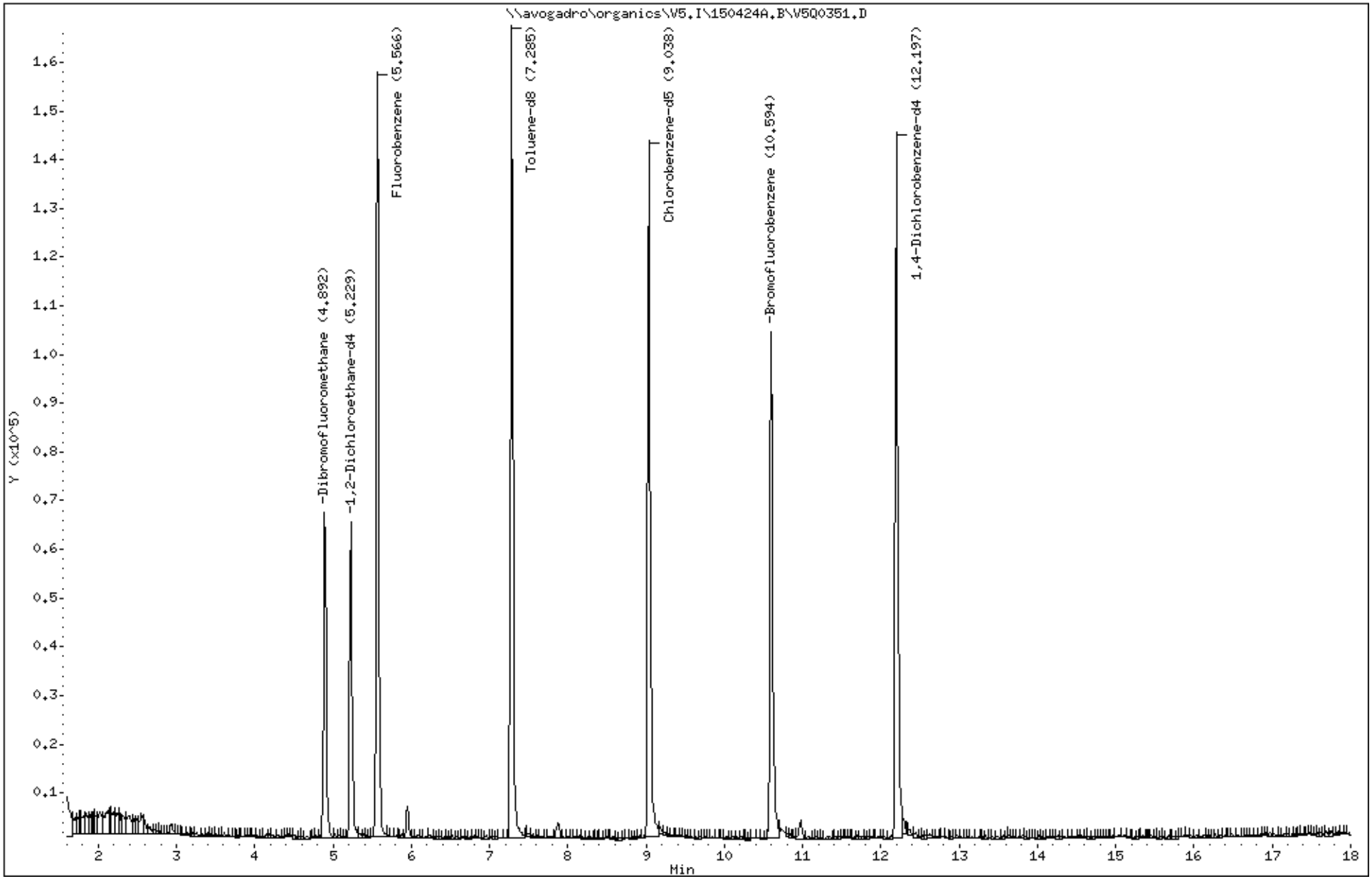
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.892	4.886	(0.879)	48874	50.8088	51
$ 43 1,2-Dichloroethane-d4	102	5.229	5.223	(0.939)	11390	51.4520	51
* 47 Fluorobenzene	96	5.565	5.560	(1.000)	161060	50.0000	
48 Trichloroethene	130	5.949	5.943	(1.069)	2673	1.47123	1
$ 60 Toluene-d8	98	7.284	7.279	(0.806)	134441	42.9343	43
* 70 Chlorobenzene-d5	117	9.038	9.032	(1.000)	119672	50.0000	
$ 81 Bromofluorobenzene	95	10.594	10.588	(1.172)	53138	48.3268	48
* 94 1,4-Dichlorobenzene-d4	152	12.196	12.191	(1.000)	57070	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0351.D
Date : 24-APR-2015 19:21
Client ID: MW-3R-042115
Instrument: V5.i
Sample Info: 5ML,P0622-05A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0351.D

Date : 24-APR-2015 19:21

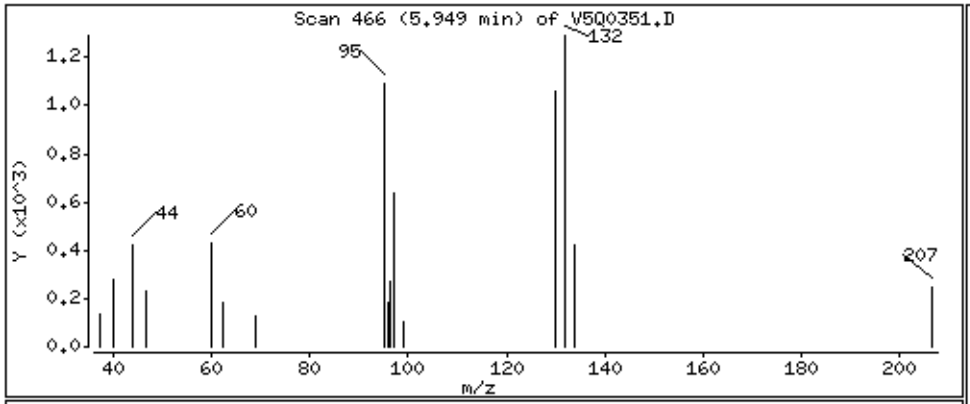
Client ID: MW-3R-042115 Instrument: V5.i

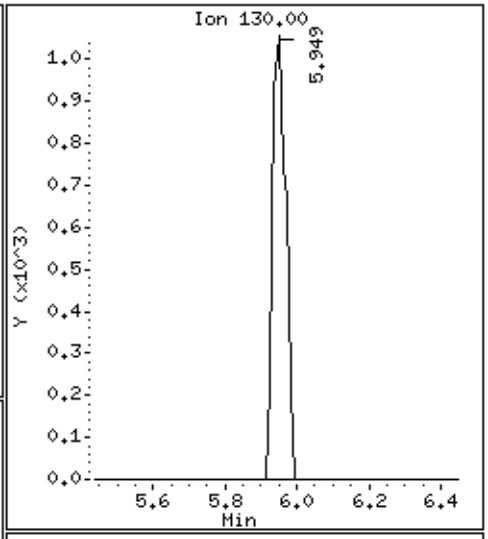
Sample Info: 5ML,P0622-05A,,81892

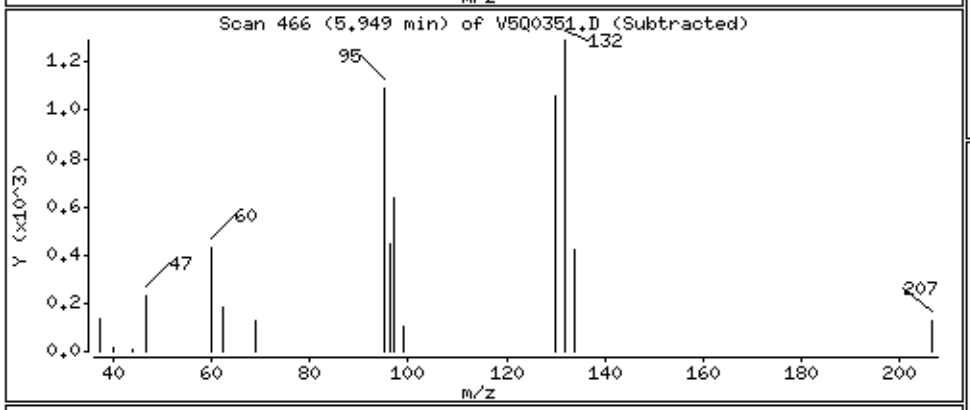
Purge Volume: 5.0 Operator: WL SRC: LIMS

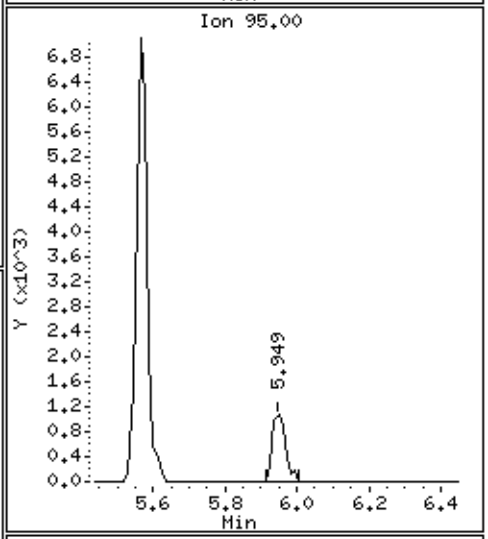
Column phase: DB-624 Column diameter: 0.25

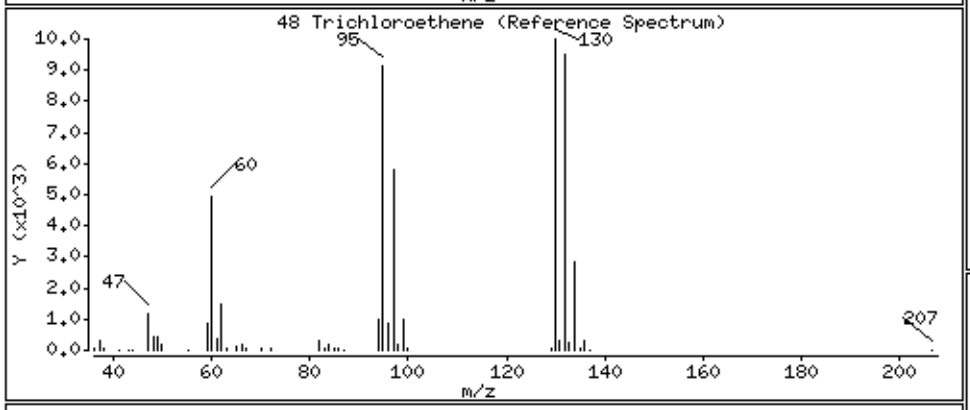
48 Trichloroethene Concentration: 1 ug/L

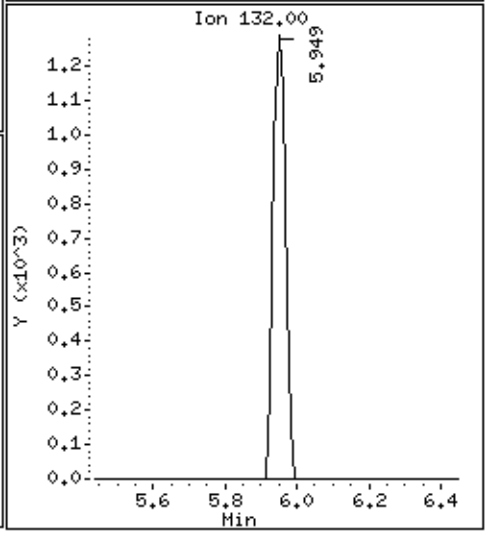


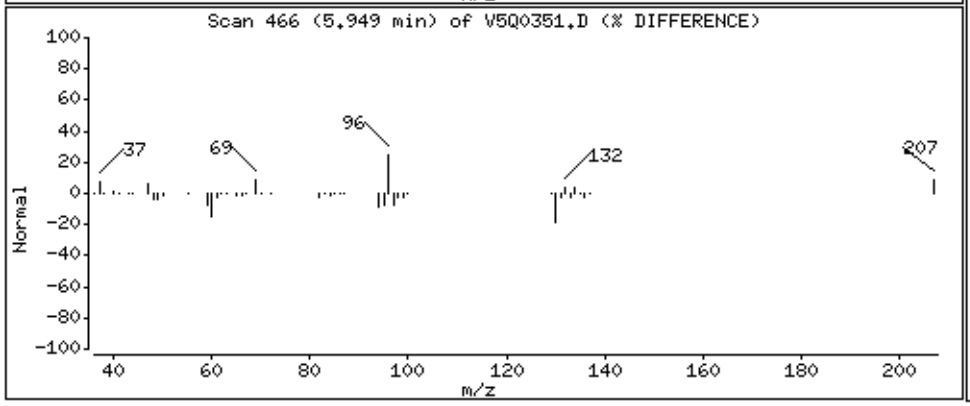












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0352.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.1	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.1	J
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	1.3	J
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

EPA SAMPLE NO.

MW-8-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0352.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0352.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0352.D
Lab Smp Id: P0622-06A Client Smp ID: MW-8-042115
Inj Date : 24-APR-2015 19:47
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-06A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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/Vo * CpndVariable

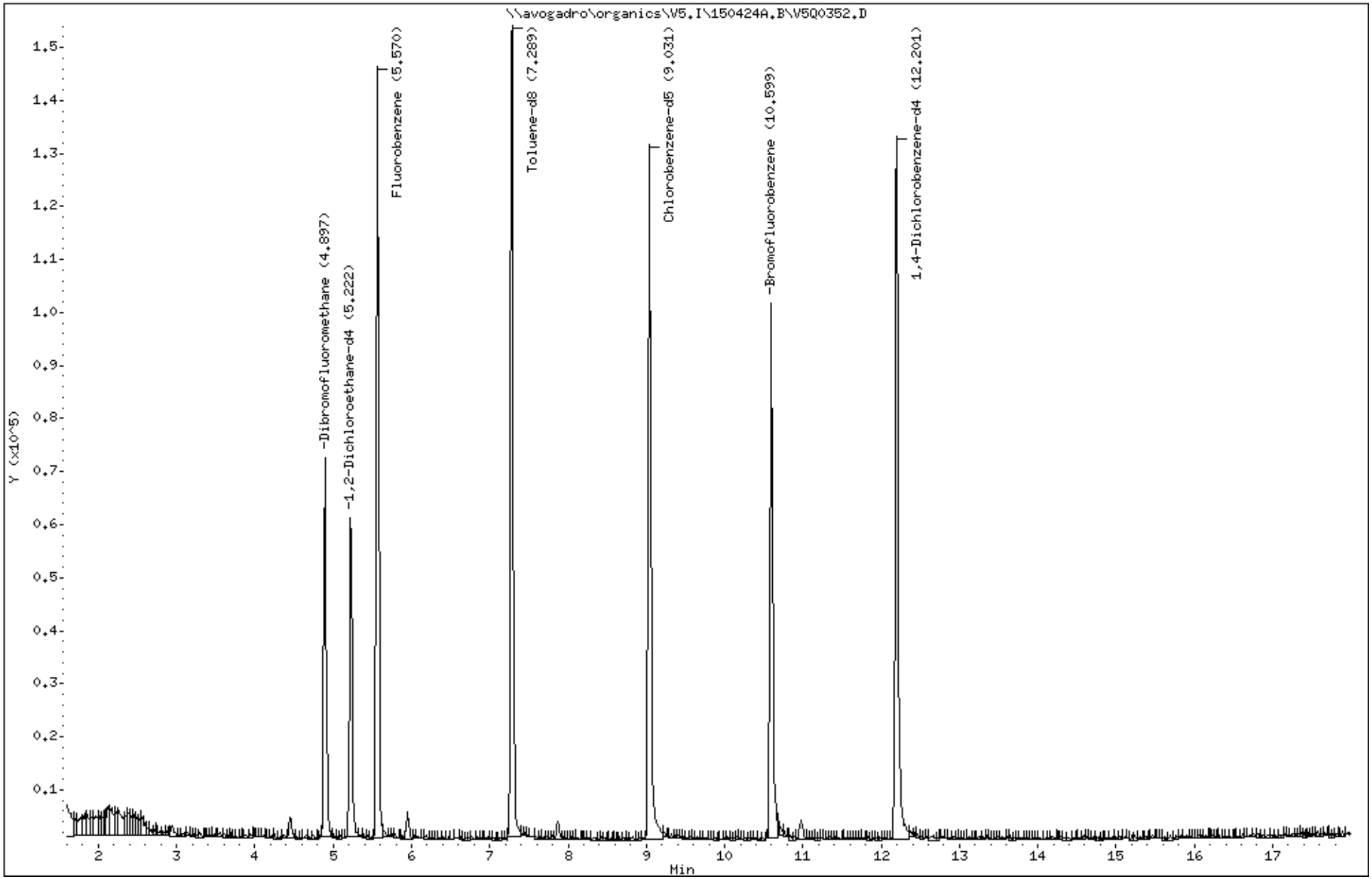
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	29 cis-1,2-Dichloroethene	96	4.455	4.445	(0.800)	2225	1.13682	1	
$	37 Dibromofluoromethane	113	4.896	4.886	(0.879)	49557	53.3287	53	
	38 1,1,1-Trichloroethane	97	4.931	4.933	(0.885)	2252	1.06002	1	
$	43 1,2-Dichloroethane-d4	102	5.221	5.223	(0.937)	9818	45.9089	46	
*	47 Fluorobenzene	96	5.570	5.560	(1.000)	155594	50.0000		
	48 Trichloroethene	130	5.953	5.943	(1.069)	2260	1.28761	1	
M	56 1,2-Dichloroethene (Total)	96				2225	1.13682	1	
$	60 Toluene-d8	98	7.289	7.279	(0.806)	136220	46.3161	46	
*	70 Chlorobenzene-d5	117	9.042	9.032	(1.000)	112402	50.0000		
$	81 Bromofluorobenzene	95	10.598	10.588	(1.172)	50873	49.2594	49	
*	94 1,4-Dichlorobenzene-d4	152	12.201	12.191	(1.000)	57313	50.0000		(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0352.D
Date : 24-APR-2015 19:47
Client ID: MW-8-042115
Instrument: V5.i
Sample Info: 5ML,P0622-06A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0352.D

Date : 24-APR-2015 19:47

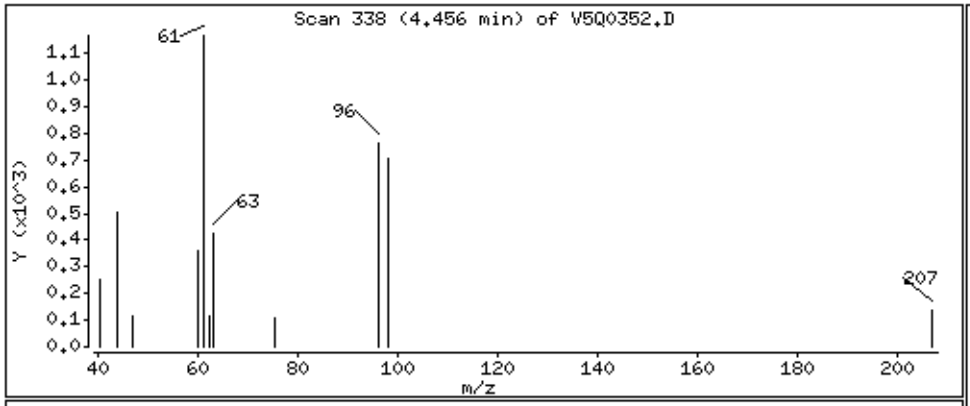
Client ID: MW-8-042115 Instrument: V5.i

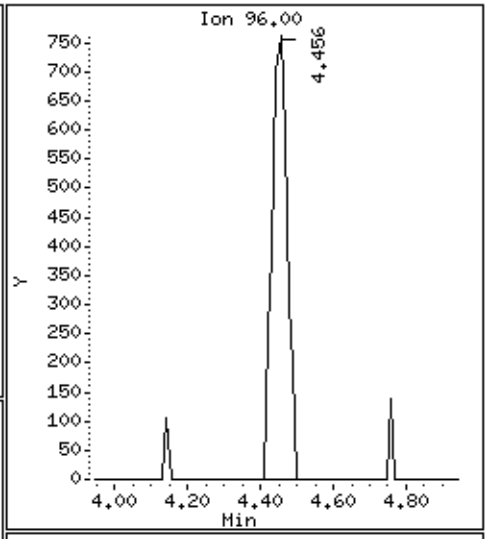
Sample Info: 5ML,P0622-06A,,81892

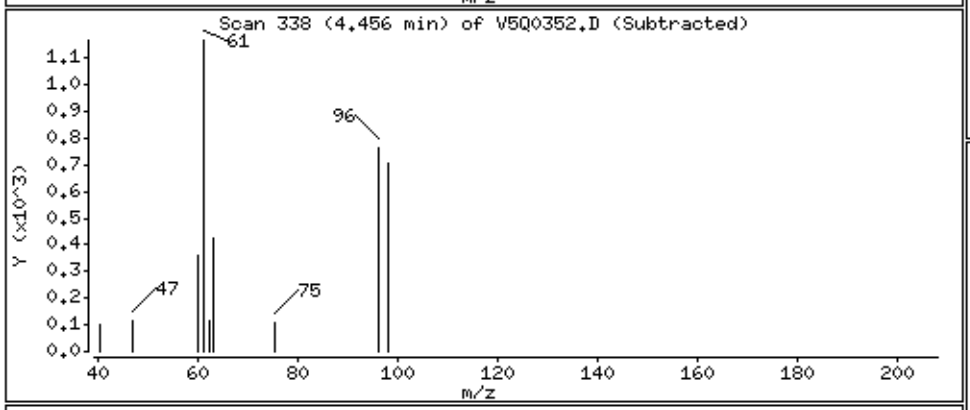
Purge Volume: 5.0 Operator: WL SRC: LIMS

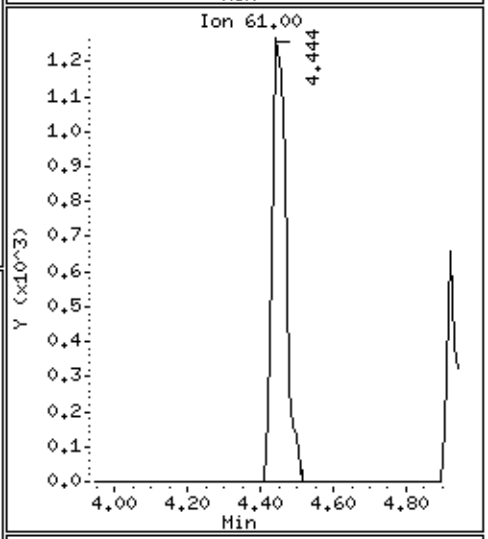
Column phase: DB-624 Column diameter: 0.25

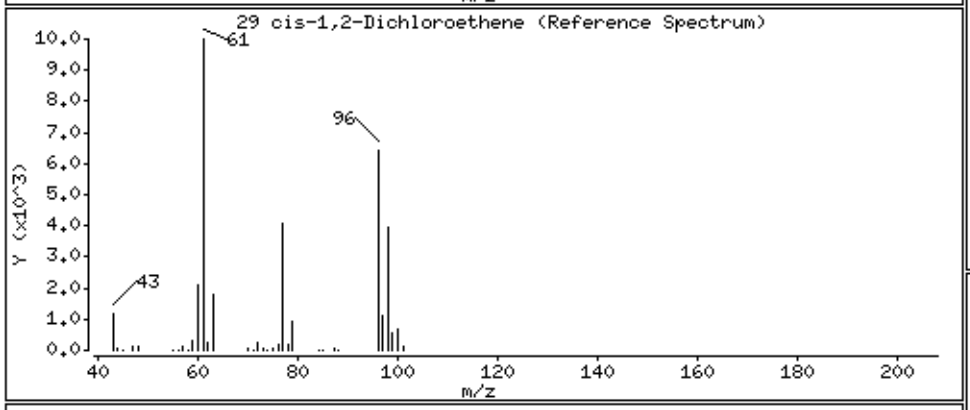
29 cis-1,2-Dichloroethene Concentration: 1 ug/L

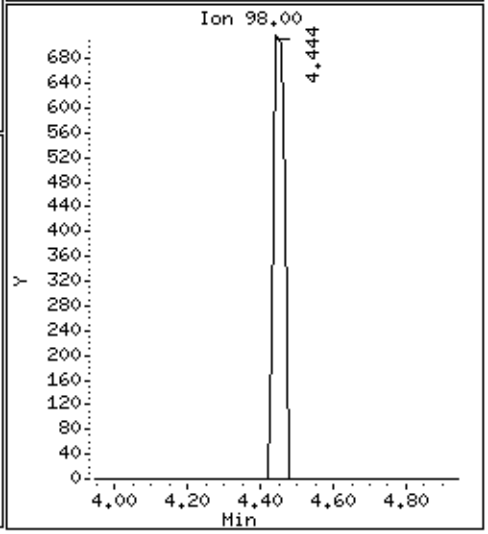


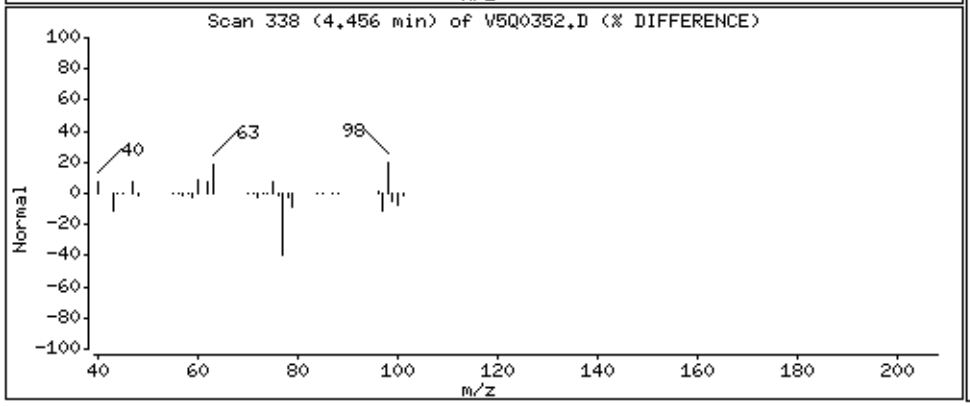












Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0352.D

Date : 24-APR-2015 19:47

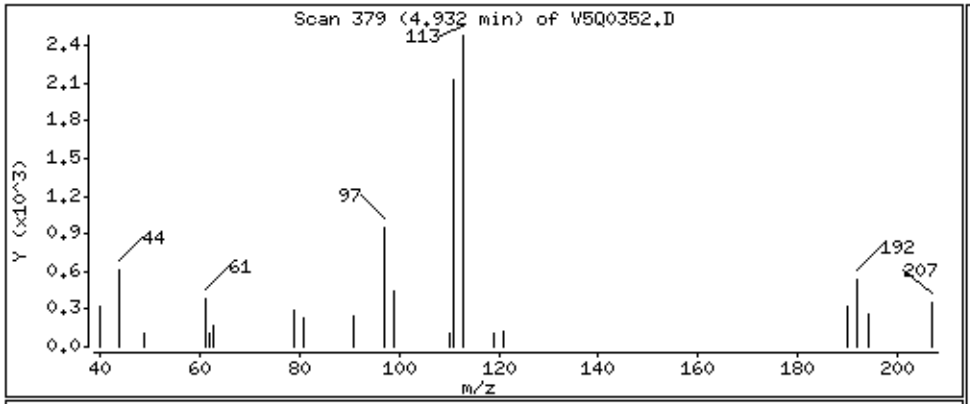
Client ID: MW-8-042115 Instrument: V5.i

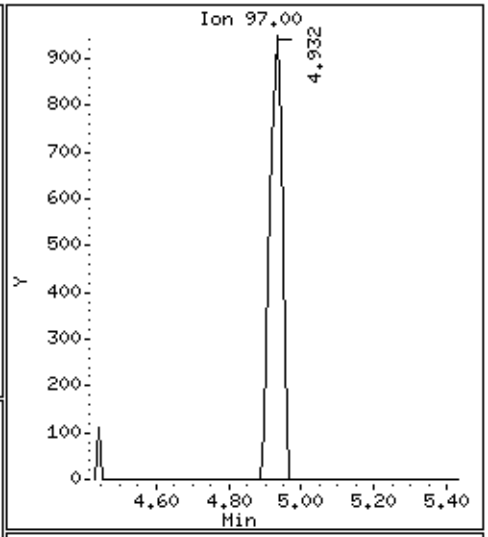
Sample Info: 5ML,P0622-06A,,81892

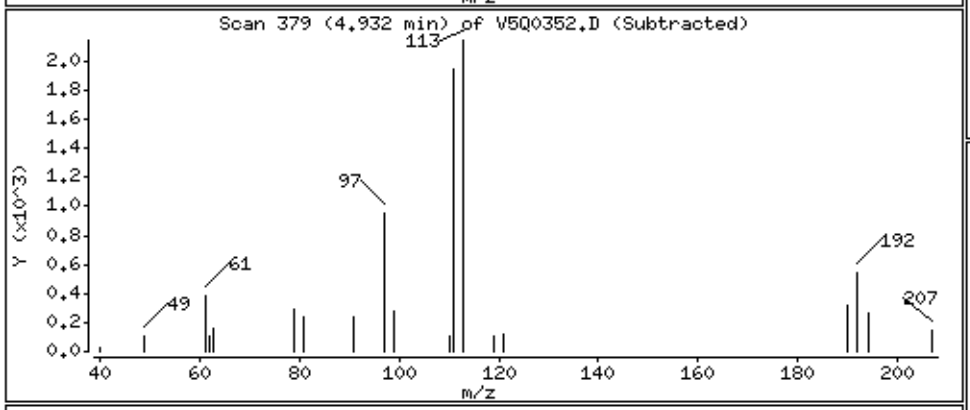
Purge Volume: 5.0 Operator: WL SRC: LIMS

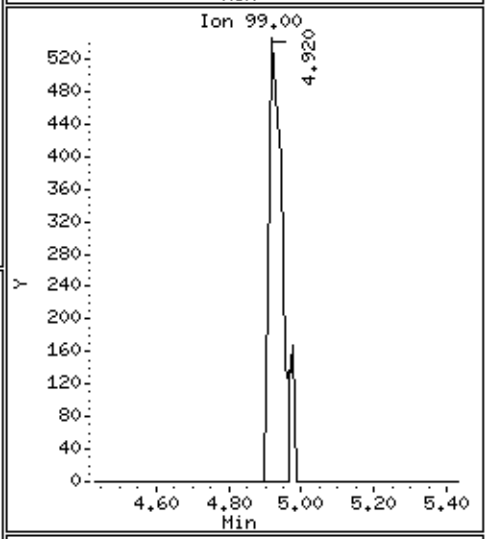
Column phase: DB-624 Column diameter: 0.25

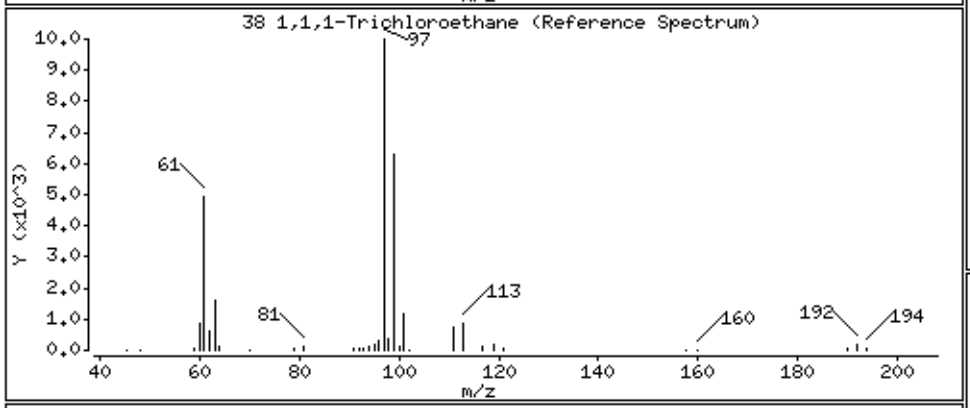
38 1,1,1-Trichloroethane Concentration: 1 ug/L

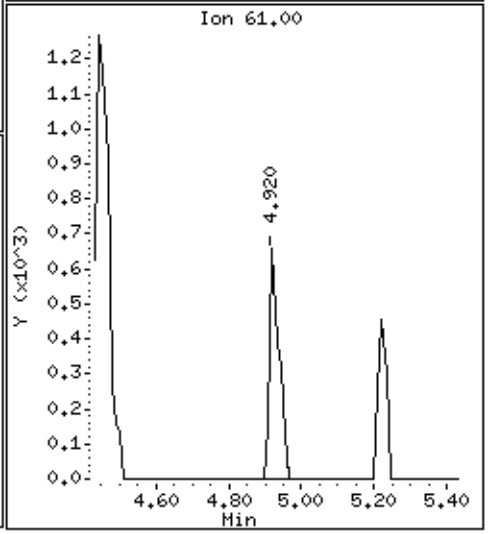


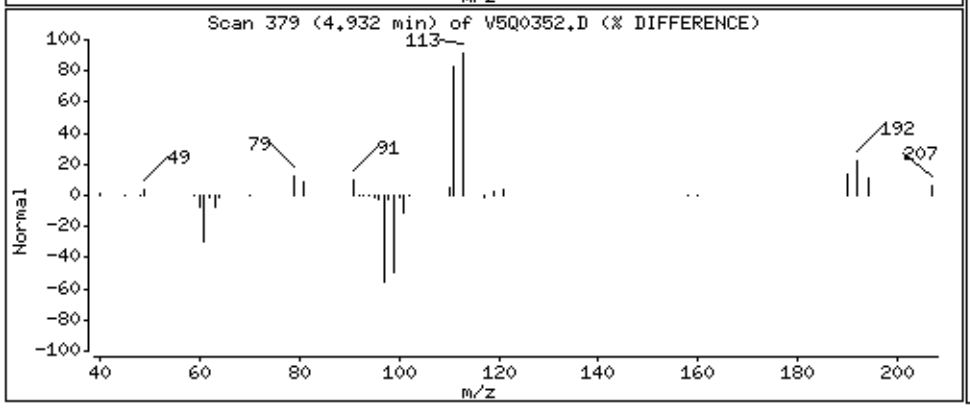












Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0352.D

Date : 24-APR-2015 19:47

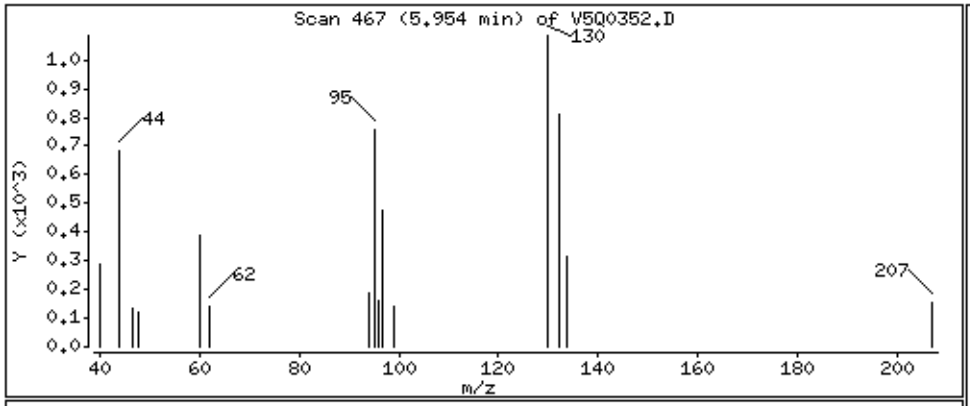
Client ID: MW-8-042115 Instrument: V5.i

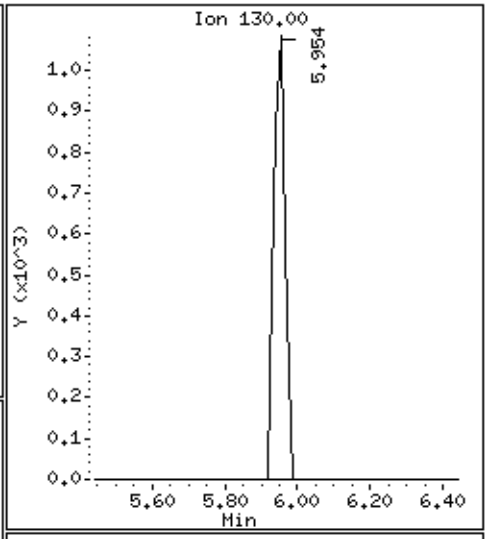
Sample Info: 5ML,P0622-06A,,81892

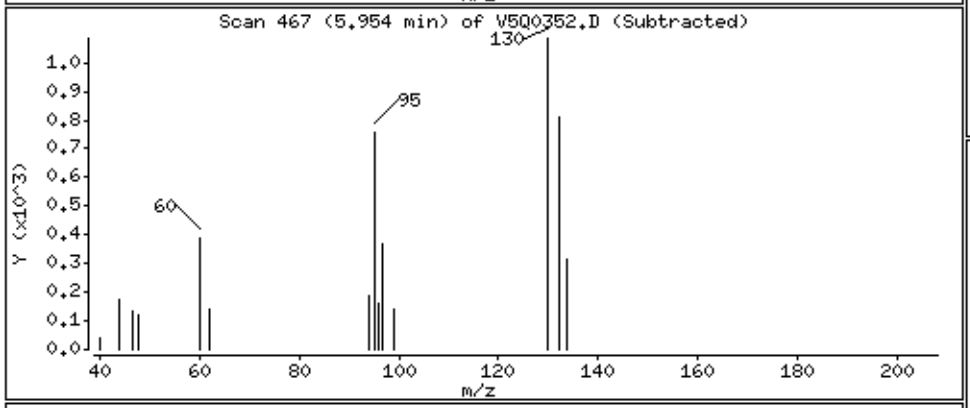
Purge Volume: 5.0 Operator: WL SRC: LIMS

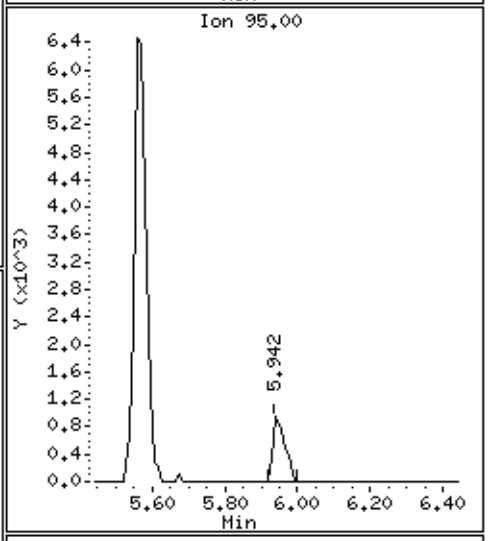
Column phase: DB-624 Column diameter: 0.25

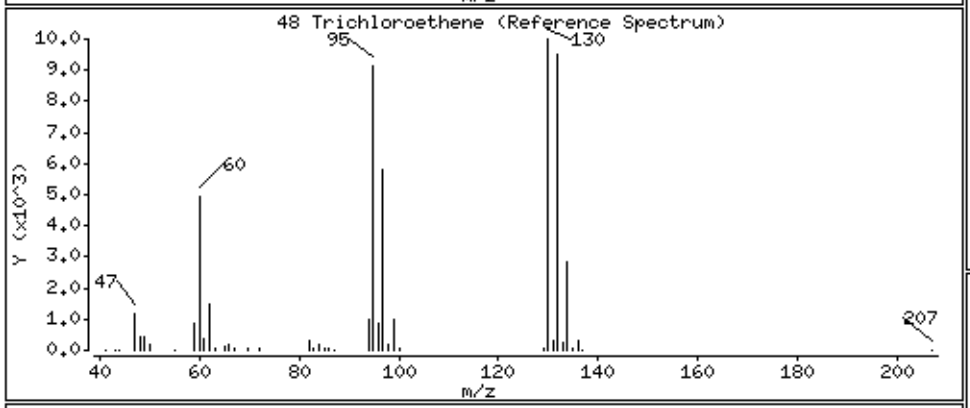
48 Trichloroethene Concentration: 1 ug/L

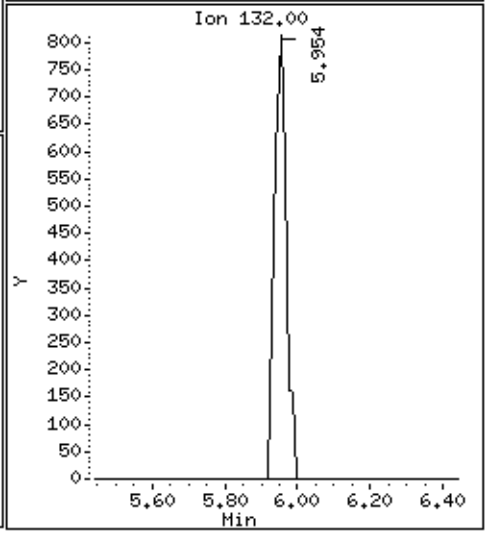


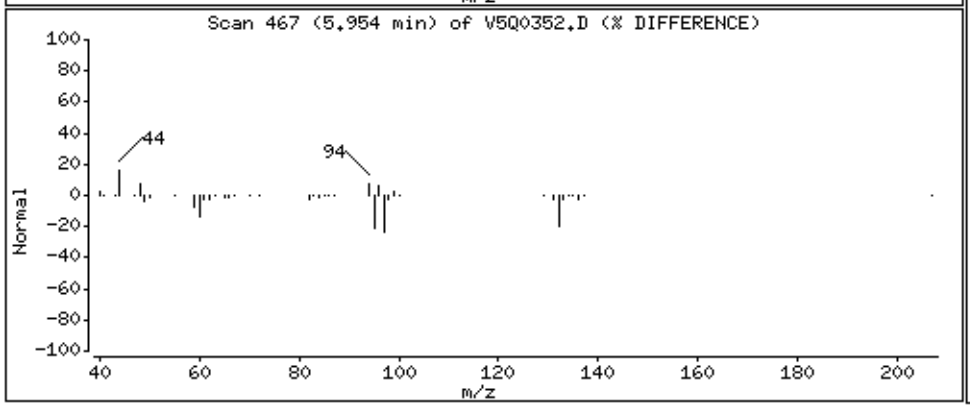












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/21/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0353.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/21/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0353.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0353.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0353.D
Lab Smp Id: P0622-07A Client Smp ID: TRIP BLANK
Inj Date : 24-APR-2015 20:12
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-07A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

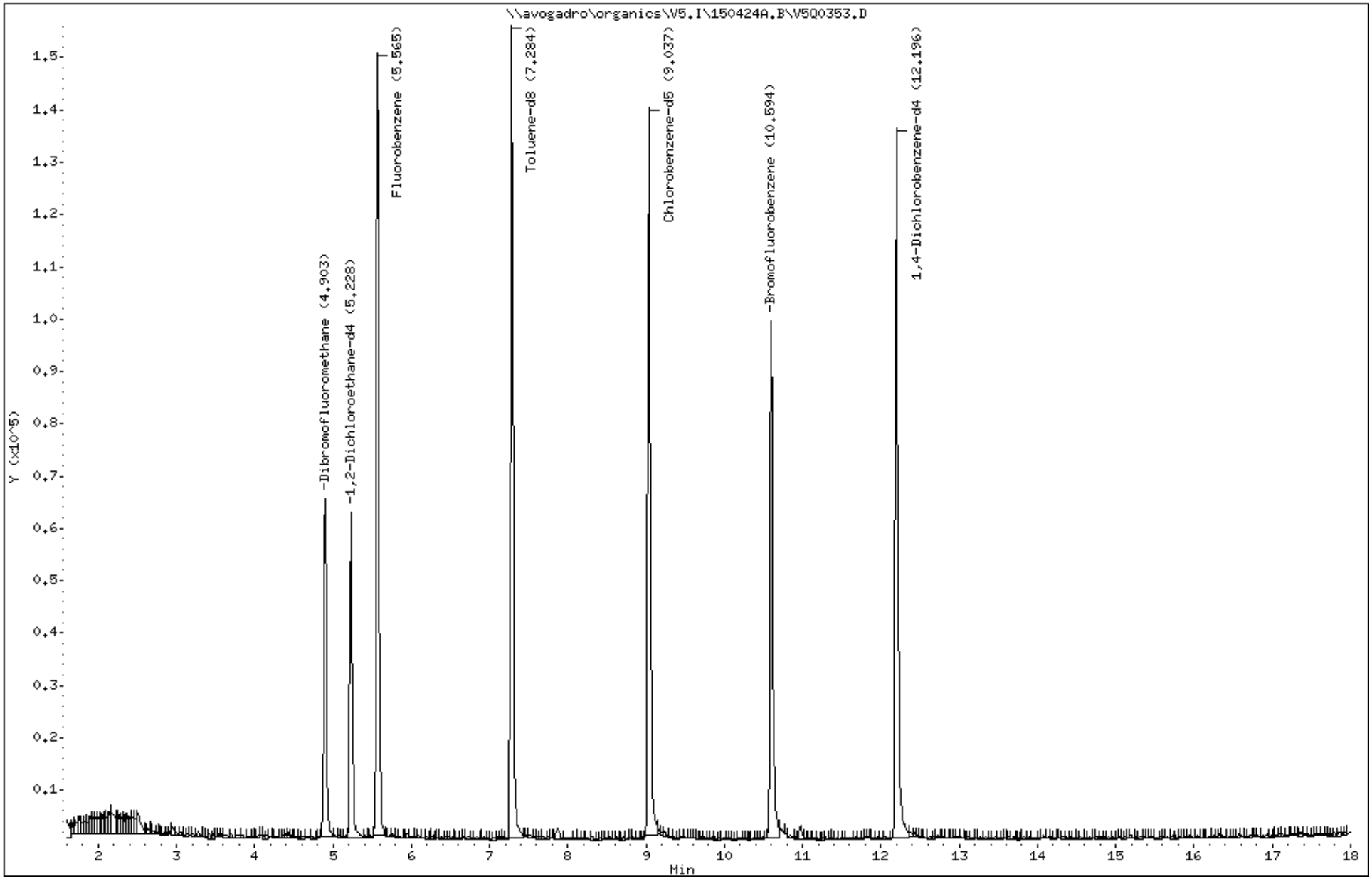
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.903	4.886	(0.881)	49210	51.9890	52
$ 43 1,2-Dichloroethane-d4	102	5.228	5.223	(0.939)	10474	48.0826	48
* 47 Fluorobenzene	96	5.565	5.560	(1.000)	158486	50.0000	
$ 60 Toluene-d8	98	7.283	7.279	(0.806)	132147	44.3718	44
* 70 Chlorobenzene-d5	117	9.037	9.032	(1.000)	113819	50.0000	
$ 81 Bromofluorobenzene	95	10.593	10.588	(1.172)	51215	48.9732	49
* 94 1,4-Dichlorobenzene-d4	152	12.196	12.191	(1.000)	52870	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0353.D
Date : 24-APR-2015 20:12
Client ID: TRIP BLANK
Instrument: V5.i
Sample Info: 5ML,P0622-07A,,81892
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.

DUP-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0354.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.8	J
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

EPA SAMPLE NO.

DUP-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0354.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0354.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0354.D
Lab Smp Id: P0622-08A Client Smp ID: DUP-1-042115
Inj Date : 24-APR-2015 20:38
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-08A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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/Vo * CpndVariable

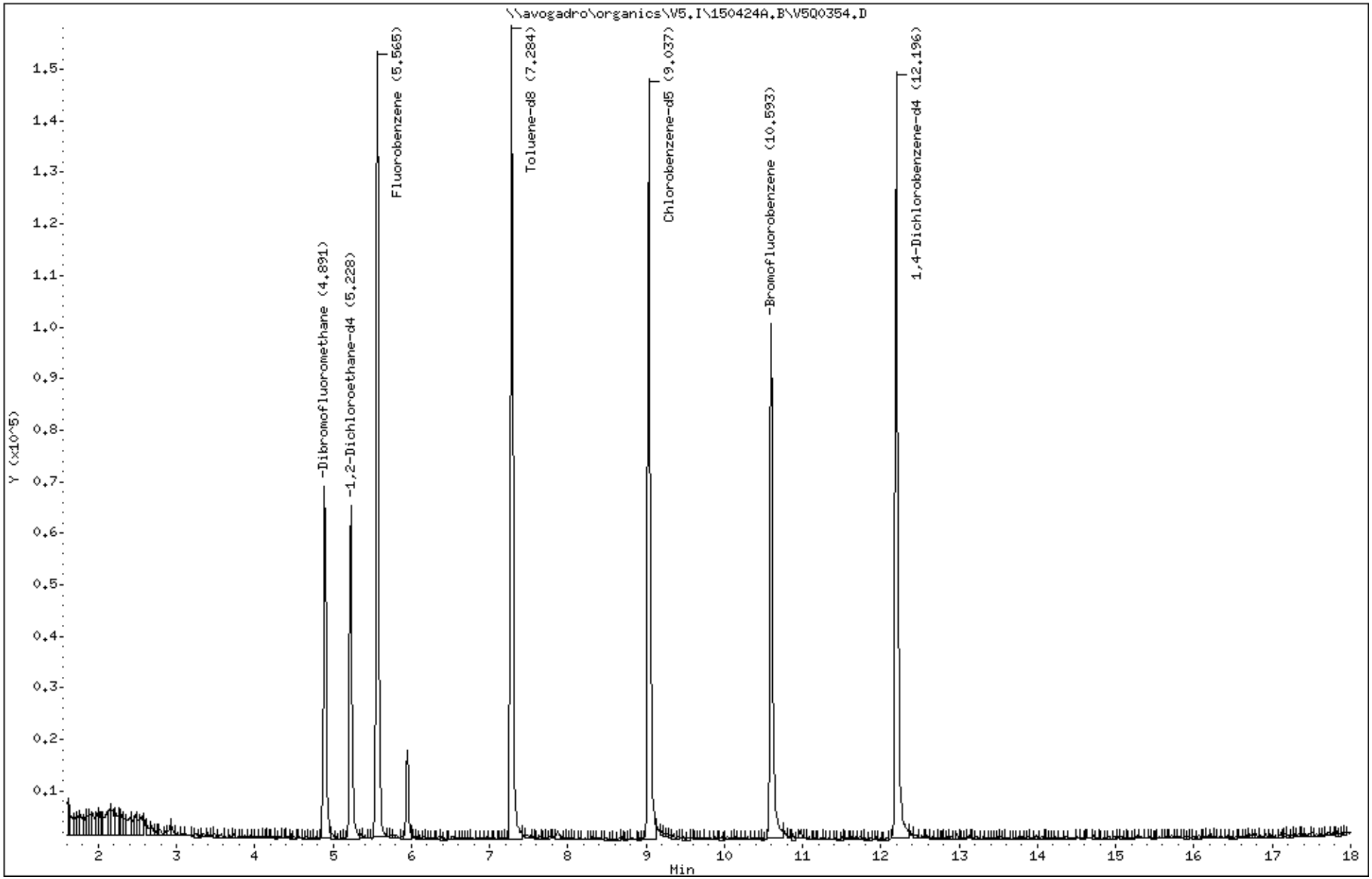
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.891	4.886	(0.879)	51059	54.1817	54
$ 43 1,2-Dichloroethane-d4	102	5.228	5.223	(0.939)	11179	51.5467	52
* 47 Fluorobenzene	96	5.564	5.560	(1.000)	157786	50.0000	
48 Trichloroethene	130	5.948	5.943	(1.069)	6681	3.75355	4
$ 60 Toluene-d8	98	7.283	7.279	(0.806)	134180	43.4121	43
* 70 Chlorobenzene-d5	117	9.037	9.032	(1.000)	118125	50.0000	
$ 81 Bromofluorobenzene	95	10.593	10.588	(1.172)	51257	47.2266	47
* 94 1,4-Dichlorobenzene-d4	152	12.195	12.191	(1.000)	58080	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0354.D
Date : 24-APR-2015 20:38
Client ID: DUP-1-042115
Instrument: V5.i
Sample Info: 5ML,P0622-08A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0354.D

Date : 24-APR-2015 20:38

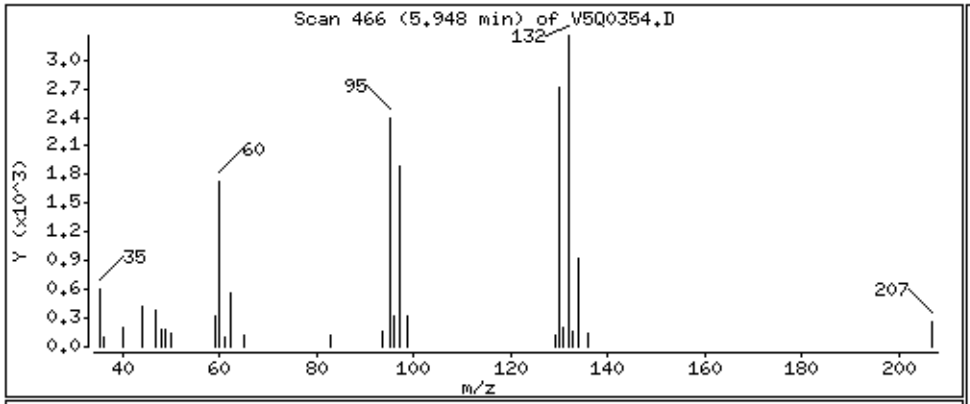
Client ID: DUP-1-042115 Instrument: V5.i

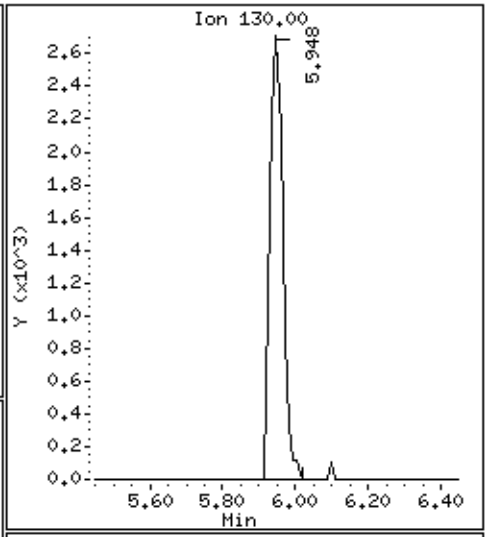
Sample Info: 5ML,P0622-08A,,81892

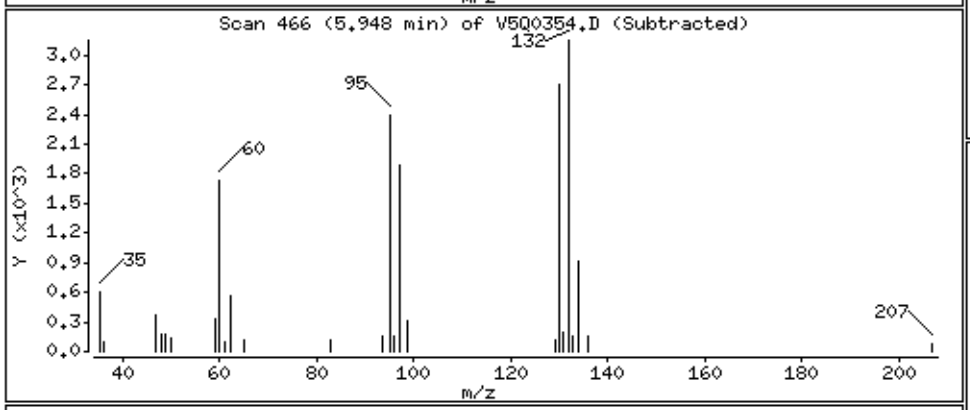
Purge Volume: 5.0 Operator: WL SRC: LIMS

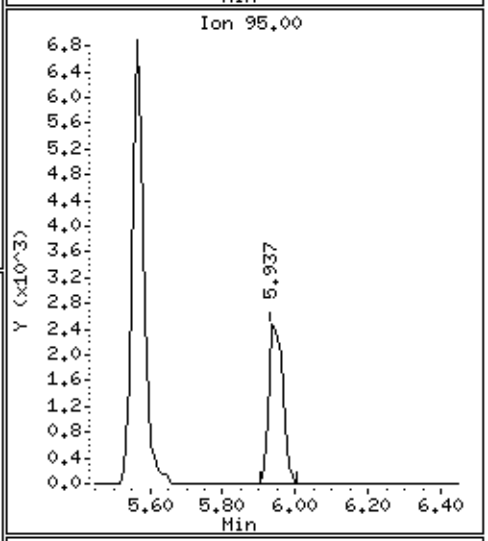
Column phase: DB-624 Column diameter: 0.25

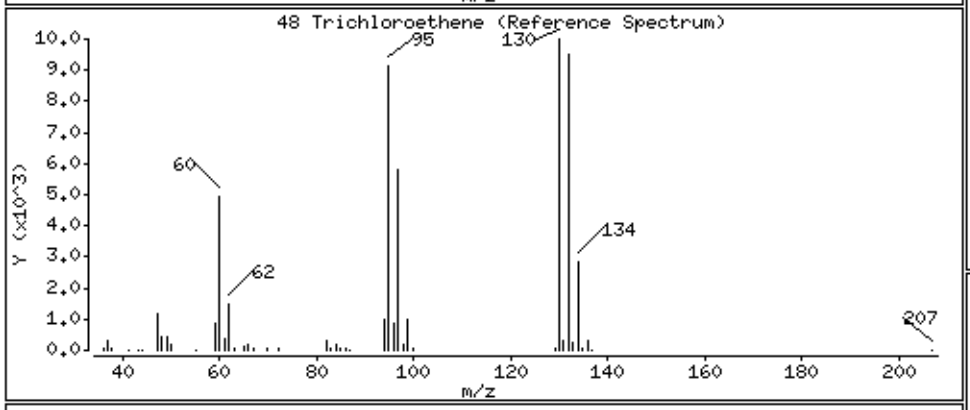
48 Trichloroethene Concentration: 4 ug/L

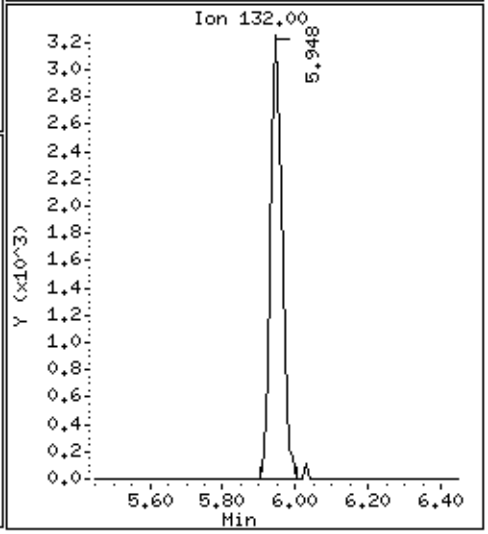


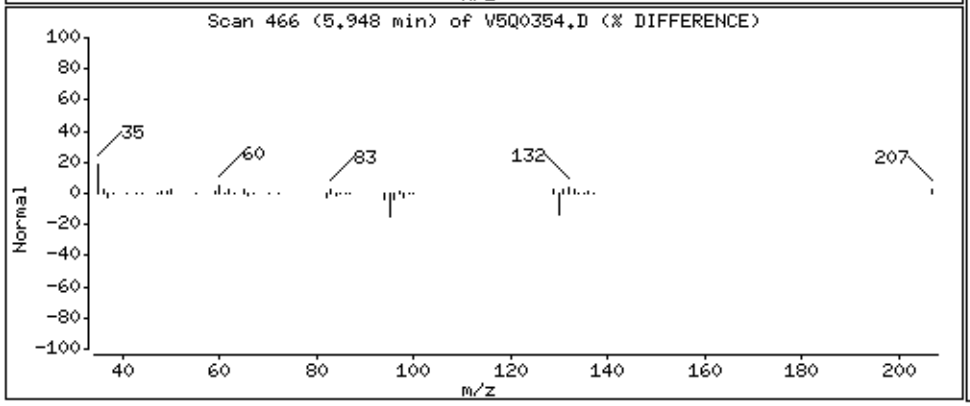












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0355.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.4	J
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

EPA SAMPLE NO.

MW-4-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0355.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0355.D
Report Date: 28-Apr-2015 12:09

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0355.D
Lab Smp Id: P0622-09A Client Smp ID: MW-4-042215
Inj Date : 24-APR-2015 21:04
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-09A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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/Vo * CpndVariable

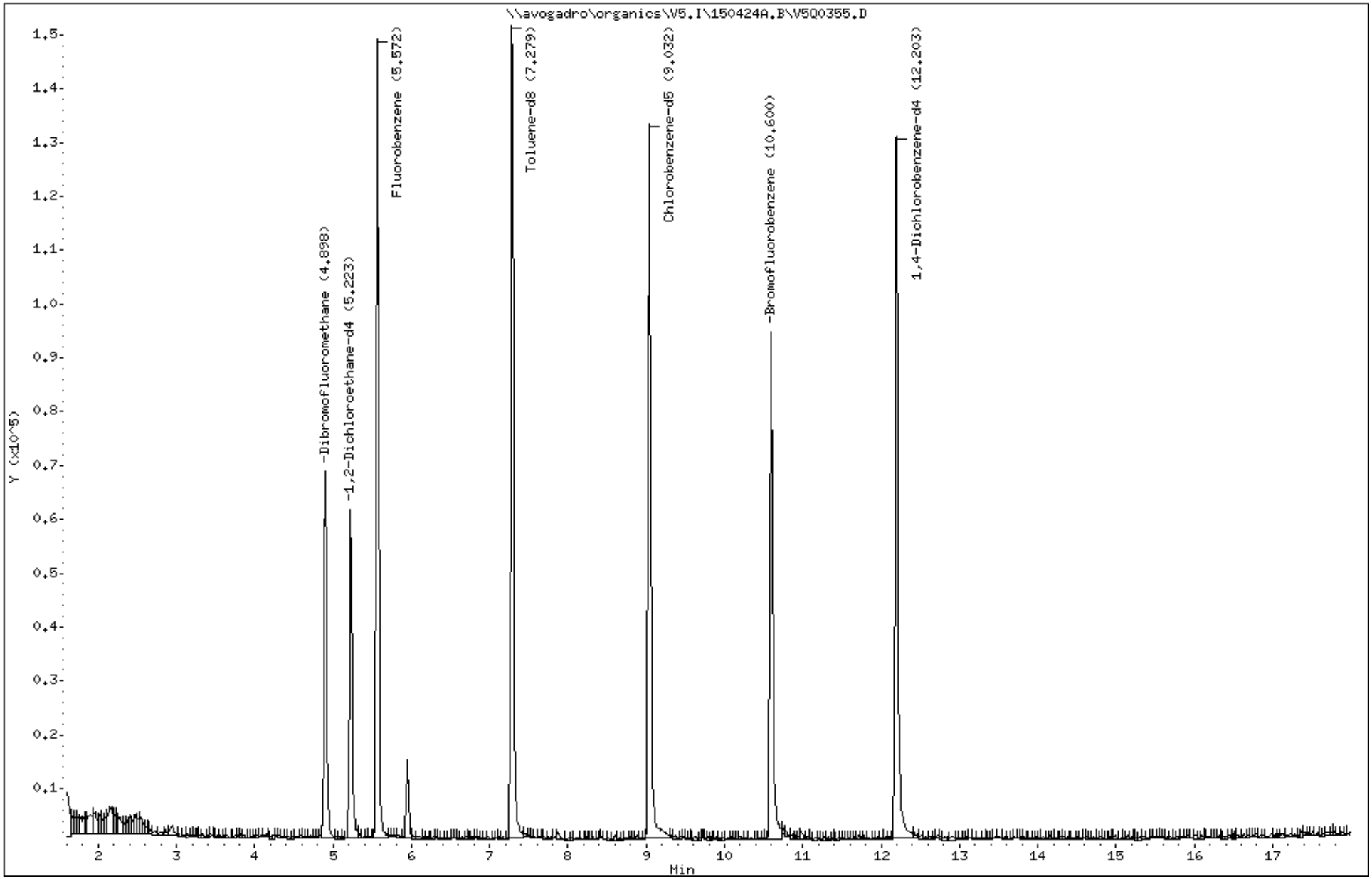
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.898	4.886	(0.879)	47721	50.5630	50
$ 43 1,2-Dichloroethane-d4	102	5.223	5.223	(0.937)	10410	47.9282	48
* 47 Fluorobenzene	96	5.571	5.560	(1.000)	158025	50.0000	
48 Trichloroethene	130	5.954	5.943	(1.069)	6090	3.41634	3
$ 60 Toluene-d8	98	7.290	7.279	(0.807)	133686	45.3375	45
* 70 Chlorobenzene-d5	117	9.032	9.032	(1.000)	112692	50.0000	
$ 81 Bromofluorobenzene	95	10.600	10.588	(1.174)	51853	50.0791	50
* 94 1,4-Dichlorobenzene-d4	152	12.191	12.191	(1.000)	56163	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0355.D
Date : 24-APR-2015 21:04
Client ID: MW-4-042215
Instrument: V5.i
Sample Info: 5ML,P0622-09A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0355.D

Date : 24-APR-2015 21:04

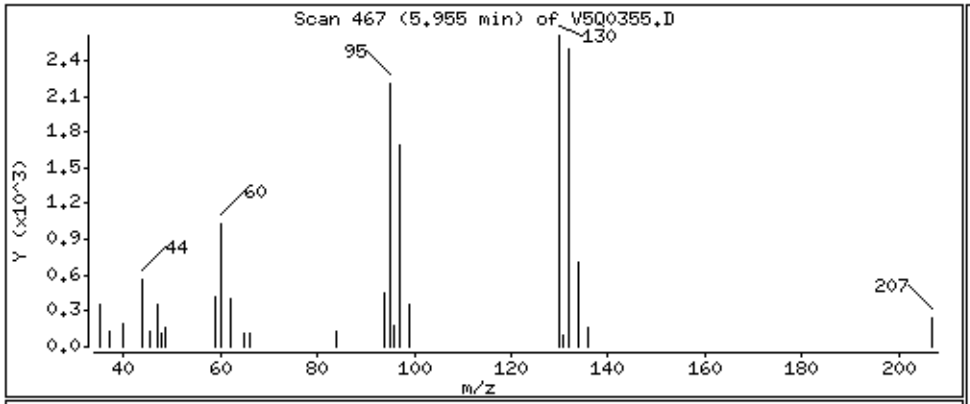
Client ID: MW-4-042215 Instrument: V5.i

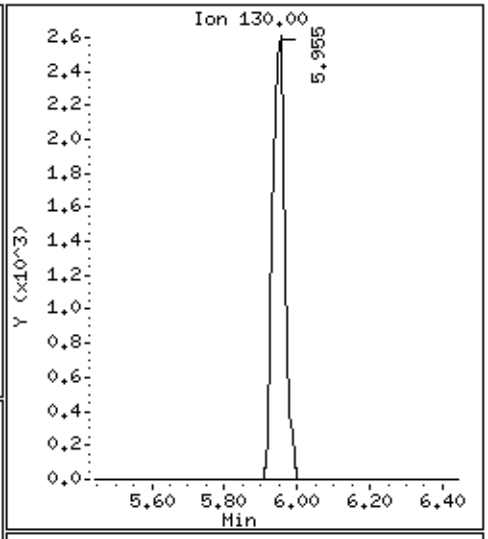
Sample Info: 5ML,P0622-09A,,81892

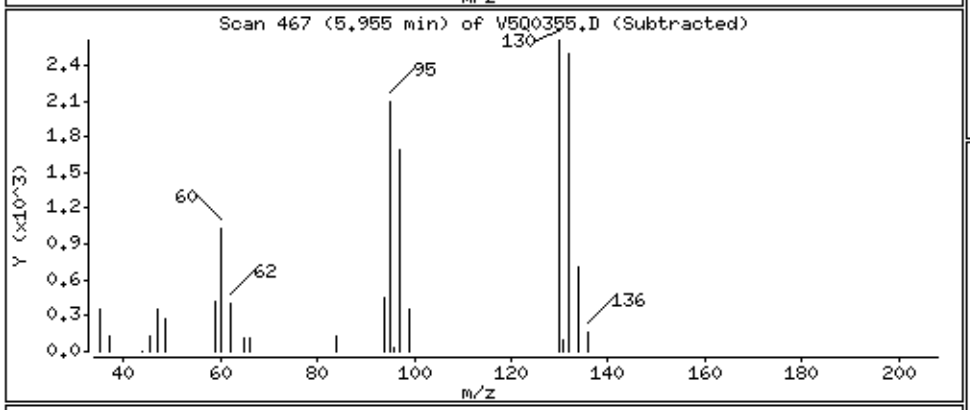
Purge Volume: 5.0 Operator: WL SRC: LIMS

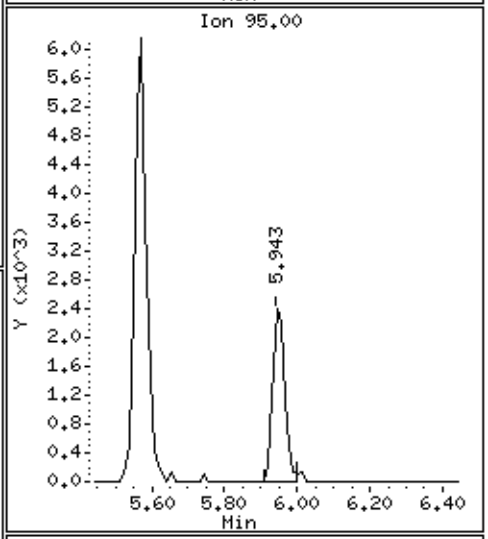
Column phase: DB-624 Column diameter: 0.25

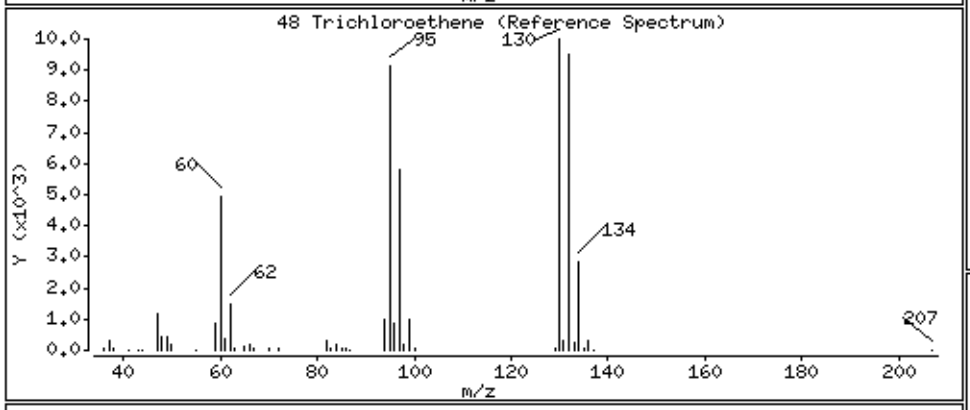
48 Trichloroethene Concentration: 3 ug/L

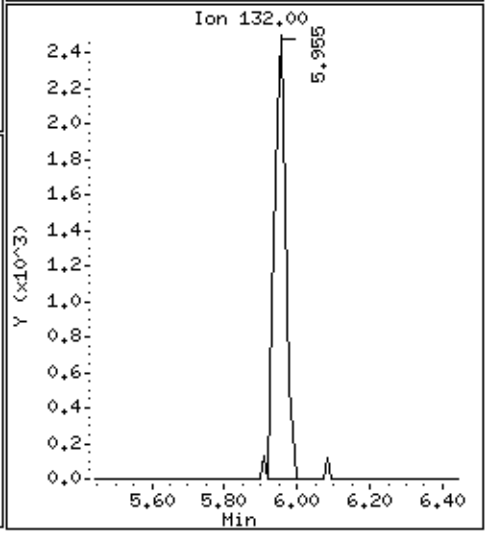


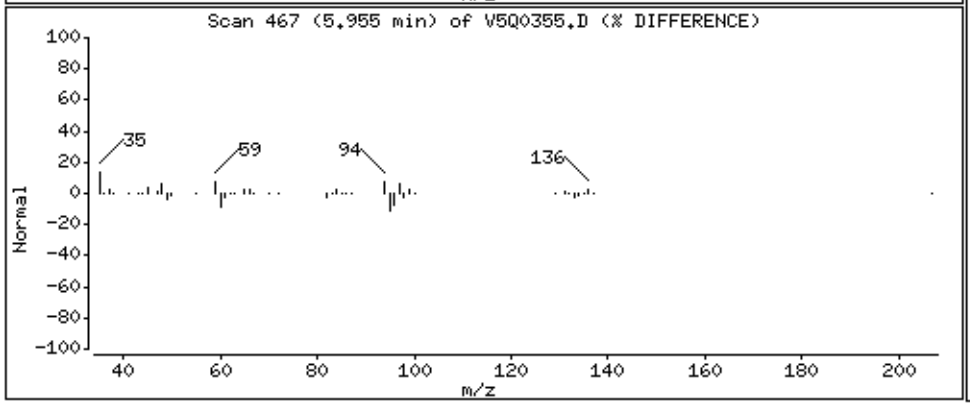












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0356.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	15	
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	29	
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

EPA SAMPLE NO.

MW-5-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0356.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0356.D
Report Date: 28-Apr-2015 12:09

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0356.D
Lab Smp Id: P0622-10A Client Smp ID: MW-5-042215
Inj Date : 24-APR-2015 21:30
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-10A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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/Vo * CpndVariable

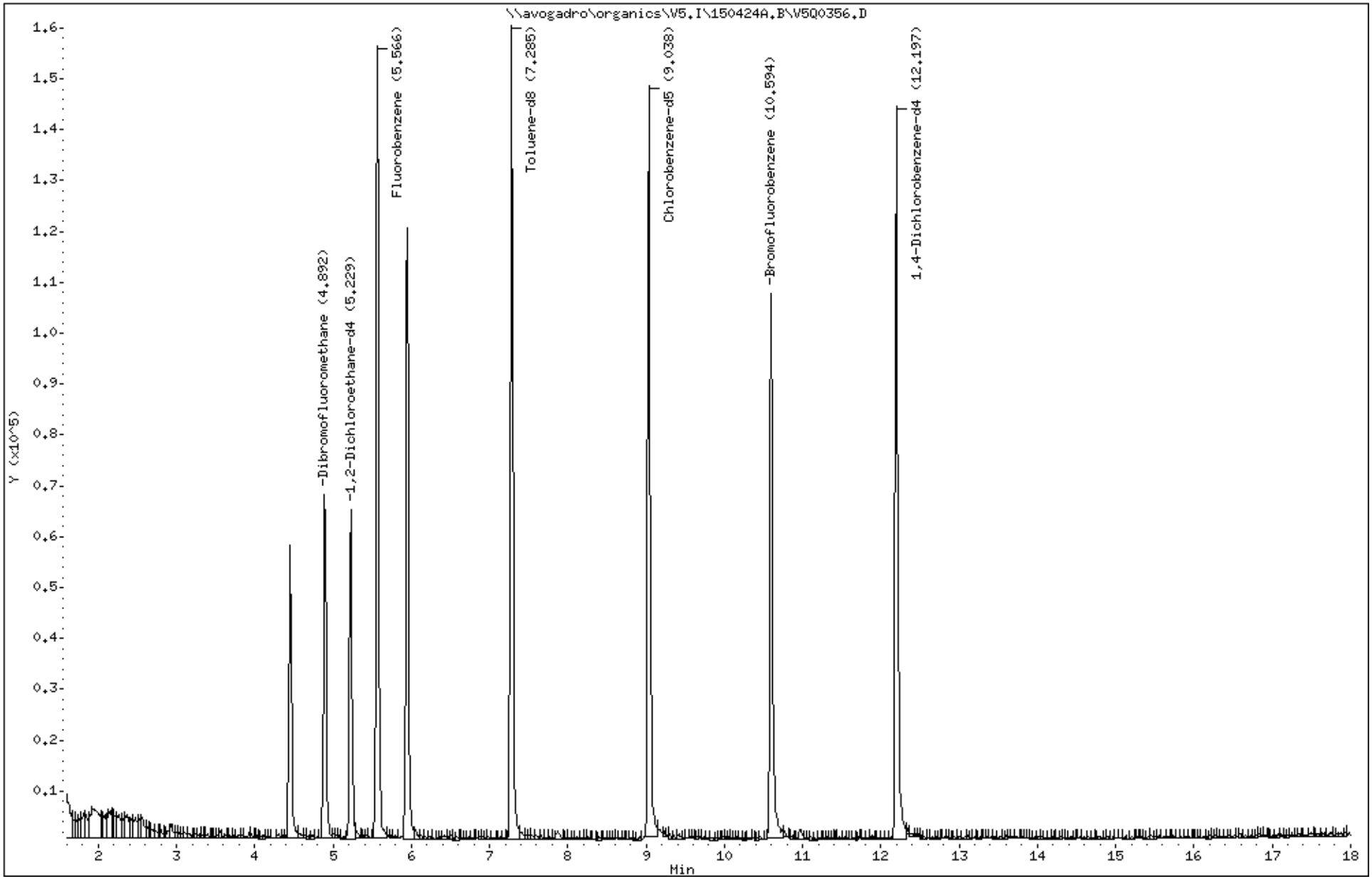
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	29 cis-1,2-Dichloroethene	96	4.451	4.445	(0.800)	28592	14.5039	14
$	37 Dibromofluoromethane	113	4.892	4.886	(0.879)	51780	55.3220	55
$	43 1,2-Dichloroethane-d4	102	5.229	5.223	(0.939)	10530	48.8857	49
*	47 Fluorobenzene	96	5.565	5.560	(1.000)	156716	50.0000	
	48 Trichloroethene	130	5.949	5.943	(1.069)	50916	28.8012	29
M	56 1,2-Dichloroethene (Total)	96				28592	14.5039	14
$	60 Toluene-d8	98	7.284	7.279	(0.806)	134563	44.2101	44
*	70 Chlorobenzene-d5	117	9.038	9.032	(1.000)	116324	50.0000	
$	81 Bromofluorobenzene	95	10.594	10.588	(1.172)	53255	49.8272	50
*	94 1,4-Dichlorobenzene-d4	152	12.197	12.191	(1.000)	55467	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0356.D
Date : 24-APR-2015 21:30
Client ID: MW-5-042215
Instrument: V5.i
Sample Info: 5ML,P0622-10A,,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0356.D

Date : 24-APR-2015 21:30

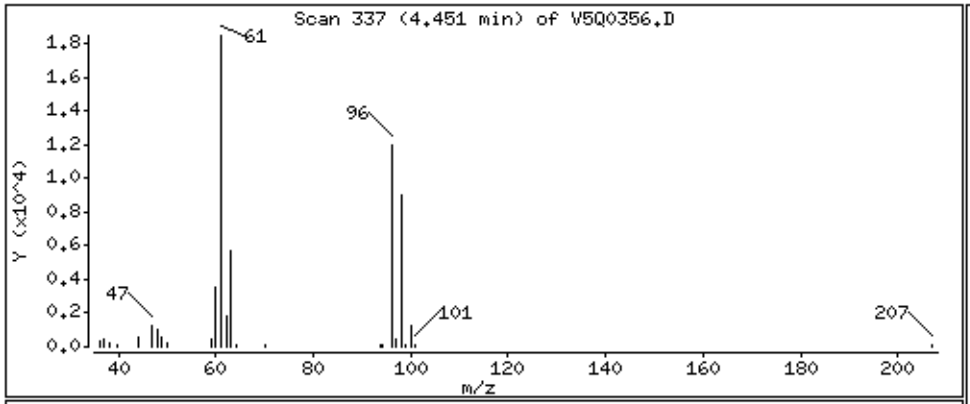
Client ID: MW-5-042215 Instrument: V5.i

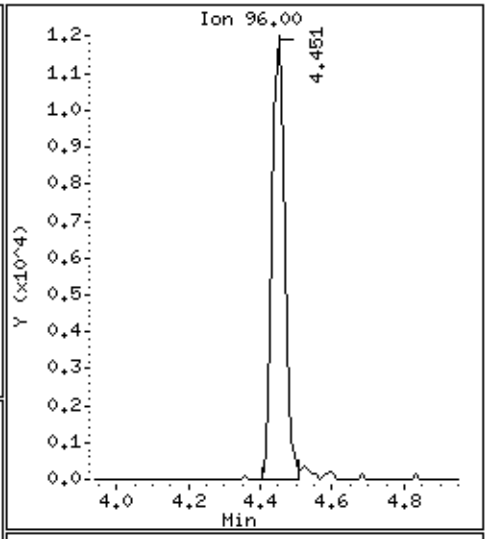
Sample Info: 5ML,P0622-10A,,81892

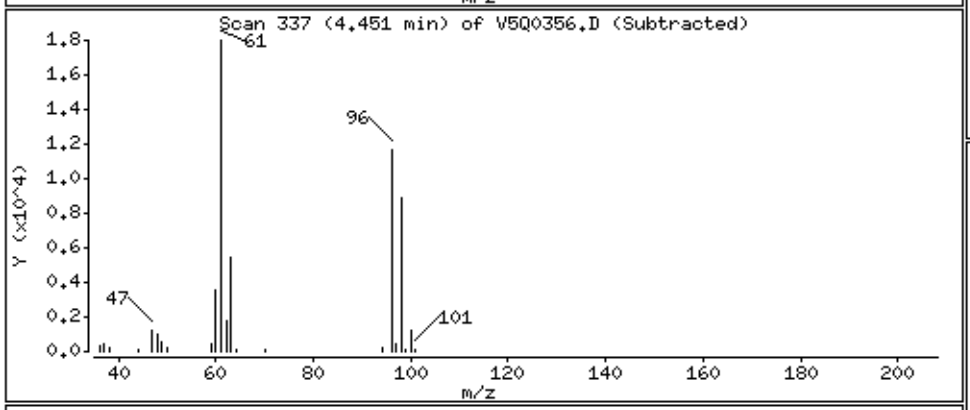
Purge Volume: 5.0 Operator: WL SRC: LIMS

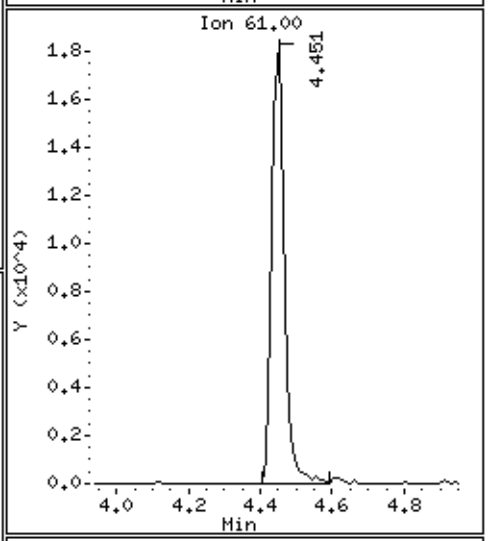
Column phase: DB-624 Column diameter: 0.25

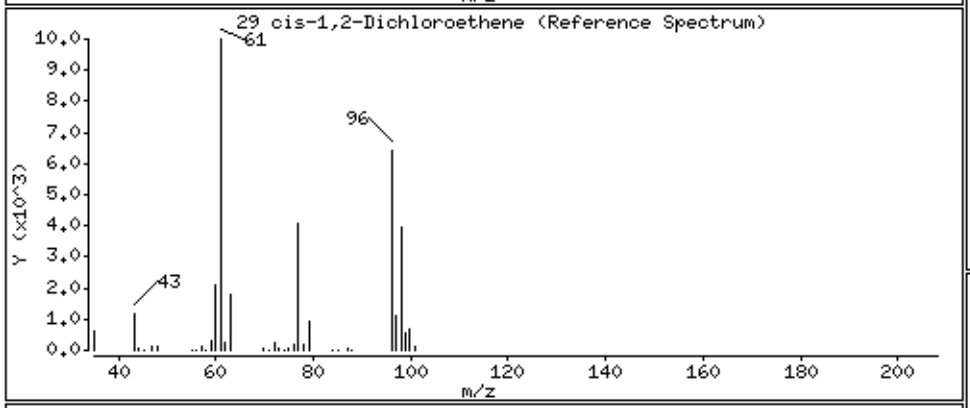
29 cis-1,2-Dichloroethene Concentration: 14 ug/L

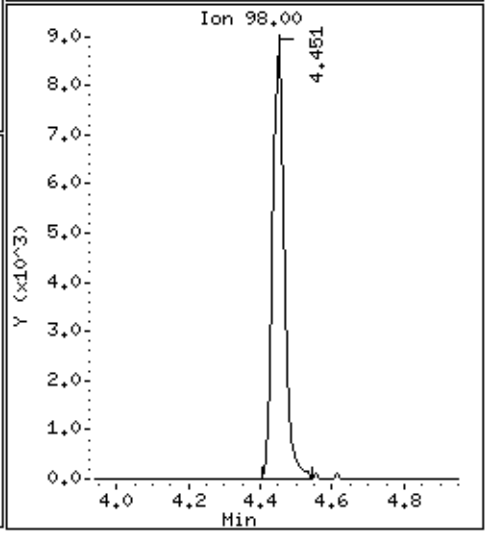


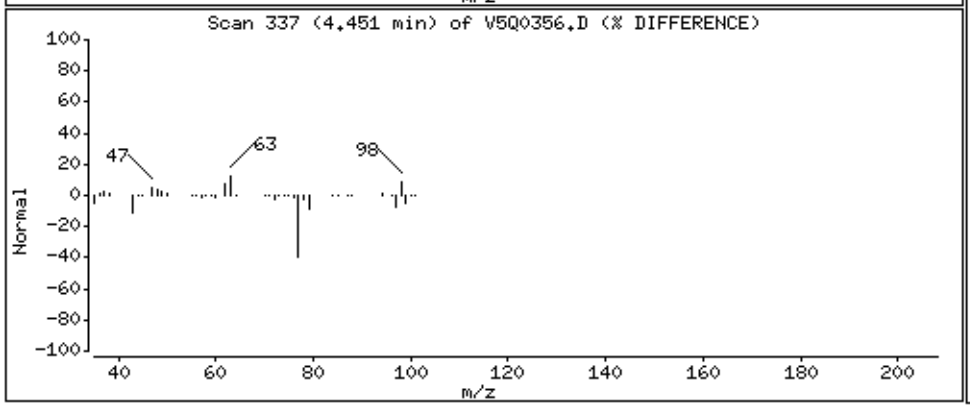












Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0356.D

Date : 24-APR-2015 21:30

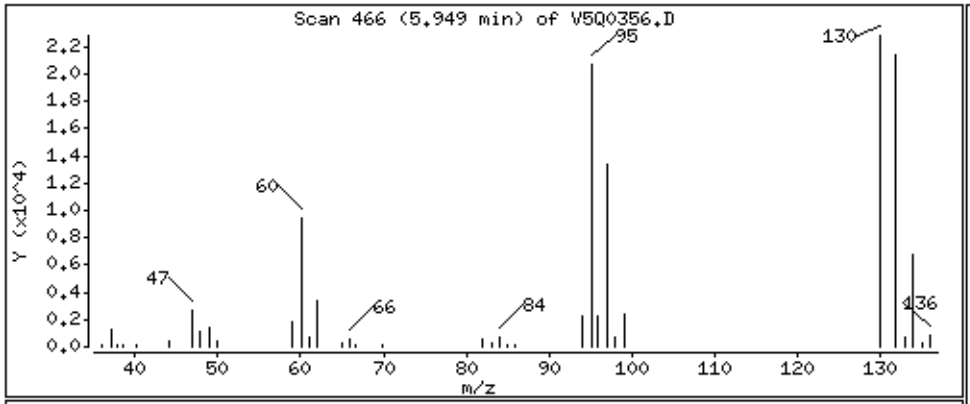
Client ID: MW-5-042215 Instrument: V5.i

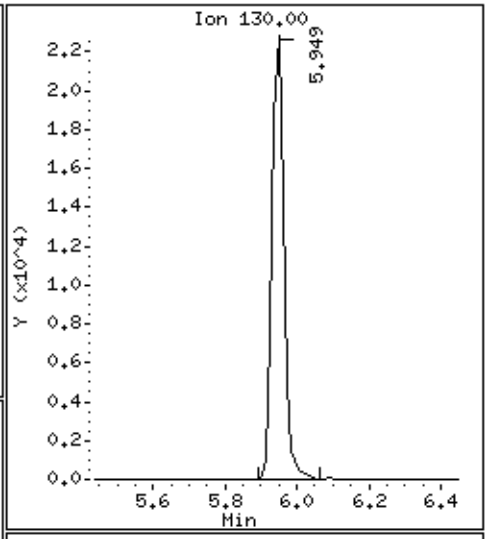
Sample Info: 5ML,P0622-10A,,81892

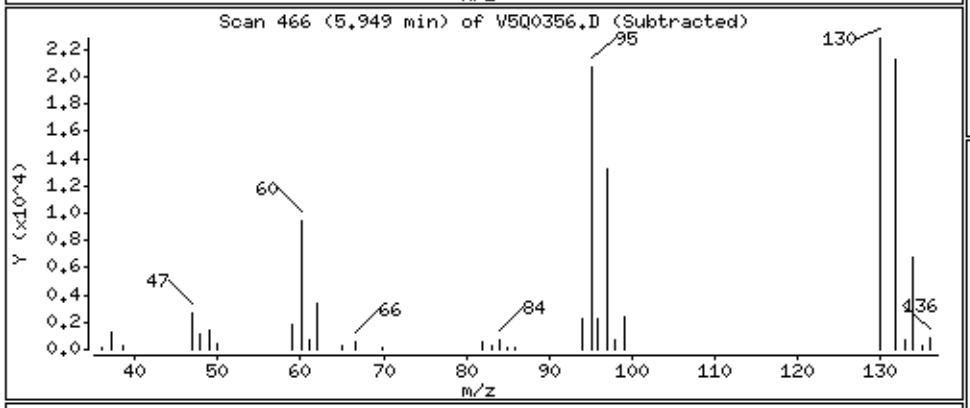
Purge Volume: 5.0 Operator: WL SRC: LIMS

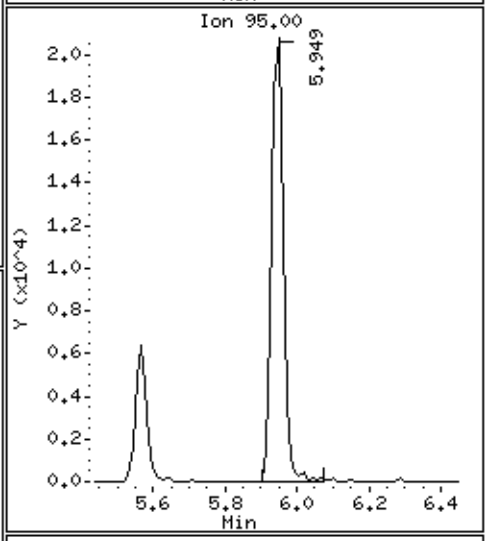
Column phase: DB-624 Column diameter: 0.25

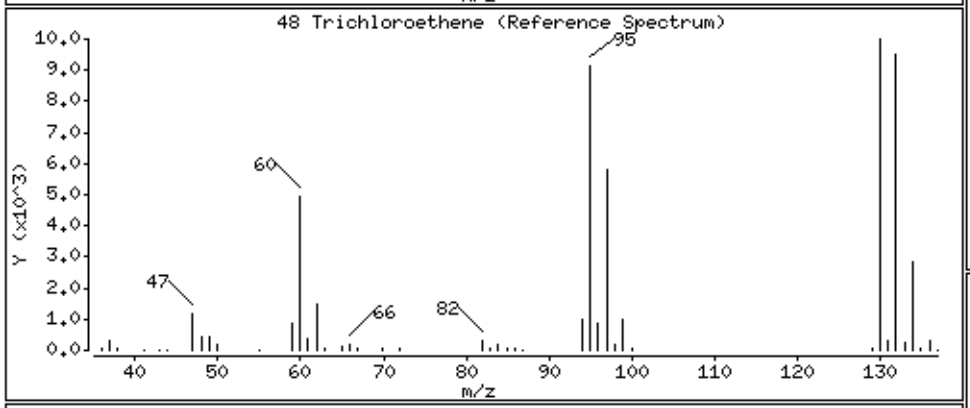
48 Trichloroethene Concentration: 29 ug/L

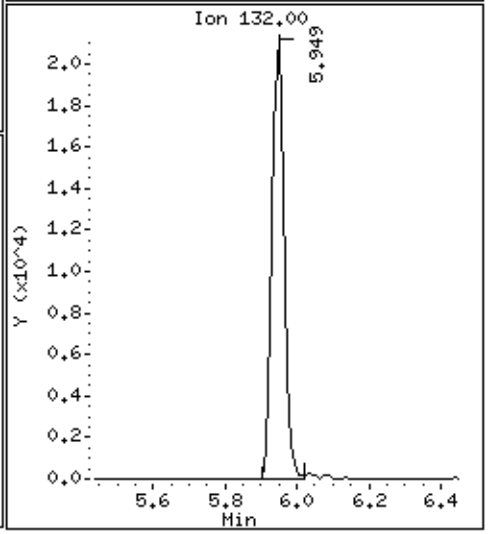


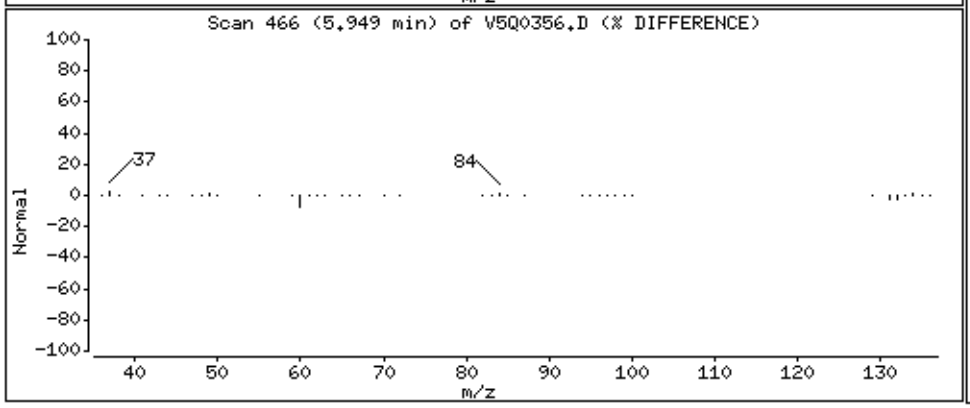












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0357.D
Report Date: 28-Apr-2015 12:09

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0357.D
Lab Smp Id: P0622-11A Client Smp ID: MW-7-042215
Inj Date : 24-APR-2015 21:55
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-11A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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/Vo * CpndVariable

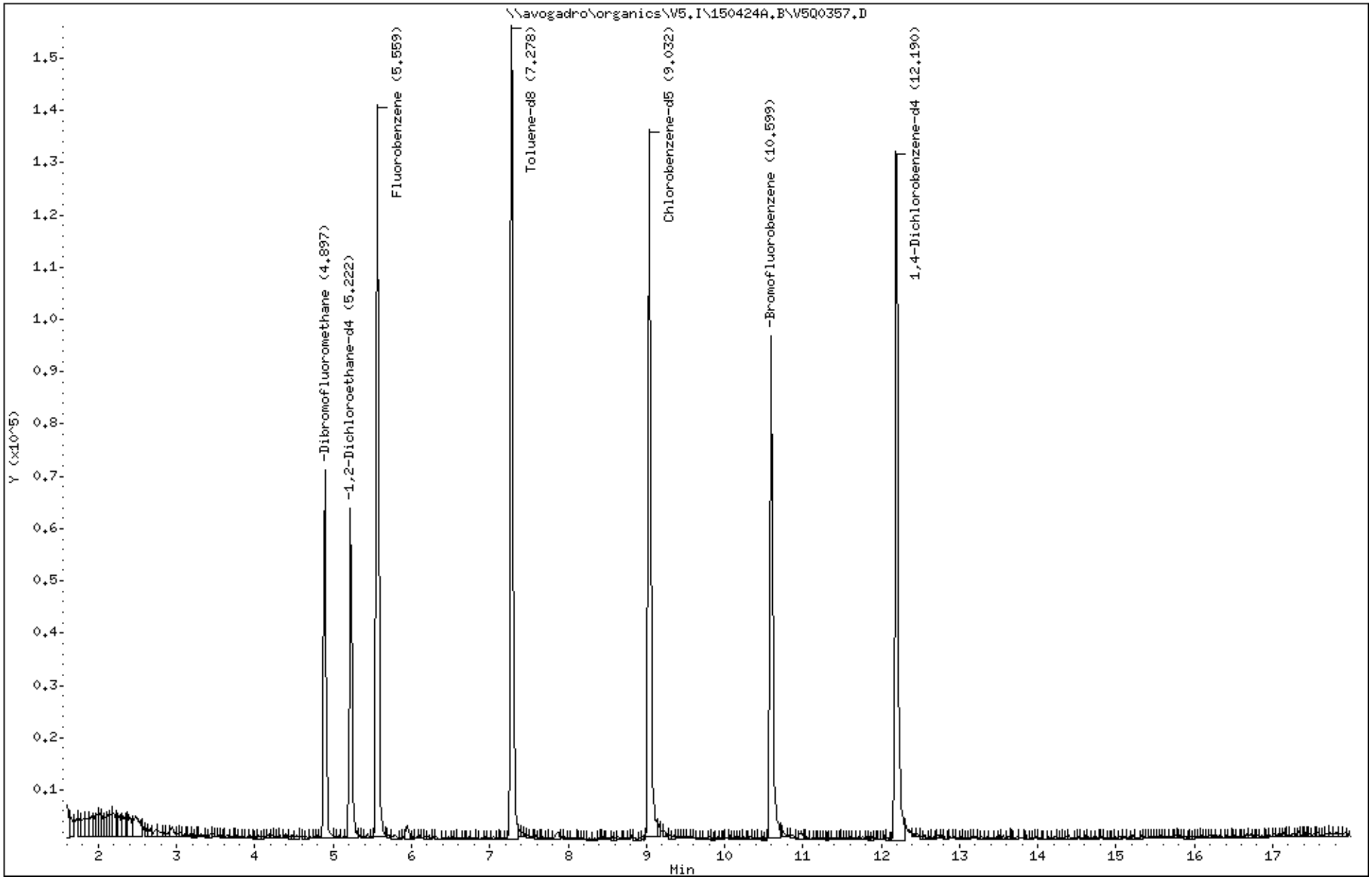
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.897	4.886	(0.879)	49836	53.5832	54
$ 43 1,2-Dichloroethane-d4	102	5.222	5.223	(0.937)	10094	47.1591	47
* 47 Fluorobenzene	96	5.570	5.560	(1.000)	155727	50.0000	
$ 60 Toluene-d8	98	7.277	7.279	(0.805)	134055	42.6318	43
* 70 Chlorobenzene-d5	117	9.043	9.032	(1.000)	120175	50.0000	
$ 81 Bromofluorobenzene	95	10.587	10.588	(1.171)	51379	46.5315	46
* 94 1,4-Dichlorobenzene-d4	152	12.201	12.191	(1.000)	57104	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0357.D
Date : 24-APR-2015 21:55
Client ID: MW-7-042215
Instrument: V5.i
Sample Info: 5ML,P0622-11A,,81892
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.

TRIP BLANK_04/22/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/22/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0358.D
Report Date: 28-Apr-2015 12:09

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0358.D
Lab Smp Id: P0622-12A Client Smp ID: TRIP BLANK
Inj Date : 24-APR-2015 22:20
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-12A,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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/Vo * CpndVariable

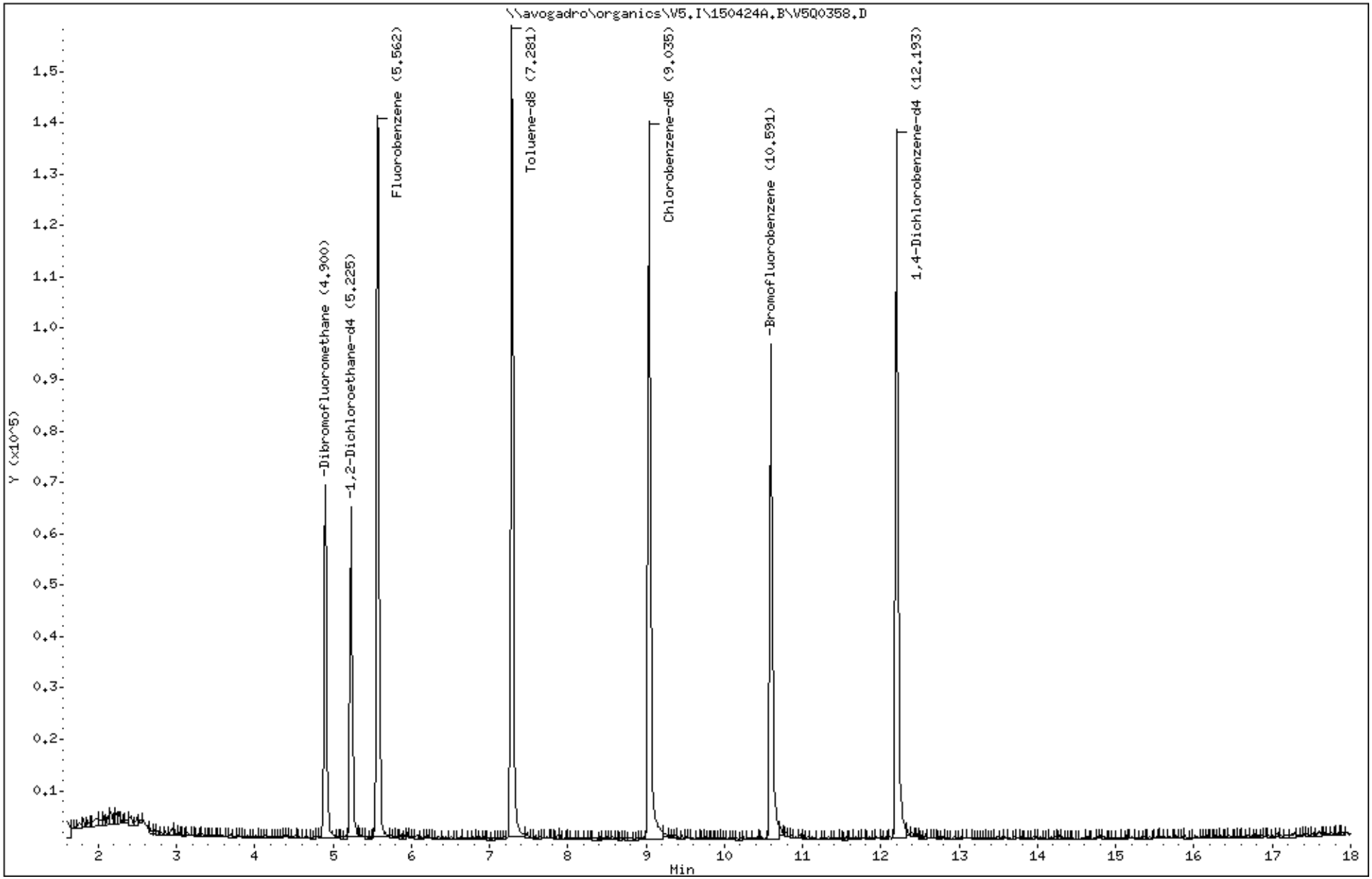
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.900	4.886	(0.881)	47861	51.2183	51
$ 43 1,2-Dichloroethane-d4	102	5.225	5.223	(0.939)	11301	52.5506	52
* 47 Fluorobenzene	96	5.562	5.560	(1.000)	156461	50.0000	
$ 60 Toluene-d8	98	7.280	7.279	(0.806)	132449	42.8760	43
* 70 Chlorobenzene-d5	117	9.034	9.032	(1.000)	118059	50.0000	
$ 81 Bromofluorobenzene	95	10.590	10.588	(1.172)	49426	45.5651	46
* 94 1,4-Dichlorobenzene-d4	152	12.193	12.191	(1.000)	54386	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0358.D
Date : 24-APR-2015 22:20
Client ID: TRIP BLANK
Instrument: V5.i
Sample Info: 5ML,P0622-12A,,81892
Purge Volume: 5.0
Operator: WL 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.: P0622 SAS No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date(s): 04/20/2015 04/20/2015

Heated Purge: (Y/N) N Calibration Times: 16:53 19:01

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5Q0162.D RRF020 = V5Q0163.D RRF050 = V5Q0164.D RRF100 = V5Q0165.D RRF200 = V5Q0166.D
RRF001 = V5Q0161.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.607	0.576	0.514	0.547	0.535	0.727					0.584	13.2
Chloromethane	0.871	0.978	0.941	0.916	0.901	0.987					0.932	4.8
Vinyl chloride	0.684	0.705	0.694	0.677	0.673	0.782					0.702	5.8
Bromomethane	0.693	0.559	0.528	0.514	0.492	0.485					0.545	14.2
Chloroethane	0.390	0.385	0.390	0.367	0.359	0.322					0.369	7.1
Trichlorofluoromethane	0.630	0.603	0.586	0.746	0.738	0.609					0.652	10.9
1,1-Dichloroethene	0.480	0.481	0.512	0.470	0.600	0.513					0.509	9.4
Acetone	0.078	0.092	0.107	0.107	0.102						0.097	12.7
Iodomethane	1.043	1.137	1.125	1.096	1.097	0.997					1.083	4.9
Carbon disulfide	1.551	1.564	1.572	1.546	1.446	1.668					1.558	4.6
Methylene chloride	0.656	0.665	0.640	0.638	0.625	0.706					0.655	4.3
trans-1,2-Dichloroethene	0.626	0.646	0.635	0.613	0.607	0.658					0.631	3.1
Methyl tert-butyl ether	1.345	1.408	1.431	1.376	1.322	1.492					1.396	4.4
1,1-Dichloroethane	1.091	1.112	1.061	1.084	1.053	1.167					1.095	3.8
Vinyl acetate	1.755	1.780	1.860	1.752	1.735	1.809					1.782	2.6
2-Butanone	0.082	0.102	0.111	0.107	0.108						0.102	11.3
cis-1,2-Dichloroethene	0.619	0.643	0.633	0.625	0.621	0.632					0.629	1.4
2,2-Dichloropropane	0.584	0.582	0.580	0.549	0.503	0.745					0.590	13.9
Bromochloromethane	0.328	0.359	0.350	0.342	0.337	0.345					0.344	3.1
Chloroform	0.969	0.961	0.917	0.905	0.890	0.895					0.923	3.7
1,1,1-Trichloroethane	0.663	0.687	0.712	0.702	0.663	0.669					0.683	3.1
1,1-Dichloropropene	0.238	0.281	0.278	0.281	0.280	0.232					0.265	8.7
Carbon tetrachloride	0.590	0.653	0.673	0.667	0.681	0.566					0.638	7.5
1,2-Dichloroethane	0.782	0.798	0.766	0.742	0.735	0.772					0.766	3.1
Benzene	2.044	2.085	2.022	1.971	1.970	2.283					2.062	5.6
Trichloroethene	0.544	0.576	0.574	0.575	0.576	0.539					0.564	3.1
1,2-Dichloropropane	0.539	0.581	0.588	0.564	0.566	0.645					0.580	6.1

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: P0622 SAS No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date(s): 04/20/2015 04/20/2015

Heated Purge: (Y/N) N Calibration Times: 16:53 19:01

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5Q0162.D RRF020 = V5Q0163.D RRF050 = V5Q0164.D RRF100 = V5Q0165.D RRF200 = V5Q0166.D
RRF001 = V5Q0161.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.369	0.396	0.402	0.391	0.391	0.379					0.388	3.1
Bromodichloromethane	0.668	0.688	0.677	0.673	0.674	0.680					0.677	1.0
cis-1,3-Dichloropropene	0.738	0.819	0.825	0.808	0.825	0.643					0.776	9.4
4-Methyl-2-pentanone	1.020	1.008	1.076	1.057	1.059						1.044	2.7
Toluene	1.852	2.000	1.965	1.884	1.920	1.966					1.931	2.9
trans-1,3-Dichloropropene	0.603	0.774	0.767	0.750	0.778	0.644					0.719	10.6
1,1,2-Trichloroethane	0.489	0.493	0.495	0.481	0.485	0.517					0.493	2.6
1,3-Dichloropropane	1.230	1.297	1.251	1.216	1.059	1.167					1.203	6.9
Tetrachloroethene	0.595	0.638	0.642	0.647	0.566	0.684					0.629	6.7
2-Hexanone	0.340	0.940	1.078	1.125	1.007						0.898	35.6
Dibromochloromethane	0.797	0.915	0.893	0.900	0.810	0.785					0.850	6.9
1,2-Dibromoethane	0.760	0.869	0.865	0.860	0.757	0.735					0.808	7.8
Chlorobenzene	1.818	1.966	1.974	2.005	1.791	1.893					1.908	4.6
1,1,1,2-Tetrachloroethane	0.658	0.667	0.676	0.739	0.683	0.769					0.699	6.4
Ethylbenzene	0.867	0.910	0.956	1.016	0.940	0.882					0.928	5.9
m,p-Xylene	1.152	1.212	1.273	1.276	1.166	1.156					1.206	4.8
o-Xylene	1.086	1.154	1.281	1.251	1.144	1.044					1.160	7.9
Xylene (Total)	1.130	1.193	1.276	1.268	1.159	1.118					1.191	5.7
Styrene	1.716	1.954	2.213	2.185	1.974	1.739					1.963	10.8
Bromoform	0.549	0.611	0.691	0.676	0.608	0.567					0.617	9.2
Isopropylbenzene	2.677	2.887	3.074	3.007	2.631	2.754					2.838	6.3
1,1,2,2-Tetrachloroethane	1.864	1.930	1.974	1.951	2.025	1.766					1.918	4.8
Bromobenzene	1.348	1.470	1.519	1.555	1.627	1.118					1.440	12.7
1,2,3-Trichloropropane	1.950	2.061	2.117	2.148	2.262	2.140					2.113	4.9
n-Propylbenzene	1.212	1.286	1.367	1.370	1.497	1.232					1.327	8.0
2-Chlorotoluene	1.200	1.317	1.347	1.350	1.474	1.421					1.351	6.9
1,3,5-Trimethylbenzene	3.954	4.190	4.376	4.317	4.643	4.105					4.264	5.6

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.: P0622 SAS No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date(s): 04/20/2015 04/20/2015

Heated Purge: (Y/N) N Calibration Times: 16:53 19:01

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5Q0162.D RRF020 = V5Q0163.D RRF050 = V5Q0164.D RRF100 = V5Q0165.D RRF200 = V5Q0166.D
RRF001 = V5Q0161.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	1.302	1.376	1.429	1.400	1.544	1.185					1.373	8.8
tert-Butylbenzene	3.971	4.157	4.449	4.612	4.798	4.593					4.430	7.0
1,2,4-Trimethylbenzene	3.868	4.203	4.502	4.524	4.807	3.737					4.274	9.7
sec-Butylbenzene	5.363	5.508	5.654	5.732	5.756	4.655					5.445	7.6
4-Isopropyltoluene	4.360	4.611	4.735	4.689	4.804	4.486					4.614	3.6
1,3-Dichlorobenzene	2.705	2.669	2.752	2.778	2.854	2.637					2.732	2.9
1,4-Dichlorobenzene	2.777	2.966	2.922	2.892	2.955	3.492					3.001	8.3
n-Butylbenzene	3.454	3.626	4.095	3.947	3.858	3.145					3.687	9.5
1,2-Dichlorobenzene	2.435	2.547	2.830	2.780	2.750	2.157					2.583	10.0
1,2-Dibromo-3-chloropropane	0.256	0.326	0.316	0.328	0.362	0.043					0.272	43.2
1,2,4-Trichlorobenzene	1.682	1.913	2.011	1.878	2.198	1.820					1.917	9.2
Hexachlorobutadiene	0.771	0.815	0.872	0.816	0.943	0.837					0.842	7.1
1,2,3-Trichlorobenzene	1.633	1.874	2.007	1.765	1.972	1.908					1.860	7.5
Naphthalene	4.324	5.165	5.522	5.155	5.900	3.419					4.914	18.3

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: P0622 SAS No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date(s): 04/20/2015 04/20/2015

Heated Purge: (Y/N) N Calibration Times: 16:53 19:01

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5Q0162.D RRF020 = V5Q0163.D RRF050 = V5Q0164.D RRF100 = V5Q0165.D RRF200 = V5Q0166.D
RRF001 = V5Q0161.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.298	0.293	0.299	0.298	0.300	0.304					0.299	1.2
1,2-Dichloroethane-d4	0.066	0.071	0.069	0.069	0.066	0.071					0.069	3.4
Toluene-d8	1.312	1.334	1.328	1.313	1.190	1.372					1.308	4.7
Bromofluorobenzene	0.450	0.466	0.482	0.476	0.437	0.446					0.459	3.9

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0161.D
Report Date: 21-Apr-2015 11:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150420.B\V5Q0161.D
Lab Smp Id: VSTD001B5 Client Smp ID: VSTD001B5
Inj Date : 20-APR-2015 16:53
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD001B5,VSTD001B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150420.B\v5_8260W.m
Meth Date : 21-Apr-2015 10:46 wluo Quant Type: ISTD
Cal Date : 20-APR-2015 16:53 Cal File: V5Q0161.D
Als bottle: 2 Calibration Sample, Level: 6
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	1.568	1.546	(0.282)	3774	1.00000	1
2	Chloromethane	50	1.708	1.720	(0.307)	5123	1.00000	1
4	Vinyl Chloride	62	1.824	1.813	(0.328)	4060	1.00000	1
9	Ether	59	2.683	2.684	(0.482)	3143	1.00000	1
10	Acrolein	55	2.799	2.800	(0.503)	1533	1.00000	5
11	1,1-Dichloroethene	96	2.880	2.882	(0.518)	2661	1.00000	1
13	Acetone	58	2.950	2.928	(0.530)	663	1.00000	1(Q)
15	Carbon Disulfide	76	3.078	3.079	(0.553)	8660	1.00000	1
17	Allyl Chloride	39	3.194	3.195	(0.574)	4827	1.00000	1(Q)
18	Methyl Acetate	43	3.229	3.219	(0.580)	6161	1.00000	1
19	Methylene Chloride	84	3.310	3.311	(0.595)	3664	1.00000	1
22	trans-1,2-Dichloroethene	96	3.554	3.544	(0.639)	3414	1.00000	1
23	Methyl tert-butyl ether	73	3.554	3.555	(0.639)	7744	1.00000	1
24	1,1-Dichloroethane	63	3.914	3.915	(0.704)	6059	1.00000	1
25	Vinyl acetate	43	3.984	3.985	(0.716)	9391	1.00000	1(T)
26	Diisopropyl Ether	45	3.984	3.997	(0.716)	15454	1.00000	1
27	2-Chloro-1,3-Butadiene	53	4.007	4.008	(0.720)	4346	1.00000	1
28	Ethyl tert-butyl ether	59	4.321	4.322	(0.777)	9154	1.00000	1
29	cis-1,2-Dichloroethene	96	4.448	4.450	(0.800)	3283	1.00000	1
31	2,2-Dichloropropane	77	4.460	4.461	(0.802)	3867	1.00000	1
34	Bromochloromethane	128	4.681	4.682	(0.841)	1793	1.00000	1(Q)
$ 37	Dibromofluoromethane	113	4.901	4.902	(0.881)	78897	50.0000	51
39	Cyclohexane	56	5.006	4.995	(0.900)	3702	1.00000	1

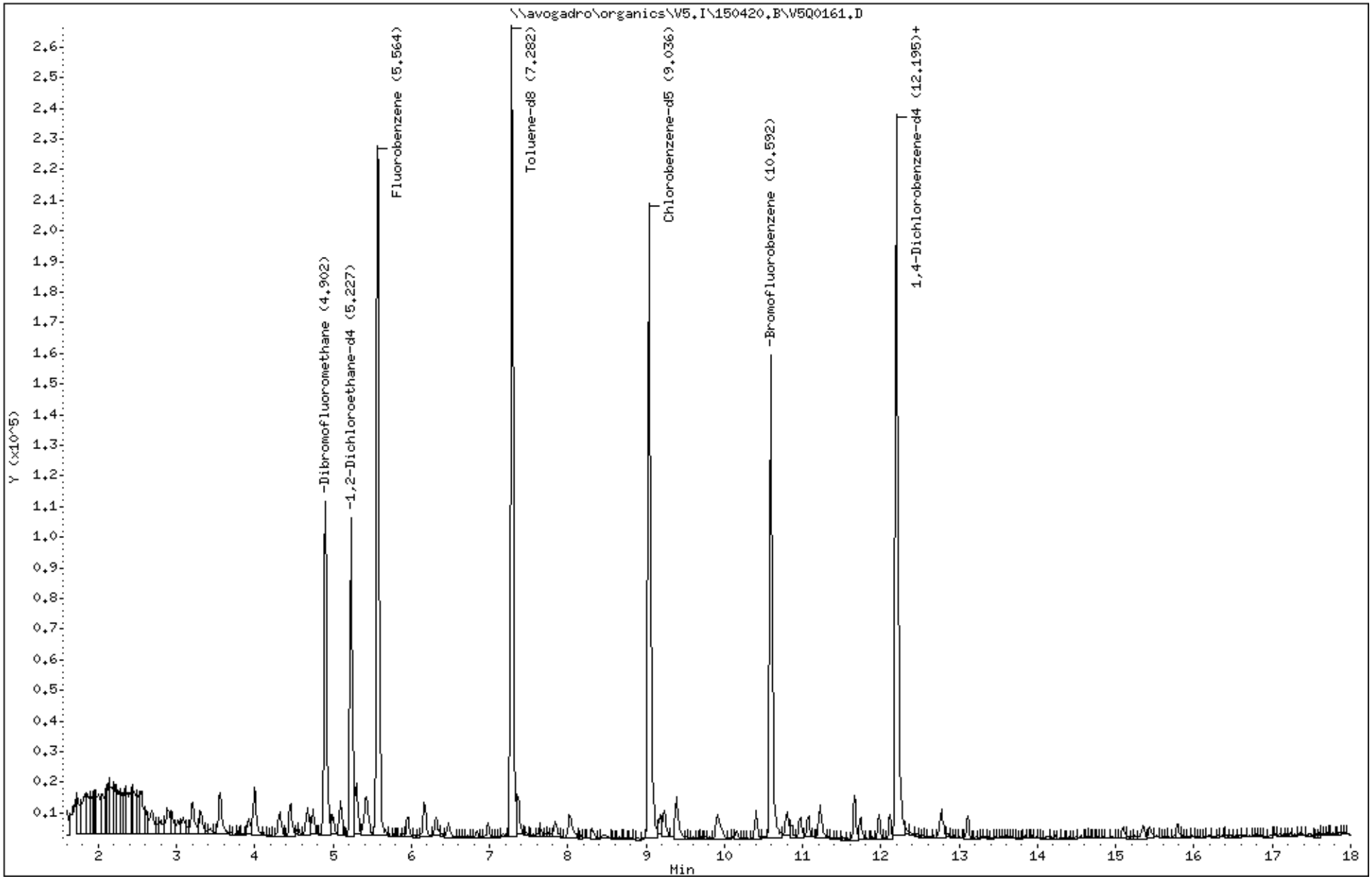
Data File: \\avogadro\organics\V5.I\150420.B\V5Q0161.D
Report Date: 21-Apr-2015 11:03

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	43	1,2-Dichloroethane-d4	102	5.226	5.228	(0.939)	18549	50.0000	52
	44	Benzene	78	5.296	5.297	(0.952)	11851	1.00000	1
	45	1,2-Dichloroethane	62	5.308	5.309	(0.954)	4009	1.00000	1
	46	tert-Amyl methyl ether	73	5.412	5.413	(0.973)	8509	1.00000	1
*	47	Fluorobenzene	96	5.563	5.576	(1.000)	259603	50.0000	
	49	Methylcyclohexane	83	6.155	6.157	(1.106)	3352	1.00000	1
	51	1,2-Dichloropropane	63	6.179	6.180	(1.111)	3347	1.00000	1
	55	Bromodichloromethane	83	6.469	6.470	(1.163)	3531	1.00000	1
M	56	1,2-Dichloroethene (Total)	96				6697	1.00000	2
$	60	Toluene-d8	98	7.282	7.283	(0.806)	225107	50.0000	52
	61	Toluene	91	7.363	7.364	(1.324)	10208	1.00000	1
	64	1,1,2-Trichloroethane	97	7.828	7.829	(1.407)	2684	1.00000	1
	65	Tetrachloroethene	164	8.013	8.015	(0.887)	2245	1.00000	1
*	70	Chlorobenzene-d5	117	9.035	9.037	(1.000)	164013	50.0000	
	73	1,1,1,2-Tetrachloroethane	131	9.175	9.176	(1.015)	2523	1.00000	1(Q)
$	81	Bromofluorobenzene	95	10.592	10.593	(1.172)	73145	50.0000	48
	84	1,2,3-Trichloropropane	75	10.859	10.848	(0.890)	3686	1.00000	1(Q)
	86	2-Chlorotoluene	126	11.068	11.069	(0.908)	2447	1.00000	1
	89	tert-Butylbenzene	119	11.660	11.661	(0.956)	7910	1.00000	1
*	94	1,4-Dichlorobenzene-d4	152	12.194	12.195	(1.000)	86105	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	12.229	12.230	(1.003)	6013	1.00000	1
	99	Hexachloroethane	117	13.112	13.113	(1.075)	1993	1.00000	1
	100	1,2-Dibromo-3-chloropropane	75	13.890	13.868	(1.139)	74	1.00000	3(QM)
	105	1,2,3-Trichlorobenzene	180	15.794	15.772	(1.295)	3286	1.00000	1

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\V5.I\150420.B\V5Q0161.D
Date : 20-APR-2015 16:53
Client ID: VSTD001B5
Instrument: V5.i
Sample Info: 5ML,VSTD001B5,VSTD001B5
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150420.B\V5Q0162.D
Report Date: 21-Apr-2015 11:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150420.B\V5Q0162.D
Lab Smp Id: VSTD005B5 Client Smp ID: VSTD005B5
Inj Date : 20-APR-2015 17:19
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD005B5,VSTD005B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150420.B\v5_8260W.m
Meth Date : 21-Apr-2015 10:46 wluo Quant Type: ISTD
Cal Date : 20-APR-2015 17:19 Cal File: V5Q0162.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	1.545	1.546	(0.277)	15830	5.00000	5
3	Freon114	85	1.649	1.651	(0.296)	11397	5.00000	4(Q)
2	Chloromethane	50	1.719	1.720	(0.308)	22714	5.00000	5
4	Vinyl Chloride	62	1.823	1.813	(0.327)	17840	5.00000	5
5	Bromomethane	94	2.149	2.139	(0.385)	18076	5.00000	6
6	Chloroethane	64	2.207	2.208	(0.396)	10166	5.00000	5
7	Trichlorofluoromethane	101	2.451	2.429	(0.440)	16436	5.00000	5
8	Ethanol	46	2.636	2.638	(0.473)	5749	500.000	410(Q)
9	Ether	59	2.694	2.684	(0.483)	12762	5.00000	4
10	Acrolein	55	2.811	2.800	(0.504)	6420	25.0000	21
11	1,1-Dichloroethene	96	2.892	2.882	(0.519)	12514	5.00000	5
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.903	2.893	(0.521)	9551	5.00000	5
13	Acetone	58	2.938	2.928	(0.527)	2036	5.00000	4(Q)
14	Iodomethane	142	3.031	3.021	(0.544)	27193	5.00000	5
15	Carbon Disulfide	76	3.089	3.079	(0.554)	40432	5.00000	5
16	Acetonitrile	41	3.205	3.195	(0.575)	54963	50.0000	44
17	Allyl Chloride	39	3.205	3.195	(0.575)	21563	5.00000	5(Q)
18	Methyl Acetate	43	3.229	3.219	(0.579)	28882	5.00000	5
19	Methylene Chloride	84	3.310	3.311	(0.594)	17098	5.00000	5
20	tert-Butanol	59	3.426	3.428	(0.615)	5037	10.0000	12
21	Acrylonitrile	53	3.542	3.520	(0.635)	7383	5.00000	4
22	trans-1,2-Dichloroethene	96	3.554	3.544	(0.638)	16320	5.00000	5
23	Methyl tert-butyl ether	73	3.565	3.555	(0.640)	35054	5.00000	5

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	24	1,1-Dichloroethane	63	3.925	3.915	(0.704)	28430	5.00000	5
	25	Vinyl acetate	43	3.995	3.985	(0.717)	45758	5.00000	5
	26	Diisopropyl Ether	45	3.995	3.997	(0.717)	68032	5.00000	5
	27	2-Chloro-1,3-Butadiene	53	4.007	4.008	(0.719)	20188	5.00000	5
	28	Ethyl tert-butyl ether	59	4.320	4.322	(0.775)	44152	5.00000	5
	29	cis-1,2-Dichloroethene	96	4.460	4.450	(0.800)	16130	5.00000	5
	30	2-Butanone	72	4.471	4.473	(0.802)	2140	5.00000	4(Q)
	31	2,2-Dichloropropane	77	4.460	4.461	(0.800)	15234	5.00000	5
	32	Propionitrile	54	4.529	4.519	(0.813)	23051	50.0000	39
	33	Methacrylonitrile	41	4.669	4.659	(0.838)	24830	10.0000	9
	34	Bromochloromethane	128	4.680	4.682	(0.840)	8555	5.00000	5
	35	Tetrahydrofuran	72	4.738	4.728	(0.850)	4205	10.0000	9
	36	Chloroform	83	4.750	4.751	(0.852)	25273	5.00000	5
$	37	Dibromofluoromethane	113	4.901	4.902	(0.879)	77745	50.0000	50
	38	1,1,1-Trichloroethane	97	4.936	4.937	(0.885)	17274	5.00000	5
	39	Cyclohexane	56	5.005	4.995	(0.898)	15551	5.00000	4
	40	1,1-Dichloropropene	110	5.098	5.088	(0.915)	6217	5.00000	4(Q)
	41	Carbon Tetrachloride	117	5.098	5.100	(0.915)	15380	5.00000	5
	42	Isobutyl Alcohol	43	5.214	5.204	(0.935)	12356	100.000	70
$	43	1,2-Dichloroethane-d4	102	5.238	5.228	(0.940)	17147	50.0000	48
	44	Benzene	78	5.296	5.297	(0.950)	53283	5.00000	5
	45	1,2-Dichloroethane	62	5.307	5.309	(0.952)	20383	5.00000	5
	46	tert-Amyl methyl ether	73	5.412	5.413	(0.971)	38636	5.00000	5
*	47	Fluorobenzene	96	5.574	5.576	(1.000)	260701	50.0000	
	48	Trichloroethene	130	5.946	5.948	(1.067)	14188	5.00000	5
	49	Methylcyclohexane	83	6.167	6.157	(1.106)	14992	5.00000	5
	51	1,2-Dichloropropane	63	6.178	6.180	(1.108)	14051	5.00000	5
	52	Methyl Methacrylate	69	6.318	6.308	(1.133)	12536	5.00000	4
	53	Dibromomethane	93	6.306	6.308	(1.131)	9626	5.00000	5
	54	1,4-Dioxane	88	6.341	6.331	(1.137)	1738	100.000	62
	55	Bromodichloromethane	83	6.469	6.470	(1.160)	17427	5.00000	5
M	56	1,2-Dichloroethene (Total)	96				32450	10.0000	10
	57	2-Chloroethyl vinyl ether	63	6.817	6.807	(1.223)	9701	5.00000	4
	58	cis-1,3-Dichloropropene	75	6.980	6.970	(1.252)	19233	5.00000	5
	59	4-Methyl-2-pentanone	43	7.165	7.155	(1.285)	26580	5.00000	5
$	60	Toluene-d8	98	7.282	7.283	(0.806)	222271	50.0000	50
	61	Toluene	91	7.363	7.364	(1.321)	48289	5.00000	5
	62	trans-1,3-Dichloropropene	75	7.630	7.608	(1.369)	15727	5.00000	4
	63	Ethyl Methacrylate	69	7.758	7.736	(1.392)	11443	5.00000	4
	64	1,1,2-Trichloroethane	97	7.827	7.829	(1.404)	12755	5.00000	5
	65	Tetrachloroethene	164	8.013	8.015	(0.887)	10080	5.00000	5
	66	1,3-Dichloropropane	76	8.036	8.026	(0.889)	20837	5.00000	5
	67	2-Hexanone	43	8.211	8.142	(0.909)	5764	5.00000	1(TQ)
	68	Dibromochloromethane	129	8.315	8.305	(0.920)	13513	5.00000	5
	69	1,2-Dibromoethane	107	8.455	8.444	(0.936)	12886	5.00000	5
*	70	Chlorobenzene-d5	117	9.035	9.037	(1.000)	169458	50.0000	
	71	1-Chlorohexane	91	9.058	9.060	(1.003)	14921	5.00000	5(Q)
	72	Chlorobenzene	112	9.082	9.072	(1.005)	30801	5.00000	5
	73	1,1,1,2-Tetrachloroethane	131	9.175	9.176	(1.015)	11145	5.00000	5
	74	Ethylbenzene	106	9.233	9.222	(1.022)	14694	5.00000	5
	75	m,p-Xylene	106	9.384	9.373	(1.039)	39047	10.0000	10
	76	o-Xylene	106	9.895	9.896	(1.095)	18400	5.00000	5
	77	Styrene	104	9.918	9.919	(1.098)	29084	5.00000	4
	78	Bromoform	173	10.150	10.140	(1.123)	9307	5.00000	4

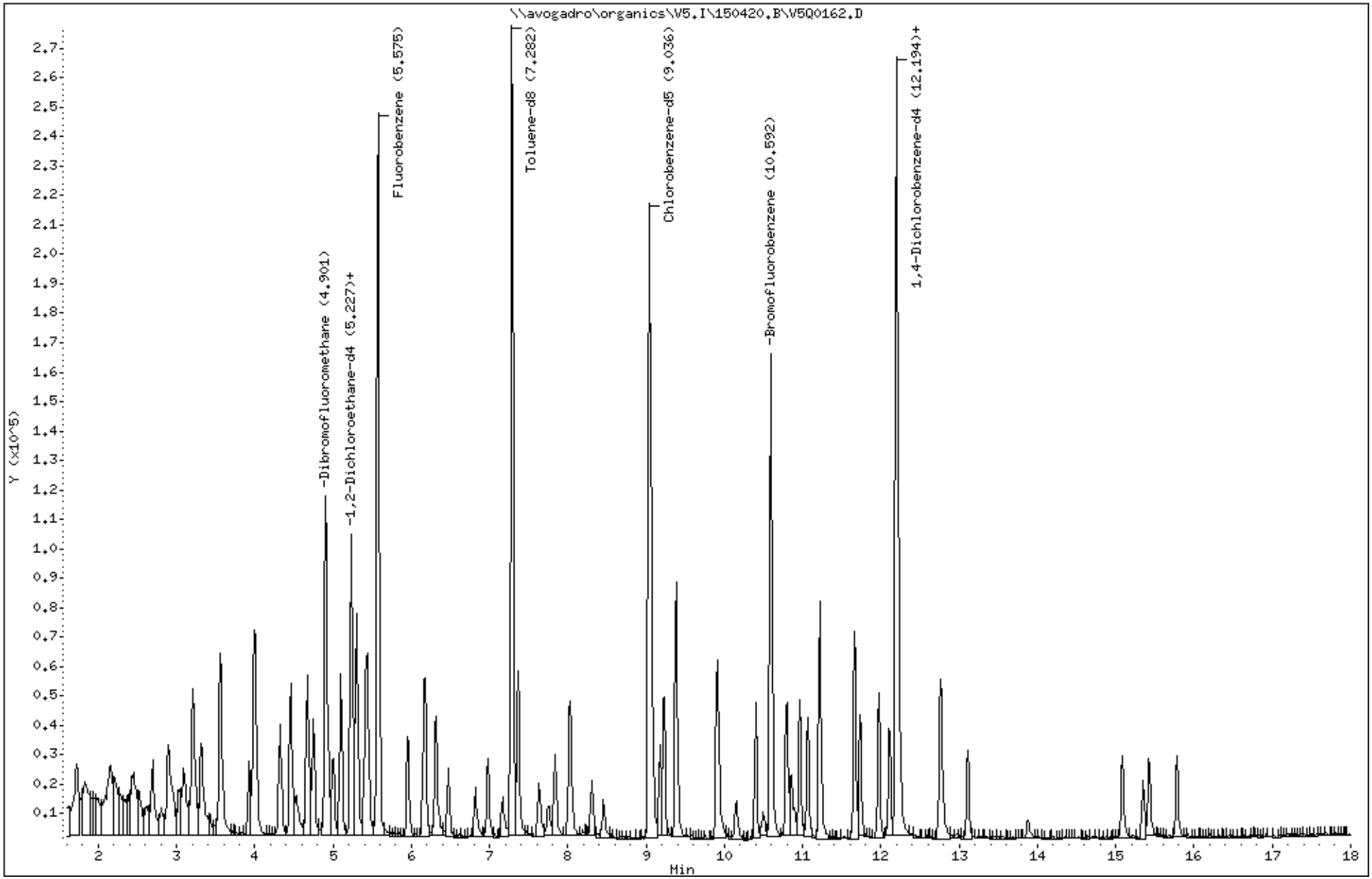
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Report Date: 21-Apr-2015 11:03

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	79	Isopropylbenzene	105	10.406	10.395	(1.152)	45370	5.00000	5
	80	trans-1,4-Dichloro-2-butene	75	10.498	10.477	(1.162)	3394	5.00000	3
$	81	Bromofluorobenzene	95	10.591	10.593	(1.172)	76174	50.0000	49
	82	Bromobenzene	156	10.800	10.790	(0.886)	11988	5.00000	5
	83	1,1,2,2-Tetrachloroethane	83	10.800	10.790	(0.886)	16570	5.00000	5
	84	1,2,3-Trichloropropane	75	10.858	10.848	(0.890)	17341	5.00000	5(Q)
	85	n-Propylbenzene	120	10.963	10.964	(0.899)	10772	5.00000	4(Q)
	86	2-Chlorotoluene	126	11.067	11.069	(0.908)	10672	5.00000	4(Q)
	87	4-Chlorotoluene	126	11.218	11.220	(0.920)	11575	5.00000	5
	88	1,3,5-Trimethylbenzene	105	11.218	11.208	(0.920)	35152	5.00000	5
	89	tert-Butylbenzene	119	11.660	11.661	(0.956)	35308	5.00000	4
	90	1,2,4-Trimethylbenzene	105	11.729	11.731	(0.962)	34387	5.00000	4
	91	sec-Butylbenzene	105	11.973	11.975	(0.982)	47683	5.00000	5
	92	1,3-Dichlorobenzene	146	12.113	12.103	(0.993)	24047	5.00000	5
	93	4-Isopropyltoluene	119	12.182	12.184	(0.999)	38760	5.00000	5
*	94	1,4-Dichlorobenzene-d4	152	12.194	12.195	(1.000)	88906	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	12.229	12.230	(1.003)	24692	5.00000	5
M	98	Xylene (Total)	106				57447	15.0000	14
	96	1,2-Dichlorobenzene	146	12.763	12.753	(1.047)	21652	5.00000	5
	97	n-Butylbenzene	91	12.775	12.764	(1.048)	30706	5.00000	5
	99	Hexachloroethane	117	13.111	13.113	(1.075)	8972	5.00000	4
	100	1,2-Dibromo-3-chloropropane	75	13.878	13.868	(1.138)	2272	5.00000	7
	102	1,2,4-Trichlorobenzene	180	15.086	15.075	(1.237)	14954	5.00000	4
	103	Hexachlorobutadiene	225	15.353	15.354	(1.259)	6853	5.00000	4
	104	Naphthalene	128	15.422	15.412	(1.265)	38441	5.00000	4
	105	1,2,3-Trichlorobenzene	180	15.782	15.772	(1.294)	14517	5.00000	4

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0162.D
Date : 20-APR-2015 17:19
Client ID: VSTD005B5
Instrument: V5.i
Sample Info: 5ML,VSTD005B5,VSTD005B5
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150420.B\V5Q0163.D
Report Date: 21-Apr-2015 11:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150420.B\V5Q0163.D
Lab Smp Id: VSTD020B5 Client Smp ID: VSTD020B5
Inj Date : 20-APR-2015 17:44
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD020B5,VSTD020B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150420.B\v5_8260W.m
Meth Date : 21-Apr-2015 10:46 wluo Quant Type: ISTD
Cal Date : 20-APR-2015 17:44 Cal File: V5Q0163.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	1.555	1.546	(0.279)	58368	20.0000	20
3	Freon114	85	1.660	1.651	(0.298)	54391	20.0000	21(Q)
2	Chloromethane	50	1.730	1.720	(0.310)	99123	20.0000	21
4	Vinyl Chloride	62	1.811	1.813	(0.325)	71520	20.0000	20
5	Bromomethane	94	2.148	2.139	(0.385)	56723	20.0000	20
6	Chloroethane	64	2.229	2.208	(0.400)	39050	20.0000	21
7	Trichlorofluoromethane	101	2.438	2.429	(0.437)	61118	20.0000	18
8	Ethanol	46	2.624	2.638	(0.471)	23771	2000.00	1700(Q)
9	Ether	59	2.693	2.684	(0.483)	58309	20.0000	20
10	Acrolein	55	2.798	2.800	(0.502)	25256	100.000	85(Q)
11	1,1-Dichloroethene	96	2.891	2.882	(0.519)	48721	20.0000	19(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.902	2.893	(0.521)	33427	20.0000	19
13	Acetone	58	2.949	2.928	(0.529)	9331	20.0000	19(Q)
14	Iodomethane	142	3.030	3.021	(0.544)	115292	20.0000	21
15	Carbon Disulfide	76	3.088	3.079	(0.554)	158589	20.0000	20
16	Acetonitrile	41	3.204	3.195	(0.575)	254611	200.000	210
17	Allyl Chloride	39	3.204	3.195	(0.575)	85564	20.0000	19
18	Methyl Acetate	43	3.228	3.219	(0.579)	122625	20.0000	21
19	Methylene Chloride	84	3.309	3.311	(0.594)	67406	20.0000	20
20	tert-Butanol	59	3.425	3.428	(0.615)	14051	40.0000	36
21	Acrylonitrile	53	3.530	3.520	(0.633)	31636	20.0000	20
22	trans-1,2-Dichloroethene	96	3.553	3.544	(0.637)	65466	20.0000	20
23	Methyl tert-butyl ether	73	3.564	3.555	(0.640)	142805	20.0000	20

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	1,1-Dichloroethane	63	3.924	3.915	(0.704)	112747	20.0000	20
	25	Vinyl acetate	43	3.983	3.985	(0.715)	180467	20.0000	20
	26	Diisopropyl Ether	45	3.994	3.997	(0.717)	265596	20.0000	20
	27	2-Chloro-1,3-Butadiene	53	4.017	4.008	(0.721)	85307	20.0000	21
	28	Ethyl tert-butyl ether	59	4.319	4.322	(0.775)	174969	20.0000	20
	29	cis-1,2-Dichloroethene	96	4.459	4.450	(0.800)	65196	20.0000	20
	30	2-Butanone	72	4.470	4.473	(0.802)	10292	20.0000	20(Q)
	31	2,2-Dichloropropane	77	4.459	4.461	(0.800)	59057	20.0000	20
	32	Propionitrile	54	4.517	4.519	(0.810)	118642	200.000	210
	33	Methacrylonitrile	41	4.656	4.659	(0.835)	109453	40.0000	41
	34	Bromochloromethane	128	4.679	4.682	(0.840)	36382	20.0000	21
	35	Tetrahydrofuran	72	4.737	4.728	(0.850)	17759	40.0000	40
	36	Chloroform	83	4.749	4.751	(0.852)	97464	20.0000	21
$	37	Dibromofluoromethane	113	4.900	4.902	(0.879)	74255	50.0000	49
	38	1,1,1-Trichloroethane	97	4.935	4.937	(0.885)	69669	20.0000	20
	39	Cyclohexane	56	5.004	4.995	(0.898)	67420	20.0000	20
	40	1,1-Dichloropropene	110	5.097	5.088	(0.915)	28534	20.0000	21
	41	Carbon Tetrachloride	117	5.109	5.100	(0.917)	66198	20.0000	20
	42	Isobutyl Alcohol	43	5.213	5.204	(0.935)	63285	400.000	370
$	43	1,2-Dichloroethane-d4	102	5.237	5.228	(0.940)	17932	50.0000	51
	44	Benzene	78	5.295	5.297	(0.950)	211374	20.0000	20
	45	1,2-Dichloroethane	62	5.306	5.309	(0.952)	80883	20.0000	21
	46	tert-Amyl methyl ether	73	5.411	5.413	(0.971)	160471	20.0000	21
*	47	Fluorobenzene	96	5.573	5.576	(1.000)	253478	50.0000	
	48	Trichloroethene	130	5.957	5.948	(1.069)	58425	20.0000	20
	49	Methylcyclohexane	83	6.166	6.157	(1.106)	58826	20.0000	20
	51	1,2-Dichloropropane	63	6.177	6.180	(1.108)	58937	20.0000	20
	52	Methyl Methacrylate	69	6.305	6.308	(1.131)	55910	20.0000	20
	53	Dibromomethane	93	6.305	6.308	(1.131)	40192	20.0000	20
	54	1,4-Dioxane	88	6.328	6.331	(1.135)	8584	400.000	320
	55	Bromodichloromethane	83	6.479	6.470	(1.163)	69794	20.0000	20
M	56	1,2-Dichloroethene (Total)	96				130662	40.0000	41
	57	2-Chloroethyl vinyl ether	63	6.816	6.807	(1.223)	50686	20.0000	20
	58	cis-1,3-Dichloropropene	75	6.979	6.970	(1.252)	83018	20.0000	21
	59	4-Methyl-2-pentanone	43	7.153	7.155	(1.283)	102239	20.0000	19
$	60	Toluene-d8	98	7.281	7.283	(0.806)	220178	50.0000	51
	61	Toluene	91	7.362	7.364	(1.321)	202755	20.0000	21
	62	trans-1,3-Dichloropropene	75	7.617	7.608	(1.367)	78489	20.0000	22
	63	Ethyl Methacrylate	69	7.745	7.736	(1.390)	53703	20.0000	20
	64	1,1,2-Trichloroethane	97	7.826	7.829	(1.404)	50019	20.0000	20
	65	Tetrachloroethene	164	8.012	8.015	(0.887)	42085	20.0000	21
	66	1,3-Dichloropropane	76	8.035	8.026	(0.889)	85615	20.0000	22
	67	2-Hexanone	43	8.163	8.142	(0.904)	62076	20.0000	18
	68	Dibromochloromethane	129	8.303	8.305	(0.919)	60431	20.0000	22
	69	1,2-Dibromoethane	107	8.454	8.444	(0.936)	57336	20.0000	22
*	70	Chlorobenzene-d5	117	9.034	9.037	(1.000)	165025	50.0000	
	71	1-Chlorohexane	91	9.057	9.060	(1.003)	62500	20.0000	20(Q)
	72	Chlorobenzene	112	9.069	9.072	(1.004)	129802	20.0000	21
	73	1,1,1,2-Tetrachloroethane	131	9.185	9.176	(1.017)	44027	20.0000	19
	74	Ethylbenzene	106	9.220	9.222	(1.021)	60067	20.0000	20
	75	m,p-Xylene	106	9.383	9.373	(1.039)	160018	40.0000	40
	76	o-Xylene	106	9.894	9.896	(1.095)	76175	20.0000	20
	77	Styrene	104	9.917	9.919	(1.098)	128975	20.0000	20
	78	Bromoform	173	10.137	10.140	(1.122)	40351	20.0000	20

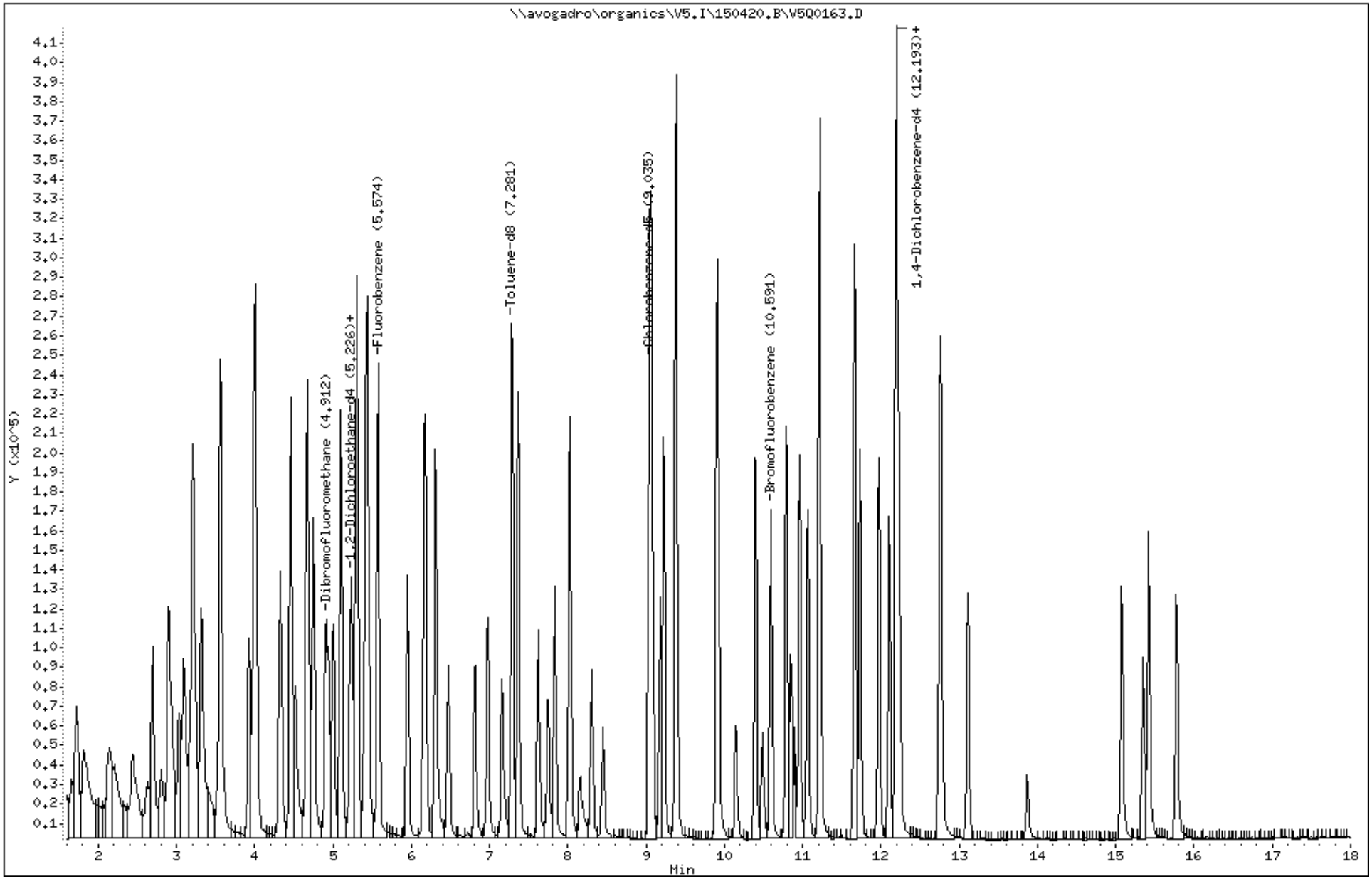
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Report Date: 21-Apr-2015 11:03

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	79 Isopropylbenzene	105	10.393	10.395	(1.150)	190556	20.0000	20
	80 trans-1,4-Dichloro-2-butene	75	10.486	10.477	(1.161)	18445	20.0000	19
$	81 Bromofluorobenzene	95	10.590	10.593	(1.172)	76943	50.0000	51
	82 Bromobenzene	156	10.788	10.790	(0.885)	52515	20.0000	20
	83 1,1,2,2-Tetrachloroethane	83	10.799	10.790	(0.886)	68944	20.0000	20
	84 1,2,3-Trichloropropane	75	10.846	10.848	(0.890)	73614	20.0000	20
	85 n-Propylbenzene	120	10.962	10.964	(0.899)	45950	20.0000	19
	86 2-Chlorotoluene	126	11.066	11.069	(0.908)	47028	20.0000	19
	87 4-Chlorotoluene	126	11.217	11.220	(0.920)	49143	20.0000	20
	88 1,3,5-Trimethylbenzene	105	11.217	11.208	(0.920)	149665	20.0000	20
	89 tert-Butylbenzene	119	11.659	11.661	(0.956)	148477	20.0000	19
	90 1,2,4-Trimethylbenzene	105	11.728	11.731	(0.962)	150128	20.0000	20
	91 sec-Butylbenzene	105	11.972	11.975	(0.982)	196717	20.0000	20
	92 1,3-Dichlorobenzene	146	12.100	12.103	(0.992)	95329	20.0000	20
	93 4-Isopropyltoluene	119	12.181	12.184	(0.999)	164705	20.0000	20
*	94 1,4-Dichlorobenzene-d4	152	12.193	12.195	(1.000)	89295	50.0000	(Q)
	95 1,4-Dichlorobenzene	146	12.228	12.230	(1.003)	105939	20.0000	20
M	98 Xylene (Total)	106				236193	60.0000	60
	96 1,2-Dichlorobenzene	146	12.750	12.753	(1.046)	90972	20.0000	20
	97 n-Butylbenzene	91	12.774	12.764	(1.048)	129496	20.0000	20
	99 Hexachloroethane	117	13.110	13.113	(1.075)	37361	20.0000	19
	100 1,2-Dibromo-3-chloropropane	75	13.865	13.868	(1.137)	11661	20.0000	21
	102 1,2,4-Trichlorobenzene	180	15.073	15.075	(1.236)	68345	20.0000	20
	103 Hexachlorobutadiene	225	15.352	15.354	(1.259)	29119	20.0000	19
	104 Naphthalene	128	15.421	15.412	(1.265)	184482	20.0000	21
	105 1,2,3-Trichlorobenzene	180	15.770	15.772	(1.293)	66919	20.0000	20

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0163.D
Date : 20-APR-2015 17:44
Client ID: VSTD020B5
Instrument: V5.i
Sample Info: 5ML,VSTD020B5,VSTD020B5
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150420.B\V5Q0164.D
Report Date: 21-Apr-2015 11:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150420.B\V5Q0164.D
Lab Smp Id: VSTD050B5 Client Smp ID: VSTD050B5
Inj Date : 20-APR-2015 18:10
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD050B5,VSTD050B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150420.B\v5_8260W.m
Meth Date : 21-Apr-2015 10:46 wluo Quant Type: ISTD
Cal Date : 20-APR-2015 18:10 Cal File: V5Q0164.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	1.546	1.546	(0.277)	135398	50.0000	44
3	Freon114	85	1.651	1.651	(0.296)	149402	50.0000	55(Q)
2	Chloromethane	50	1.720	1.720	(0.309)	247962	50.0000	50
4	Vinyl Chloride	62	1.813	1.813	(0.325)	182691	50.0000	49
5	Bromomethane	94	2.139	2.139	(0.384)	139147	50.0000	48
6	Chloroethane	64	2.208	2.208	(0.396)	102646	50.0000	53
7	Trichlorofluoromethane	101	2.429	2.429	(0.436)	154390	50.0000	45
8	Ethanol	46	2.638	2.638	(0.473)	96460	5000.00	6800(Q)
9	Ether	59	2.684	2.684	(0.481)	153151	50.0000	52(Q)
10	Acrolein	55	2.800	2.800	(0.502)	80857	250.000	260
11	1,1-Dichloroethene	96	2.882	2.882	(0.517)	134816	50.0000	50(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.893	2.893	(0.519)	94587	50.0000	52
13	Acetone	58	2.928	2.928	(0.525)	28138	50.0000	55
14	Iodomethane	142	3.021	3.021	(0.542)	296282	50.0000	51
15	Carbon Disulfide	76	3.079	3.079	(0.552)	414166	50.0000	50
16	Acetonitrile	41	3.195	3.195	(0.573)	682503	500.000	540
17	Allyl Chloride	39	3.195	3.195	(0.573)	240287	50.0000	52
18	Methyl Acetate	43	3.219	3.219	(0.577)	317814	50.0000	52
19	Methylene Chloride	84	3.311	3.311	(0.594)	168629	50.0000	49
20	tert-Butanol	59	3.428	3.428	(0.615)	46189	100.000	110
21	Acrylonitrile	53	3.520	3.520	(0.631)	87996	50.0000	54
22	trans-1,2-Dichloroethene	96	3.544	3.544	(0.636)	167238	50.0000	50
23	Methyl tert-butyl ether	73	3.555	3.555	(0.638)	377007	50.0000	51

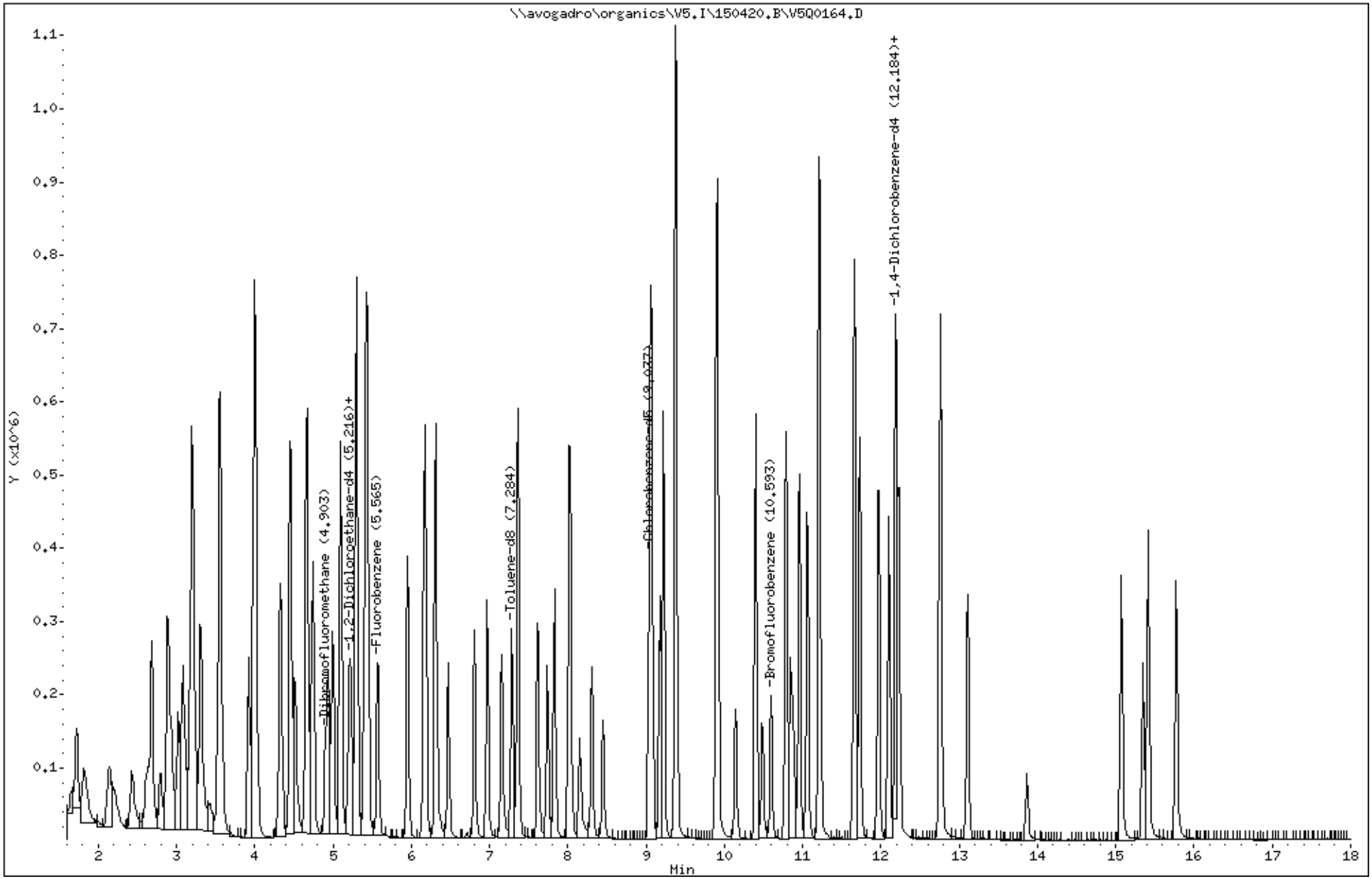
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	1,1-Dichloroethane	63	3.915	3.915	(0.702)	279460	50.0000	48
25	Vinyl acetate	43	3.985	3.985	(0.715)	489901	50.0000	52
26	Diisopropyl Ether	45	3.997	3.997	(0.717)	691502	50.0000	50
27	2-Chloro-1,3-Butadiene	53	4.008	4.008	(0.719)	219426	50.0000	51
28	Ethyl tert-butyl ether	59	4.322	4.322	(0.775)	453909	50.0000	51
29	cis-1,2-Dichloroethene	96	4.450	4.450	(0.798)	166848	50.0000	50
30	2-Butanone	72	4.473	4.473	(0.802)	29168	50.0000	54
31	2,2-Dichloropropane	77	4.461	4.461	(0.800)	152643	50.0000	49
32	Propionitrile	54	4.519	4.519	(0.810)	322085	500.000	540
33	Methacrylonitrile	41	4.659	4.659	(0.835)	290271	100.000	100
34	Bromochloromethane	128	4.682	4.682	(0.840)	92155	50.0000	51
35	Tetrahydrofuran	72	4.728	4.728	(0.848)	48689	100.000	100
36	Chloroform	83	4.751	4.751	(0.852)	241556	50.0000	50
$ 37	Dibromofluoromethane	113	4.902	4.902	(0.879)	78794	50.0000	50
38	1,1,1-Trichloroethane	97	4.937	4.937	(0.885)	187641	50.0000	52
39	Cyclohexane	56	4.995	4.995	(0.896)	180489	50.0000	51
40	1,1-Dichloropropene	110	5.088	5.088	(0.913)	73278	50.0000	52
41	Carbon Tetrachloride	117	5.100	5.100	(0.915)	177177	50.0000	53
42	Isobutyl Alcohol	43	5.204	5.204	(0.933)	209233	1000.00	1200
$ 43	1,2-Dichloroethane-d4	102	5.228	5.228	(0.938)	18209	50.0000	50
44	Benzene	78	5.297	5.297	(0.950)	532500	50.0000	49
45	1,2-Dichloroethane	62	5.309	5.309	(0.952)	201874	50.0000	50
46	tert-Amyl methyl ether	73	5.413	5.413	(0.971)	413217	50.0000	51
* 47	Fluorobenzene	96	5.576	5.576	(1.000)	263387	50.0000	
48	Trichloroethene	130	5.948	5.948	(1.067)	151309	50.0000	51
49	Methylcyclohexane	83	6.157	6.157	(1.104)	159166	50.0000	52
51	1,2-Dichloropropane	63	6.180	6.180	(1.108)	154785	50.0000	51
52	Methyl Methacrylate	69	6.308	6.308	(1.131)	145605	50.0000	51
53	Dibromomethane	93	6.308	6.308	(1.131)	105890	50.0000	52
54	1,4-Dioxane	88	6.331	6.331	(1.135)	27556	1000.00	980(Q)
55	Bromodichloromethane	83	6.470	6.470	(1.160)	178303	50.0000	50
M 56	1,2-Dichloroethene (Total)	96				334086	100.000	100
57	2-Chloroethyl vinyl ether	63	6.807	6.807	(1.221)	137047	50.0000	53
58	cis-1,3-Dichloropropene	75	6.970	6.970	(1.250)	217381	50.0000	53
59	4-Methyl-2-pentanone	43	7.155	7.155	(1.283)	283420	50.0000	52
$ 60	Toluene-d8	98	7.283	7.283	(0.806)	227839	50.0000	51
61	Toluene	91	7.364	7.364	(1.321)	517613	50.0000	51
62	trans-1,3-Dichloropropene	75	7.608	7.608	(1.364)	202072	50.0000	53
63	Ethyl Methacrylate	69	7.736	7.736	(1.387)	150346	50.0000	53
64	1,1,2-Trichloroethane	97	7.829	7.829	(1.404)	130331	50.0000	50
65	Tetrachloroethene	164	8.015	8.015	(0.887)	110152	50.0000	52
66	1,3-Dichloropropane	76	8.026	8.026	(0.888)	214564	50.0000	52
67	2-Hexanone	43	8.142	8.142	(0.901)	184914	50.0000	52
68	Dibromochloromethane	129	8.305	8.305	(0.919)	153101	50.0000	52
69	1,2-Dibromoethane	107	8.444	8.444	(0.934)	148338	50.0000	54
* 70	Chlorobenzene-d5	117	9.037	9.037	(1.000)	171538	50.0000	
71	1-Chlorohexane	91	9.060	9.060	(1.003)	168916	50.0000	52
72	Chlorobenzene	112	9.072	9.072	(1.004)	338609	50.0000	52
73	1,1,1,2-Tetrachloroethane	131	9.176	9.176	(1.015)	115982	50.0000	48
74	Ethylbenzene	106	9.222	9.222	(1.021)	163905	50.0000	51
75	m,p-Xylene	106	9.373	9.373	(1.037)	436905	100.000	100
76	o-Xylene	106	9.896	9.896	(1.095)	219710	50.0000	55
77	Styrene	104	9.919	9.919	(1.098)	379631	50.0000	56
78	Bromoform	173	10.140	10.140	(1.122)	118528	50.0000	56

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	79	Isopropylbenzene	105	10.395	10.395	(1.150)	527324	50.0000	54
	80	trans-1,4-Dichloro-2-butene	75	10.477	10.477	(1.159)	54225	50.0000	55
$	81	Bromofluorobenzene	95	10.593	10.593	(1.172)	82646	50.0000	52
	82	Bromobenzene	156	10.790	10.790	(0.885)	135468	50.0000	53
	83	1,1,2,2-Tetrachloroethane	83	10.790	10.790	(0.885)	176038	50.0000	51
	84	1,2,3-Trichloropropane	75	10.848	10.848	(0.890)	188768	50.0000	50
	85	n-Propylbenzene	120	10.964	10.964	(0.899)	121888	50.0000	51
	86	2-Chlorotoluene	126	11.069	11.069	(0.908)	120103	50.0000	50
	87	4-Chlorotoluene	126	11.220	11.220	(0.920)	127453	50.0000	52
	88	1,3,5-Trimethylbenzene	105	11.208	11.208	(0.919)	390305	50.0000	51
	89	tert-Butylbenzene	119	11.661	11.661	(0.956)	396782	50.0000	50
	90	1,2,4-Trimethylbenzene	105	11.731	11.731	(0.962)	401551	50.0000	53
	91	sec-Butylbenzene	105	11.975	11.975	(0.982)	504284	50.0000	52
	92	1,3-Dichlorobenzene	146	12.103	12.103	(0.992)	245456	50.0000	50
	93	4-Isopropyltoluene	119	12.184	12.184	(0.999)	422282	50.0000	51
*	94	1,4-Dichlorobenzene-d4	152	12.195	12.195	(1.000)	89186	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	12.230	12.230	(1.003)	260578	50.0000	49
M	98	Xylene (Total)	106				656615	150.000	160
	96	1,2-Dichlorobenzene	146	12.753	12.753	(1.046)	252363	50.0000	55
	97	n-Butylbenzene	91	12.764	12.764	(1.047)	365223	50.0000	56
	99	Hexachloroethane	117	13.113	13.113	(1.075)	101636	50.0000	52
	100	1,2-Dibromo-3-chloropropane	75	13.868	13.868	(1.137)	28190	50.0000	47
	102	1,2,4-Trichlorobenzene	180	15.075	15.075	(1.236)	179351	50.0000	52
	103	Hexachlorobutadiene	225	15.354	15.354	(1.259)	77812	50.0000	52
	104	Naphthalene	128	15.412	15.412	(1.264)	492525	50.0000	56
	105	1,2,3-Trichlorobenzene	180	15.772	15.772	(1.293)	178991	50.0000	54

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0164.D
Date : 20-APR-2015 18:10
Client ID: VSTD050B5
Instrument: V5.i
Sample Info: 5ML,VSTD050B5,VSTD050B5
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150420.B\V5Q0165.D
Report Date: 21-Apr-2015 11:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150420.B\V5Q0165.D
Lab Smp Id: VSTD100B5 Client Smp ID: VSTD100B5
Inj Date : 20-APR-2015 18:36
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD100B5,VSTD100B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150420.B\v5_8260W.m
Meth Date : 21-Apr-2015 10:46 wluo Quant Type: ISTD
Cal Date : 20-APR-2015 18:36 Cal File: V5Q0165.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	1.570	1.546	(0.282)	294116	100.000	94
3	Freon114	85	1.663	1.651	(0.298)	282086	100.000	100(Q)
2	Chloromethane	50	1.733	1.720	(0.311)	492362	100.000	98
4	Vinyl Chloride	62	1.814	1.813	(0.325)	363843	100.000	96
5	Bromomethane	94	2.151	2.139	(0.386)	276135	100.000	94
6	Chloroethane	64	2.209	2.208	(0.396)	197368	100.000	100
7	Trichlorofluoromethane	101	2.441	2.429	(0.438)	400894	100.000	110
8	Ethanol	46	2.627	2.638	(0.471)	63626	10000.0	4400(Q)
9	Ether	59	2.685	2.684	(0.482)	301231	100.000	100
10	Acrolein	55	2.801	2.800	(0.502)	167390	500.000	530
11	1,1-Dichloroethene	96	2.894	2.882	(0.519)	252507	100.000	92(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.894	2.893	(0.519)	169492	100.000	91(Q)
13	Acetone	58	2.940	2.928	(0.527)	57565	100.000	110(Q)
14	Iodomethane	142	3.022	3.021	(0.542)	589177	100.000	100
15	Carbon Disulfide	76	3.091	3.079	(0.554)	831315	100.000	99
16	Acetonitrile	41	3.196	3.195	(0.573)	1290030	1000.00	1000
17	Allyl Chloride	39	3.196	3.195	(0.573)	476615	100.000	100
18	Methyl Acetate	43	3.219	3.219	(0.577)	615817	100.000	98
19	Methylene Chloride	84	3.312	3.311	(0.594)	343104	100.000	97
20	tert-Butanol	59	3.428	3.428	(0.615)	70084	200.000	170
21	Acrylonitrile	53	3.521	3.520	(0.631)	174345	100.000	100
22	trans-1,2-Dichloroethene	96	3.556	3.544	(0.638)	329394	100.000	97
23	Methyl tert-butyl ether	73	3.567	3.555	(0.640)	740089	100.000	99

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	1,1-Dichloroethane	63	3.916	3.915	(0.702)	582820	100.000	99
	25	Vinyl acetate	43	3.974	3.985	(0.713)	942225	100.000	98
	26	Diisopropyl Ether	45	3.997	3.997	(0.717)	1321910	100.000	94
	27	2-Chloro-1,3-Butadiene	53	4.009	4.008	(0.719)	437811	100.000	100
	28	Ethyl tert-butyl ether	59	4.322	4.322	(0.775)	901997	100.000	99
	29	cis-1,2-Dichloroethene	96	4.450	4.450	(0.798)	335984	100.000	99
	30	2-Butanone	72	4.462	4.473	(0.800)	57310	100.000	100
	31	2,2-Dichloropropane	77	4.462	4.461	(0.800)	295050	100.000	93
	32	Propionitrile	54	4.508	4.519	(0.808)	638582	1000.00	1000
	33	Methacrylonitrile	41	4.659	4.659	(0.835)	579357	200.000	200
	34	Bromochloromethane	128	4.671	4.682	(0.838)	183934	100.000	100
	35	Tetrahydrofuran	72	4.729	4.728	(0.848)	94925	200.000	200
	36	Chloroform	83	4.752	4.751	(0.852)	486867	100.000	98
$	37	Dibromofluoromethane	113	4.903	4.902	(0.879)	80004	50.0000	50
	38	1,1,1-Trichloroethane	97	4.938	4.937	(0.885)	377400	100.000	100
	39	Cyclohexane	56	4.996	4.995	(0.896)	371854	100.000	100
	40	1,1-Dichloropropene	110	5.089	5.088	(0.913)	151177	100.000	100
	41	Carbon Tetrachloride	117	5.100	5.100	(0.915)	358583	100.000	100
	42	Isobutyl Alcohol	43	5.193	5.204	(0.931)	399026	2000.00	2200
$	43	1,2-Dichloroethane-d4	102	5.228	5.228	(0.938)	18577	50.0000	50
	44	Benzene	78	5.298	5.297	(0.950)	1060098	100.000	96
	45	1,2-Dichloroethane	62	5.309	5.309	(0.952)	399211	100.000	97
	46	tert-Amyl methyl ether	73	5.414	5.413	(0.971)	803889	100.000	98
*	47	Fluorobenzene	96	5.576	5.576	(1.000)	268859	50.0000	
	48	Trichloroethene	130	5.948	5.948	(1.067)	308955	100.000	100
	49	Methylcyclohexane	83	6.157	6.157	(1.104)	312054	100.000	99
	51	1,2-Dichloropropane	63	6.180	6.180	(1.108)	303404	100.000	97
	52	Methyl Methacrylate	69	6.308	6.308	(1.131)	303820	100.000	100
	53	Dibromomethane	93	6.308	6.308	(1.131)	210189	100.000	100
	54	1,4-Dioxane	88	6.331	6.331	(1.135)	75721	2000.00	2600
	55	Bromodichloromethane	83	6.471	6.470	(1.160)	362071	100.000	99
M	56	1,2-Dichloroethene (Total)	96				665378	200.000	200
	57	2-Chloroethyl vinyl ether	63	6.807	6.807	(1.221)	278081	100.000	110
	58	cis-1,3-Dichloropropene	75	6.970	6.970	(1.250)	434400	100.000	100
	59	4-Methyl-2-pentanone	43	7.156	7.155	(1.283)	568403	100.000	100
$	60	Toluene-d8	98	7.284	7.283	(0.806)	226711	50.0000	50
	61	Toluene	91	7.365	7.364	(1.321)	1013101	100.000	98
	62	trans-1,3-Dichloropropene	75	7.609	7.608	(1.364)	403266	100.000	100
	63	Ethyl Methacrylate	69	7.737	7.736	(1.387)	308772	100.000	110
	64	1,1,2-Trichloroethane	97	7.829	7.829	(1.404)	258423	100.000	97
	65	Tetrachloroethene	164	8.015	8.015	(0.887)	223228	100.000	100
	66	1,3-Dichloropropane	76	8.027	8.026	(0.888)	419683	100.000	100
	67	2-Hexanone	43	8.143	8.142	(0.901)	388272	100.000	110
	68	Dibromochloromethane	129	8.306	8.305	(0.919)	310773	100.000	100
	69	1,2-Dibromoethane	107	8.445	8.444	(0.934)	297043	100.000	110
*	70	Chlorobenzene-d5	117	9.037	9.037	(1.000)	172613	50.0000	
	71	1-Chlorohexane	91	9.060	9.060	(1.003)	343401	100.000	100
	72	Chlorobenzene	112	9.072	9.072	(1.004)	692199	100.000	100
	73	1,1,1,2-Tetrachloroethane	131	9.177	9.176	(1.015)	255029	100.000	100
	74	Ethylbenzene	106	9.223	9.222	(1.021)	350706	100.000	110
	75	m,p-Xylene	106	9.374	9.373	(1.037)	881151	200.000	210
	76	o-Xylene	106	9.897	9.896	(1.095)	432032	100.000	110
	77	Styrene	104	9.908	9.919	(1.096)	754241	100.000	110
	78	Bromoform	173	10.140	10.140	(1.122)	233368	100.000	110

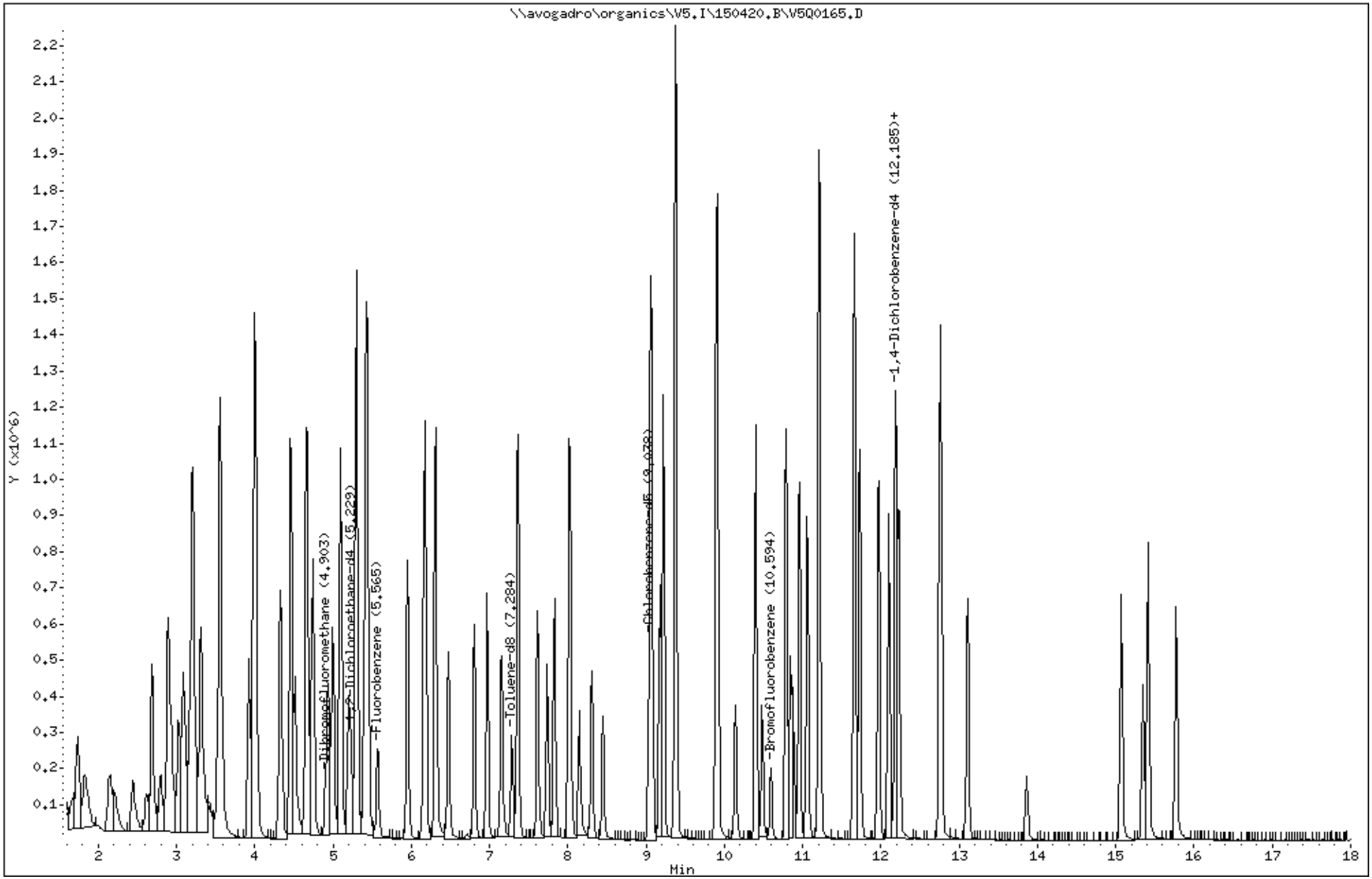
Data File: \\avogadro\organics\V5.I\150420.B\V5Q0165.D
Report Date: 21-Apr-2015 11:03

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	79 Isopropylbenzene	105	10.396	10.395	(1.150)	1038138	100.000	100
	80 trans-1,4-Dichloro-2-butene	75	10.477	10.477	(1.159)	115302	100.000	120
$	81 Bromofluorobenzene	95	10.593	10.593	(1.172)	82224	50.0000	52
	82 Bromobenzene	156	10.791	10.790	(0.885)	282654	100.000	110
	83 1,1,2,2-Tetrachloroethane	83	10.791	10.790	(0.885)	354672	100.000	100
	84 1,2,3-Trichloropropane	75	10.849	10.848	(0.890)	390506	100.000	100
	85 n-Propylbenzene	120	10.965	10.964	(0.899)	249150	100.000	100
	86 2-Chlorotoluene	126	11.058	11.069	(0.907)	245467	100.000	100
	87 4-Chlorotoluene	126	11.220	11.220	(0.920)	254509	100.000	100
	88 1,3,5-Trimethylbenzene	105	11.209	11.208	(0.919)	784830	100.000	100
	89 tert-Butylbenzene	119	11.662	11.661	(0.956)	838512	100.000	100
	90 1,2,4-Trimethylbenzene	105	11.731	11.731	(0.962)	822542	100.000	100
	91 sec-Butylbenzene	105	11.975	11.975	(0.982)	1042209	100.000	100
	92 1,3-Dichlorobenzene	146	12.103	12.103	(0.992)	505021	100.000	100
	93 4-Isopropyltoluene	119	12.184	12.184	(0.999)	852463	100.000	100
*	94 1,4-Dichlorobenzene-d4	152	12.196	12.195	(1.000)	90904	50.0000	(Q)
	95 1,4-Dichlorobenzene	146	12.231	12.230	(1.003)	525823	100.000	96
M	98 Xylene (Total)	106				1313183	300.000	320
	96 1,2-Dichlorobenzene	146	12.753	12.753	(1.046)	505422	100.000	110
	97 n-Butylbenzene	91	12.765	12.764	(1.047)	717569	100.000	110
	99 Hexachloroethane	117	13.113	13.113	(1.075)	209154	100.000	100
	100 1,2-Dibromo-3-chloropropane	75	13.857	13.868	(1.136)	59697	100.000	94
	102 1,2,4-Trichlorobenzene	180	15.076	15.075	(1.236)	341445	100.000	98
	103 Hexachlorobutadiene	225	15.355	15.354	(1.259)	148384	100.000	97
	104 Naphthalene	128	15.413	15.412	(1.264)	937165	100.000	100
	105 1,2,3-Trichlorobenzene	180	15.773	15.772	(1.293)	320852	100.000	95

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0165.D
Date : 20-APR-2015 18:36
Client ID: VSTD100B5
Instrument: V5.i
Sample Info: 5ML,VSTD100B5,VSTD100B5
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150420.B\V5Q0166.D
Report Date: 21-Apr-2015 11:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150420.B\V5Q0166.D
Lab Smp Id: VSTD200B5 Client Smp ID: VSTD200B5
Inj Date : 20-APR-2015 19:01
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD200B5,VSTD200B5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150420.B\v5_8260W.m
Meth Date : 21-Apr-2015 10:46 wluo Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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	1.542	1.546	(0.277)	568104	200.000	180
3	Freon114	85	1.646	1.651	(0.296)	551892	200.000	200(A)
2	Chloromethane	50	1.727	1.720	(0.310)	957190	200.000	190
4	Vinyl Chloride	62	1.809	1.813	(0.325)	714831	200.000	190
5	Bromomethane	94	2.134	2.139	(0.383)	522208	200.000	180
6	Chloroethane	64	2.204	2.208	(0.396)	381450	200.000	190
7	Trichlorofluoromethane	101	2.424	2.429	(0.435)	783621	200.000	230(A)
8	Ethanol	46	2.610	2.638	(0.469)	425060	20000.0	30000(A)
9	Ether	59	2.680	2.684	(0.481)	596564	200.000	200
10	Acrolein	55	2.784	2.800	(0.500)	365318	1000.00	1200(A)
11	1,1-Dichloroethene	96	2.877	2.882	(0.516)	636969	200.000	240(A)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.889	2.893	(0.519)	404379	200.000	220(A)
13	Acetone	58	2.924	2.928	(0.525)	108394	200.000	210(A)
14	Iodomethane	142	3.016	3.021	(0.541)	1165284	200.000	200
15	Carbon Disulfide	76	3.074	3.079	(0.552)	1535503	200.000	180
16	Acetonitrile	41	3.191	3.195	(0.573)	2543205	2000.00	2000
17	Allyl Chloride	39	3.191	3.195	(0.573)	928160	200.000	200(A)
18	Methyl Acetate	43	3.214	3.219	(0.577)	1196460	200.000	190
19	Methylene Chloride	84	3.307	3.311	(0.594)	664335	200.000	190
20	tert-Butanol	59	3.411	3.428	(0.612)	142541	400.000	350
21	Acrylonitrile	53	3.516	3.520	(0.631)	357911	200.000	220(A)
22	trans-1,2-Dichloroethene	96	3.551	3.544	(0.637)	644978	200.000	190
23	Methyl tert-butyl ether	73	3.562	3.555	(0.639)	1403706	200.000	190

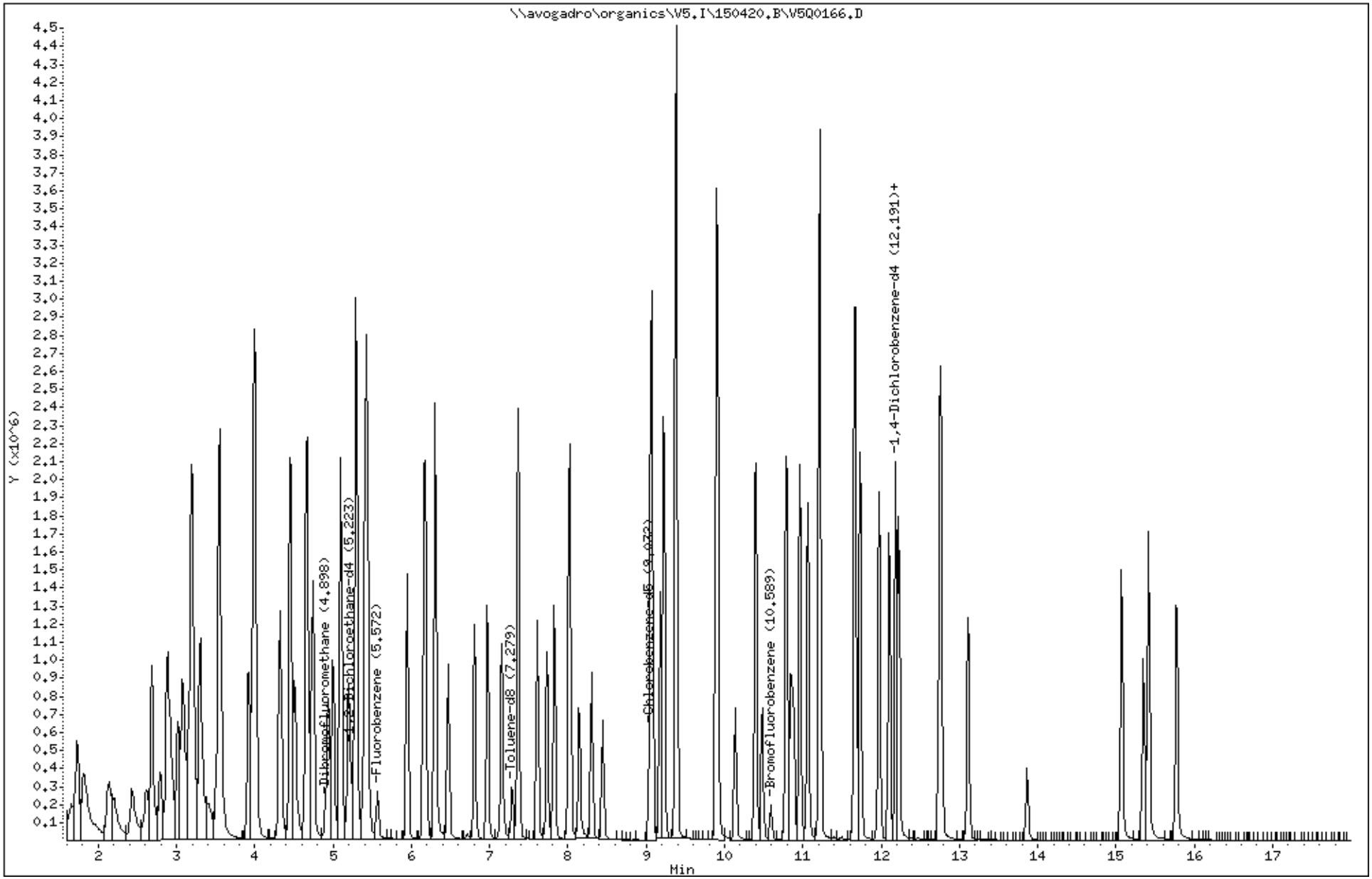
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	1,1-Dichloroethane	63	3.911	3.915	(0.702)	1118377	200.000	190
25	Vinyl acetate	43	3.969	3.985	(0.712)	1842408	200.000	190
26	Diisopropyl Ether	45	3.992	3.997	(0.717)	2559924	200.000	180
27	2-Chloro-1,3-Butadiene	53	4.004	4.008	(0.719)	859462	200.000	200
28	Ethyl tert-butyl ether	59	4.317	4.322	(0.775)	1710724	200.000	190
29	cis-1,2-Dichloroethene	96	4.445	4.450	(0.798)	659972	200.000	200
30	2-Butanone	72	4.456	4.473	(0.800)	114757	200.000	210(A)
31	2,2-Dichloropropane	77	4.456	4.461	(0.800)	533896	200.000	170
32	Propionitrile	54	4.503	4.519	(0.808)	1234961	2000.00	2100(A)
33	Methacrylonitrile	41	4.654	4.659	(0.835)	1135424	400.000	400(A)
34	Bromochloromethane	128	4.677	4.682	(0.840)	358323	200.000	200
35	Tetrahydrofuran	72	4.724	4.728	(0.848)	195457	400.000	420(A)
36	Chloroform	83	4.747	4.751	(0.852)	945378	200.000	190
$ 37	Dibromofluoromethane	113	4.898	4.902	(0.879)	79642	50.0000	50
38	1,1,1-Trichloroethane	97	4.933	4.937	(0.885)	703898	200.000	190
39	Cyclohexane	56	4.991	4.995	(0.896)	690889	200.000	200
40	1,1-Dichloropropene	110	5.095	5.088	(0.915)	297324	200.000	210(A)
41	Carbon Tetrachloride	117	5.095	5.100	(0.915)	723133	200.000	210(A)
42	Isobutyl Alcohol	43	5.200	5.204	(0.933)	795263	4000.00	4400(A)
$ 43	1,2-Dichloroethane-d4	102	5.223	5.228	(0.937)	17563	50.0000	48
44	Benzene	78	5.293	5.297	(0.950)	2092266	200.000	190
45	1,2-Dichloroethane	62	5.304	5.309	(0.952)	780641	200.000	190
46	tert-Amyl methyl ether	73	5.409	5.413	(0.971)	1592640	200.000	200
* 47	Fluorobenzene	96	5.571	5.576	(1.000)	265536	50.0000	
48	Trichloroethene	130	5.943	5.948	(1.067)	611959	200.000	200(A)
49	Methylcyclohexane	83	6.164	6.157	(1.106)	567708	200.000	180
51	1,2-Dichloropropane	63	6.175	6.180	(1.108)	601365	200.000	200
52	Methyl Methacrylate	69	6.303	6.308	(1.131)	602833	200.000	210(A)
53	Dibromomethane	93	6.303	6.308	(1.131)	415293	200.000	200(A)
54	1,4-Dioxane	88	6.326	6.331	(1.135)	146213	4000.00	5200(A)
55	Bromodichloromethane	83	6.466	6.470	(1.160)	715833	200.000	200
M 56	1,2-Dichloroethene (Total)	96				1304950	400.000	390
57	2-Chloroethyl vinyl ether	63	6.802	6.807	(1.221)	561033	200.000	220(A)
58	cis-1,3-Dichloropropene	75	6.965	6.970	(1.250)	875898	200.000	210(A)
59	4-Methyl-2-pentanone	43	7.151	7.155	(1.283)	1124348	200.000	200(A)
$ 60	Toluene-d8	98	7.278	7.283	(0.806)	227094	50.0000	45
61	Toluene	91	7.360	7.364	(1.321)	2039395	200.000	200
62	trans-1,3-Dichloropropene	75	7.615	7.608	(1.367)	826596	200.000	220(A)
63	Ethyl Methacrylate	69	7.731	7.736	(1.388)	624240	200.000	220(A)
64	1,1,2-Trichloroethane	97	7.824	7.829	(1.404)	515087	200.000	200
65	Tetrachloroethene	164	8.010	8.015	(0.887)	432129	200.000	180
66	1,3-Dichloropropane	76	8.033	8.026	(0.889)	808239	200.000	180
67	2-Hexanone	43	8.138	8.142	(0.901)	768540	200.000	190
68	Dibromochloromethane	129	8.300	8.305	(0.919)	618708	200.000	190
69	1,2-Dibromoethane	107	8.440	8.444	(0.934)	578102	200.000	190
* 70	Chlorobenzene-d5	117	9.032	9.037	(1.000)	190871	50.0000	
71	1-Chlorohexane	91	9.055	9.060	(1.003)	680039	200.000	190
72	Chlorobenzene	112	9.067	9.072	(1.004)	1367674	200.000	190
73	1,1,1,2-Tetrachloroethane	131	9.183	9.176	(1.017)	521585	200.000	200
74	Ethylbenzene	106	9.218	9.222	(1.021)	717961	200.000	200(A)
75	m,p-Xylene	106	9.380	9.373	(1.039)	1780395	400.000	390
76	o-Xylene	106	9.891	9.896	(1.095)	873508	200.000	200
77	Styrene	104	9.915	9.919	(1.098)	1506906	200.000	200(A)
78	Bromoform	173	10.135	10.140	(1.122)	464057	200.000	200

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
Compounds								
79	Isopropylbenzene	105	10.402	10.395	(1.152)	2008939	200.000	180
80	trans-1,4-Dichloro-2-butene	75	10.484	10.477	(1.161)	233480	200.000	210(A)
$ 81	Bromofluorobenzene	95	10.588	10.593	(1.172)	83323	50.0000	48
82	Bromobenzene	156	10.786	10.790	(0.885)	546698	200.000	230(A)
83	1,1,2,2-Tetrachloroethane	83	10.797	10.790	(0.886)	680207	200.000	210(A)
84	1,2,3-Trichloropropane	75	10.844	10.848	(0.890)	759941	200.000	210(A)
85	n-Propylbenzene	120	10.960	10.964	(0.899)	503022	200.000	220(A)
86	2-Chlorotoluene	126	11.064	11.069	(0.908)	495033	200.000	220(A)
87	4-Chlorotoluene	126	11.215	11.220	(0.920)	518714	200.000	220(A)
88	1,3,5-Trimethylbenzene	105	11.215	11.208	(0.920)	1559528	200.000	220(A)
89	tert-Butylbenzene	119	11.657	11.661	(0.956)	1611760	200.000	220(A)
90	1,2,4-Trimethylbenzene	105	11.726	11.731	(0.962)	1614778	200.000	220(A)
91	sec-Butylbenzene	105	11.970	11.975	(0.982)	1933464	200.000	210(A)
92	1,3-Dichlorobenzene	146	12.098	12.103	(0.992)	958760	200.000	210(A)
93	4-Isopropyltoluene	119	12.191	12.184	(1.000)	1613763	200.000	210(A)
* 94	1,4-Dichlorobenzene-d4	152	12.191	12.195	(1.000)	83979	50.0000	
95	1,4-Dichlorobenzene	146	12.226	12.230	(1.003)	992772	200.000	200
M 98	Xylene (Total)	106				2653903	600.000	580
96	1,2-Dichlorobenzene	146	12.748	12.753	(1.046)	923755	200.000	210(A)
97	n-Butylbenzene	91	12.771	12.764	(1.048)	1295876	200.000	210(A)
99	Hexachloroethane	117	13.108	13.113	(1.075)	375296	200.000	200(A)
100	1,2-Dibromo-3-chloropropane	75	13.863	13.868	(1.137)	121495	200.000	200(A)
102	1,2,4-Trichlorobenzene	180	15.071	15.075	(1.236)	738485	200.000	230(A)
103	Hexachlorobutadiene	225	15.350	15.354	(1.259)	316867	200.000	220(A)
104	Naphthalene	128	15.419	15.412	(1.265)	1981770	200.000	240(A)
105	1,2,3-Trichlorobenzene	180	15.779	15.772	(1.294)	662298	200.000	210(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0166.D
Date : 20-APR-2015 19:01
Client ID: VSTD200B5
Instrument: V5.i
Sample Info: 5ML,VSTD200B5,VSTD200B5
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.: P0622 Mod. Ref No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date: 04/24/2015 Time: 15:58

Lab File ID: V5Q0343.D Init. Calib. Date(s): 04/20/2015 04/20/2015

EPA Sample No.(VSTD#####) VSTD050J5 Init. Calib. Time(s): 16:53 19:01

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	0.584	0.558	0.100	-4.5	20.0
Chloromethane	0.932	0.924	0.100	-0.9	20.0
Vinyl chloride	0.702	0.692	0.100	-1.6	20.0
Bromomethane	0.545	0.532	0.100	-2.4	20.0
Chloroethane	0.369	0.374	0.100	1.4	20.0
Trichlorofluoromethane	0.652	0.642	0.100	-1.5	20.0
1,1-Dichloroethene	0.509	0.487	0.100	-4.4	20.0
Acetone	0.097	0.084	0.100	-13.4	20.0
Iodomethane	1.083	1.106	0.100	2.2	20.0
Carbon disulfide	1.558	1.538	0.100	-1.3	20.0
Methylene chloride	0.655	0.614	0.100	-6.3	20.0
trans-1,2-Dichloroethene	0.631	0.616	0.100	-2.3	20.0
Methyl tert-butyl ether	1.396	1.443	0.100	3.4	20.0
1,1-Dichloroethane	1.095	1.075	0.200	-1.8	20.0
Vinyl acetate	1.782	1.710	0.100	-4.0	20.0
2-Butanone	0.102	0.091	0.100	-10.7	20.0
cis-1,2-Dichloroethene	0.629	0.618	0.100	-1.8	20.0
2,2-Dichloropropane	0.590	0.584	0.100	-1.0	20.0
Bromochloromethane	0.344	0.359	0.100	4.4	20.0
Chloroform	0.923	0.972	0.200	5.3	20.0
1,1,1-Trichloroethane	0.683	0.711	0.100	4.2	20.0
1,1-Dichloropropene	0.265	0.282	0.100	6.5	20.0
Carbon tetrachloride	0.638	0.719	0.100	12.7	20.0
1,2-Dichloroethane	0.766	0.827	0.100	7.9	20.0
Benzene	2.062	2.025	0.500	-1.8	20.0
Trichloroethene	0.564	0.616	0.200	9.3	20.0
1,2-Dichloropropane	0.580	0.591	0.100	1.7	20.0
Dibromomethane	0.388	0.404	0.100	4.2	20.0
Bromodichloromethane	0.677	0.698	0.200	3.1	20.0
cis-1,3-Dichloropropene	0.776	0.816	0.200	5.1	20.0
4-Methyl-2-pentanone	1.044	0.885	0.100	-15.2	20.0
Toluene	1.931	1.955	0.400	1.2	20.0
trans-1,3-Dichloropropene	0.719	0.784	0.100	9.0	20.0
1,1,2-Trichloroethane	0.493	0.488	0.100	-1.0	20.0
1,3-Dichloropropane	1.203	1.039	0.100	-13.6	20.0
Tetrachloroethene	0.629	0.557	0.200	-11.4	20.0
2-Hexanone	0.898	0.721	0.100	-19.7	20.0
Dibromochloromethane	0.850	0.796	0.100	-6.4	20.0
1,2-Dibromoethane	0.808	0.706	0.100	-12.5	20.0
Chlorobenzene	1.908	1.808	0.500	-5.2	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date: 04/24/2015 Time: 15:58

Lab File ID: V5Q0343.D Init. Calib. Date(s): 04/20/2015 04/20/2015

EPA Sample No.(VSTD#####) VSTD050J5 Init. Calib. Time(s): 16:53 19:01

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	0.699	0.700	0.100	0.2	20.0
Ethylbenzene	0.928	0.921	0.100	-0.8	20.0
m,p-Xylene	1.206	1.181	0.100	-2.0	20.0
o-Xylene	1.160	1.135	0.300	-2.1	20.0
Xylene (Total)	1.191	1.166	0.100	-2.1	20.0
Styrene	1.963	1.965	0.300	0.1	20.0
Bromoform	0.617	0.551	0.100	-10.7	20.0
Isopropylbenzene	2.838	2.783	0.100	-1.9	20.0
1,1,2,2-Tetrachloroethane	1.918	1.711	0.300	-10.8	20.0
Bromobenzene	1.440	1.496	0.100	3.9	20.0
1,2,3-Trichloropropane	2.113	1.816	0.100	-14.1	20.0
n-Propylbenzene	1.327	1.344	0.100	1.3	20.0
2-Chlorotoluene	1.351	1.342	0.100	-0.7	20.0
1,3,5-Trimethylbenzene	4.264	4.442	0.100	4.2	20.0
4-Chlorotoluene	1.373	1.444	0.100	5.2	20.0
tert-Butylbenzene	4.430	4.635	0.100	4.6	20.0
1,2,4-Trimethylbenzene	4.274	4.537	0.100	6.2	20.0
sec-Butylbenzene	5.445	5.381	0.100	-1.2	20.0
4-Isopropyltoluene	4.614	4.626	0.100	0.3	20.0
1,3-Dichlorobenzene	2.732	2.763	0.600	1.1	20.0
1,4-Dichlorobenzene	3.001	2.910	0.500	-3.0	20.0
n-Butylbenzene	3.687	3.634	0.100	-1.4	20.0
1,2-Dichlorobenzene	2.583	2.603	0.400	0.8	20.0
1,2-Dibromo-3-chloropropane	0.272	0.277	0.050	1.8	20.0
1,2,4-Trichlorobenzene	1.917	1.781	0.200	-7.1	20.0
Hexachlorobutadiene	0.842	0.877	0.100	4.0	20.0
1,2,3-Trichlorobenzene	1.860	1.697	0.100	-8.7	20.0
Naphthalene	4.914	4.526	0.100	-7.9	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Instrument ID: V5 Calibration Date: 04/24/2015 Time: 15:58

Lab File ID: V5Q0343.D Init. Calib. Date(s): 04/20/2015 04/20/2015

EPA Sample No.(VSTD#####) VSTD050J5 Init. Calib. Time(s): 16:53 19:01

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	0.299	0.304	0.100	1.9	20.0
1,2-Dichloroethane-d4	0.069	0.066	0.100	-3.8	20.0
Toluene-d8	1.308	1.127	0.100	-13.8	20.0
Bromofluorobenzene	0.459	0.474	0.100	3.1	20.0

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0343.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0343.D
Lab Smp Id: VSTD050J5 Client Smp ID: VSTD050J5
Inj Date : 24-APR-2015 15:58
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD050J5,VSTD050J5
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 2 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	1.565	1.565	(0.282)	93934	50.0000	48
2	Chloromethane	50	1.716	1.716	(0.309)	155527	50.0000	50
3	Freon114	85	1.646	1.646	(0.296)	100670	50.0000	58(Q)
4	Vinyl Chloride	62	1.809	1.809	(0.325)	116437	50.0000	49
5	Bromomethane	94	2.134	2.134	(0.384)	89613	50.0000	49
6	Chloroethane	64	2.204	2.204	(0.396)	62966	50.0000	51
7	Trichlorofluoromethane	101	2.424	2.424	(0.436)	108102	50.0000	49
8	Ethanol	46	2.599	2.599	(0.467)	32688	5000.00	3600(Q)
9	Ether	59	2.680	2.680	(0.482)	92163	50.0000	49
10	Acrolein	55	2.784	2.784	(0.501)	57452	250.000	290
11	1,1-Dichloroethene	96	2.877	2.877	(0.518)	81937	50.0000	48
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.889	2.889	(0.520)	52301	50.0000	45
13	Acetone	58	2.924	2.924	(0.526)	14173	50.0000	43(Q)
14	Iodomethane	142	3.017	3.017	(0.543)	186278	50.0000	50
15	Carbon Disulfide	76	3.075	3.075	(0.553)	258951	50.0000	49
16	Acetonitrile	41	3.191	3.191	(0.574)	383916	500.000	470
17	Allyl Chloride	39	3.191	3.191	(0.574)	148096	50.0000	51
18	Methyl Acetate	43	3.214	3.214	(0.578)	167749	50.0000	43
19	Methylene Chloride	84	3.295	3.295	(0.593)	103366	50.0000	47
20	tert-Butanol	59	3.423	3.423	(0.616)	17585	100.000	68
21	Acrylonitrile	53	3.516	3.516	(0.632)	48778	50.0000	46
22	trans-1,2-Dichloroethene	96	3.539	3.539	(0.637)	103699	50.0000	49
23	Methyl tert-butyl ether	73	3.551	3.551	(0.639)	242929	50.0000	52

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	24	1,1-Dichloroethane	63	3.911	3.911	(0.703)	180959	50.0000	49
	25	Vinyl acetate	43	3.969	3.969	(0.714)	287957	50.0000	48
	26	Diisopropyl Ether	45	3.981	3.981	(0.716)	425721	50.0000	48
	27	2-Chloro-1,3-Butadiene	53	4.004	4.004	(0.720)	146485	50.0000	53
	28	Ethyl tert-butyl ether	59	4.317	4.317	(0.777)	312083	50.0000	54
	29	cis-1,2-Dichloroethene	96	4.445	4.445	(0.799)	104038	50.0000	49
	30	2-Butanone	72	4.457	4.457	(0.802)	15299	50.0000	45
	31	2,2-Dichloropropane	77	4.457	4.457	(0.802)	98394	50.0000	49
	32	Propionitrile	54	4.503	4.503	(0.810)	177520	500.000	470
	33	Methacrylonitrile	41	4.654	4.654	(0.837)	166208	100.000	93
	34	Bromochloromethane	128	4.666	4.666	(0.839)	60422	50.0000	52
	35	Tetrahydrofuran	72	4.724	4.724	(0.850)	26847	100.000	90
	36	Chloroform	83	4.735	4.735	(0.852)	163620	50.0000	53
$	37	Dibromofluoromethane	113	4.886	4.886	(0.879)	51228	50.0000	51
	38	1,1,1-Trichloroethane	97	4.933	4.933	(0.887)	119762	50.0000	52
	39	Cyclohexane	56	4.991	4.991	(0.898)	117420	50.0000	52
	40	1,1-Dichloropropene	110	5.084	5.084	(0.914)	47555	50.0000	53
	41	Carbon Tetrachloride	117	5.095	5.095	(0.916)	121118	50.0000	56
	42	Isobutyl Alcohol	43	5.200	5.200	(0.935)	88971	1000.00	780
$	43	1,2-Dichloroethane-d4	102	5.223	5.223	(0.939)	11126	50.0000	48
	44	Benzene	78	5.293	5.293	(0.952)	340907	50.0000	49
	45	1,2-Dichloroethane	62	5.293	5.293	(0.952)	139175	50.0000	54
	46	tert-Amyl methyl ether	73	5.409	5.409	(0.973)	276155	50.0000	54
*	47	Fluorobenzene	96	5.560	5.560	(1.000)	168364	50.0000	
	48	Trichloroethene	130	5.943	5.943	(1.069)	103784	50.0000	55
	49	Methylcyclohexane	83	6.152	6.152	(1.107)	106979	50.0000	54
	51	1,2-Dichloropropane	63	6.176	6.176	(1.111)	99432	50.0000	51
	52	Methyl Methacrylate	69	6.303	6.303	(1.134)	90117	50.0000	49
	53	Dibromomethane	93	6.303	6.303	(1.134)	68080	50.0000	52
	54	1,4-Dioxane	88	6.326	6.326	(1.138)	20561	1000.00	1100
	55	Bromodichloromethane	83	6.466	6.466	(1.163)	117546	50.0000	52
	57	2-Chloroethyl vinyl ether	63	6.803	6.803	(1.223)	58070	50.0000	35
	58	cis-1,3-Dichloropropene	75	6.965	6.965	(1.253)	137388	50.0000	52
	59	4-Methyl-2-pentanone	43	7.151	7.151	(1.286)	149083	50.0000	42
$	60	Toluene-d8	98	7.279	7.279	(0.806)	149184	50.0000	43
	61	Toluene	91	7.360	7.360	(1.324)	329096	50.0000	51
	62	trans-1,3-Dichloropropene	75	7.616	7.616	(1.370)	132050	50.0000	54
	63	Ethyl Methacrylate	69	7.732	7.732	(1.391)	90860	50.0000	50
	64	1,1,2-Trichloroethane	97	7.825	7.825	(1.407)	82229	50.0000	50
	65	Tetrachloroethene	164	8.010	8.010	(0.887)	73720	50.0000	45
	66	1,3-Dichloropropane	76	8.034	8.034	(0.889)	137513	50.0000	43
	67	2-Hexanone	43	8.150	8.150	(0.902)	95437	50.0000	35
	68	Dibromochloromethane	129	8.301	8.301	(0.919)	105332	50.0000	47
	69	1,2-Dibromoethane	107	8.440	8.440	(0.934)	93502	50.0000	44
*	70	Chlorobenzene-d5	117	9.032	9.032	(1.000)	132356	50.0000	
	71	1-Chlorohexane	91	9.056	9.056	(1.003)	110736	50.0000	44
	72	Chlorobenzene	112	9.067	9.067	(1.004)	239316	50.0000	47
	73	1,1,1,2-Tetrachloroethane	131	9.172	9.172	(1.015)	92633	50.0000	50
	74	Ethylbenzene	106	9.218	9.218	(1.021)	121951	50.0000	50
	75	m,p-Xylene	106	9.381	9.381	(1.039)	312680	100.000	98
	76	o-Xylene	106	9.892	9.892	(1.095)	150290	50.0000	49
	77	Styrene	104	9.915	9.915	(1.098)	260036	50.0000	50
	78	Bromoform	173	10.136	10.136	(1.122)	72954	50.0000	45
	79	Isopropylbenzene	105	10.391	10.391	(1.150)	368384	50.0000	49

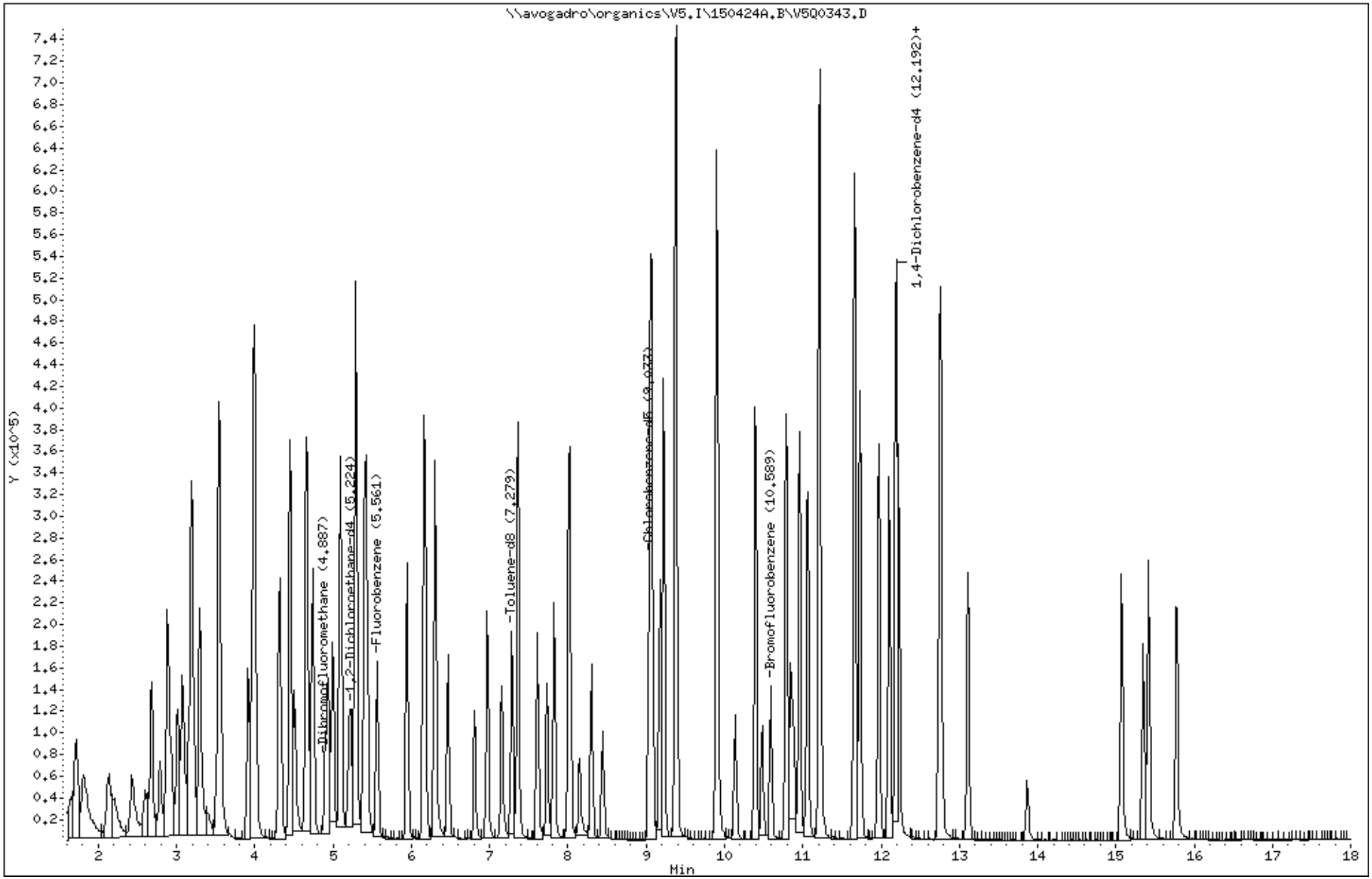
Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0343.D
Report Date: 28-Apr-2015 12:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
80	trans-1,4-Dichloro-2-butene	75	10.484	10.484	(1.161)	31913	50.0000	42	
$ 81	Bromofluorobenzene	95	10.588	10.588	(1.172)	62689	50.0000	52	
82	Bromobenzene	156	10.786	10.786	(0.885)	100344	50.0000	52	
83	1,1,2,2-Tetrachloroethane	83	10.798	10.798	(0.886)	114779	50.0000	44	
84	1,2,3-Trichloropropane	75	10.844	10.844	(0.890)	121820	50.0000	43	
85	n-Propylbenzene	120	10.960	10.960	(0.899)	90184	50.0000	51	
86	2-Chlorotoluene	126	11.065	11.065	(0.908)	90017	50.0000	50	
87	4-Chlorotoluene	126	11.216	11.216	(0.920)	96900	50.0000	53	
88	1,3,5-Trimethylbenzene	105	11.216	11.216	(0.920)	298019	50.0000	52	
89	tert-Butylbenzene	119	11.657	11.657	(0.956)	310969	50.0000	52	
90	1,2,4-Trimethylbenzene	105	11.727	11.727	(0.962)	304392	50.0000	53	
91	sec-Butylbenzene	105	11.970	11.970	(0.982)	361024	50.0000	49	
92	1,3-Dichlorobenzene	146	12.098	12.098	(0.992)	185405	50.0000	50	
93	4-Isopropyltoluene	119	12.179	12.179	(0.999)	310381	50.0000	50	
* 94	1,4-Dichlorobenzene-d4	152	12.191	12.191	(1.000)	67095	50.0000		(Q)
95	1,4-Dichlorobenzene	146	12.226	12.226	(1.003)	195260	50.0000	48	
96	1,2-Dichlorobenzene	146	12.749	12.749	(1.046)	174634	50.0000	50	
97	n-Butylbenzene	91	12.760	12.760	(1.047)	243821	50.0000	49	
99	Hexachloroethane	117	13.109	13.109	(1.075)	69032	50.0000	47	
100	1,2-Dibromo-3-chloropropane	75	13.863	13.863	(1.137)	18565	50.0000	42	
102	1,2,4-Trichlorobenzene	180	15.071	15.071	(1.236)	119485	50.0000	46	
103	Hexachlorobutadiene	225	15.350	15.350	(1.259)	58811	50.0000	52	
104	Naphthalene	128	15.420	15.420	(1.265)	303661	50.0000	46	
105	1,2,3-Trichlorobenzene	180	15.780	15.780	(1.294)	113873	50.0000	46	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0343.D
Date : 24-APR-2015 15:58
Client ID: VSTD050J5
Instrument: V5.i
Sample Info: 5ML,VSTD050J5,VSTD050J5
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\V5.I\150420.B\V5Q0160.D
Lab Smp Id: BFBB5 Client Smp ID: BFBB5
Inj Date : 20-APR-2015 16:28
Operator : WL SRC: WL Inst ID: V5.i
Smp Info : 2UL,BFBB5,BFBB5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\150420.B\bfb8260.m
Meth Date : 21-Apr-2015 09:41 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
Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.586	10.500	(0.000)	95	19120			0.00- 100.00	100.00
10.586	10.500	(0.000)	50	3613			15.00- 40.00	18.90
10.586	10.500	(0.000)	75	8053			30.00- 60.00	42.12
10.586	10.500	(0.000)	96	1298			5.00- 9.00	6.79
10.586	10.500	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.586	10.500	(0.000)	174	16920			50.00- 100.00	88.49
10.586	10.500	(0.000)	175	1428			5.00- 9.00	8.44
10.586	10.500	(0.000)	176	17032			95.00- 101.00	100.66
10.586	10.500	(0.000)	177	1106			5.00- 9.00	6.49

Data File: \\avogadro\organics\V5.I\150420.B\V5Q0160.D

Date : 20-APR-2015 16:28

Client ID: BFBB5

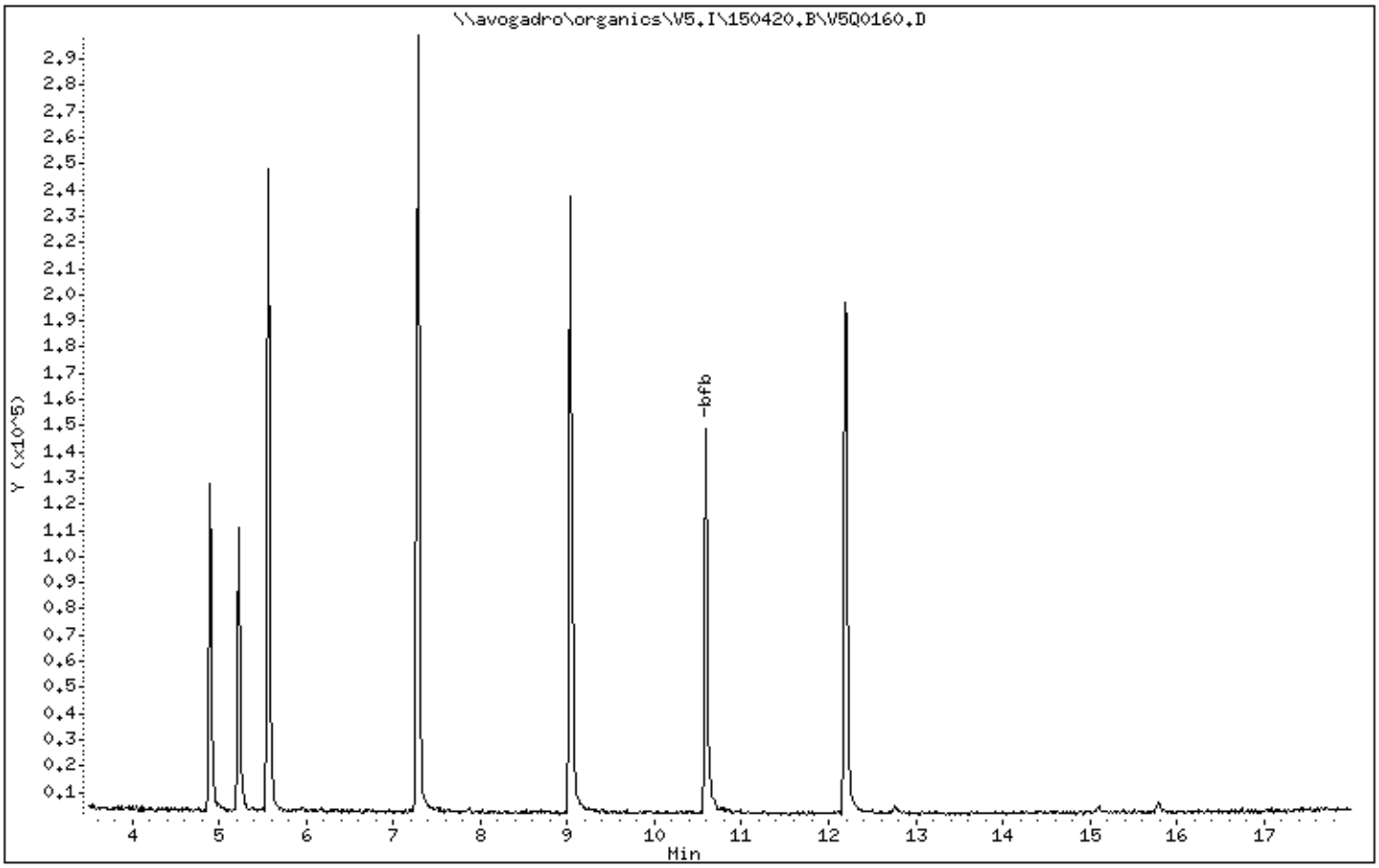
Instrument: V5.i

Sample Info: 2UL,BFBB5,BFBB5

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150420.B\V5Q0160.D

Date : 20-APR-2015 16:28

Client ID: BFBB5

Instrument: V5.i

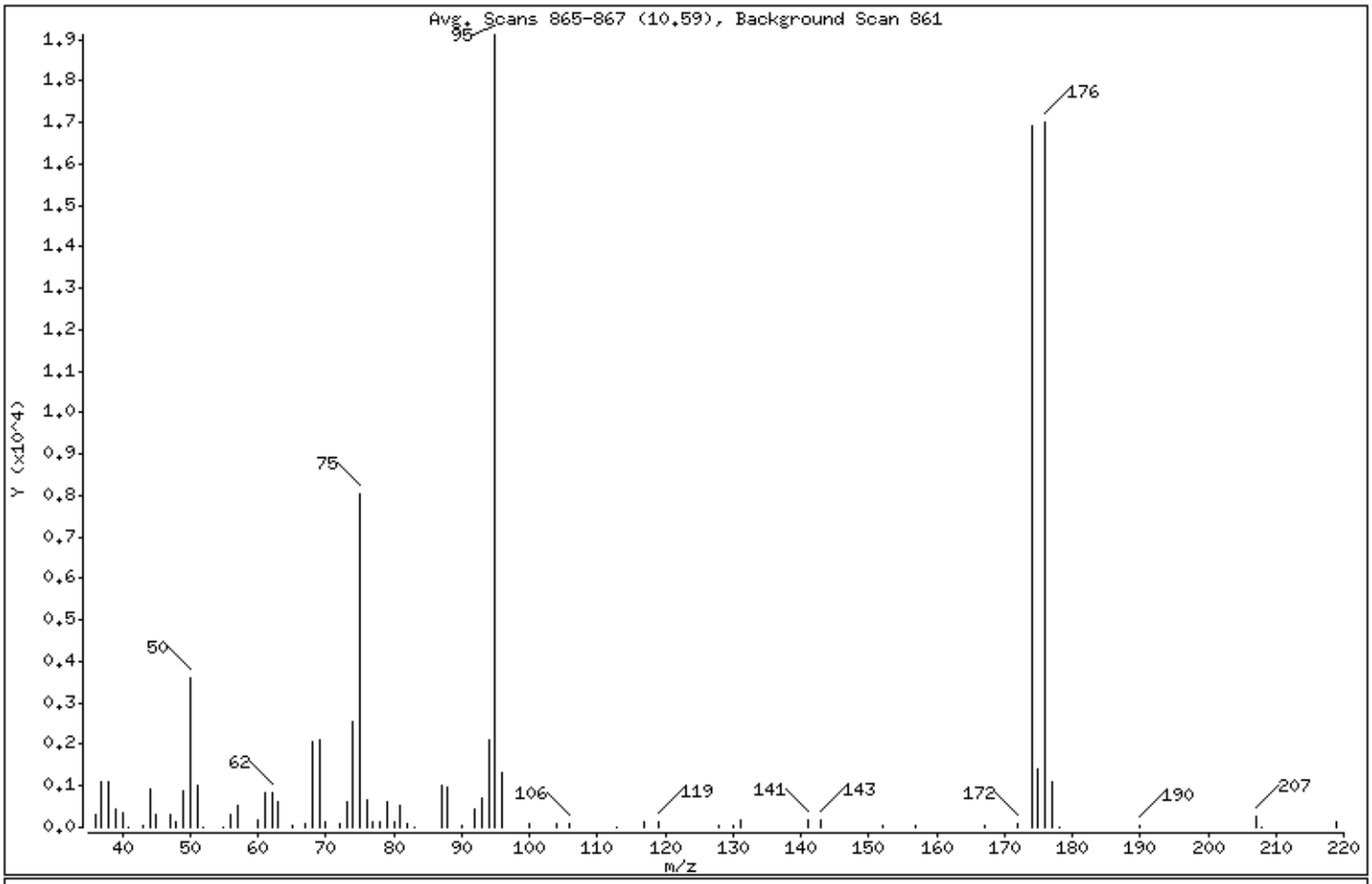
Sample Info: 2UL,BFBB5,BFBB5

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	18.90
75	30.00 - 60.00% of mass 95	42.12
96	5.00 - 9.00% of mass 95	6.79
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	88.49
175	5.00 - 9.00% of mass 174	7.47 (8.44)
176	95.00 - 101.00% of mass 174	89.08 (100.66)
177	5.00 - 9.00% of mass 176	5.78 (6.49)

Date : 20-APR-2015 16:28

Client ID: BFBB5 Instrument: V5.i

Sample Info: 2UL,BFBB5,BFBB5

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V5Q0160.D
Spectrum: Avg. Scans 865-867 (10.59), Background Scan 861
Location of Maximum: 95.00
Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	308	60.00	170	81.00	522	130.00	23
37.00	1078	61.00	823	82.00	107	131.00	155
38.00	1079	62.00	851	83.00	21	141.00	166
39.00	420	63.00	614	87.00	1020	143.00	190
40.00	371	65.00	22	88.00	976	152.00	23
41.00	21	67.00	89	90.00	23	157.00	50
43.00	44	68.00	2044	92.00	421	167.00	24
44.00	935	69.00	2128	93.00	700	172.00	91
45.00	290	70.00	145	94.00	2109	174.00	16920
47.00	321	72.00	85	95.00	19120	175.00	1428
48.00	149	73.00	628	96.00	1298	176.00	17032
49.00	900	74.00	2548	100.00	74	177.00	1106
50.00	3613	75.00	8053	104.00	67	178.00	20
51.00	1003	76.00	673	106.00	78	190.00	24
52.00	20	77.00	152	113.00	21	207.00	245
55.00	20	78.00	123	117.00	121	208.00	20
56.00	292	79.00	619	119.00	131	219.00	129
57.00	517	80.00	149	128.00	42		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0342.D
Lab Smp Id: BFBJ5 Client Smp ID: BFBJ5
Inj Date : 24-APR-2015 15:33
Operator : WL SRC: WL Inst ID: V5.i
Smp Info : 2UL,BFBJ5,BFBJ5
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\150424A.B\bfb8260.m
Meth Date : 21-Apr-2015 09:25 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		
10.592	10.500	(0.000)	95	5969			0.00- 100.00	100.00
10.592	10.500	(0.000)	50	1432			15.00- 40.00	23.99
10.592	10.500	(0.000)	75	3066			30.00- 60.00	51.37
10.592	10.500	(0.000)	96	478			5.00- 9.00	8.01
10.592	10.500	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.592	10.500	(0.000)	174	4294			50.00- 100.00	71.94
10.592	10.500	(0.000)	175	330			5.00- 9.00	7.69
10.592	10.500	(0.000)	176	4108			95.00- 101.00	95.67
10.592	10.500	(0.000)	177	364			5.00- 9.00	8.86

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0342.D

Date : 24-APR-2015 15:33

Client ID: BFBJ5

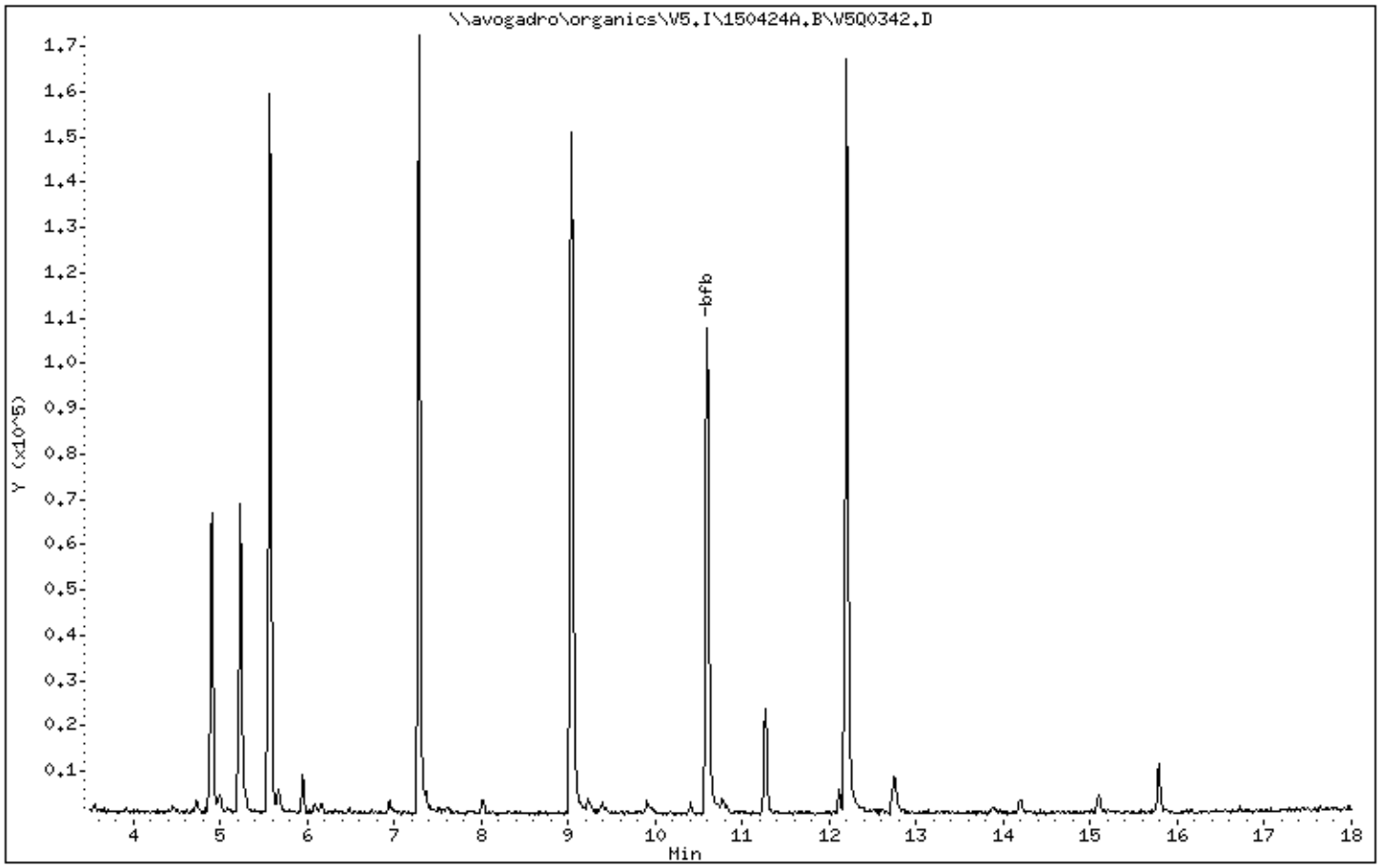
Instrument: V5.i

Sample Info: 2UL,BFBJ5,BFBJ5

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0342.D

Date : 24-APR-2015 15:33

Client ID: BFBJ5

Instrument: V5.i

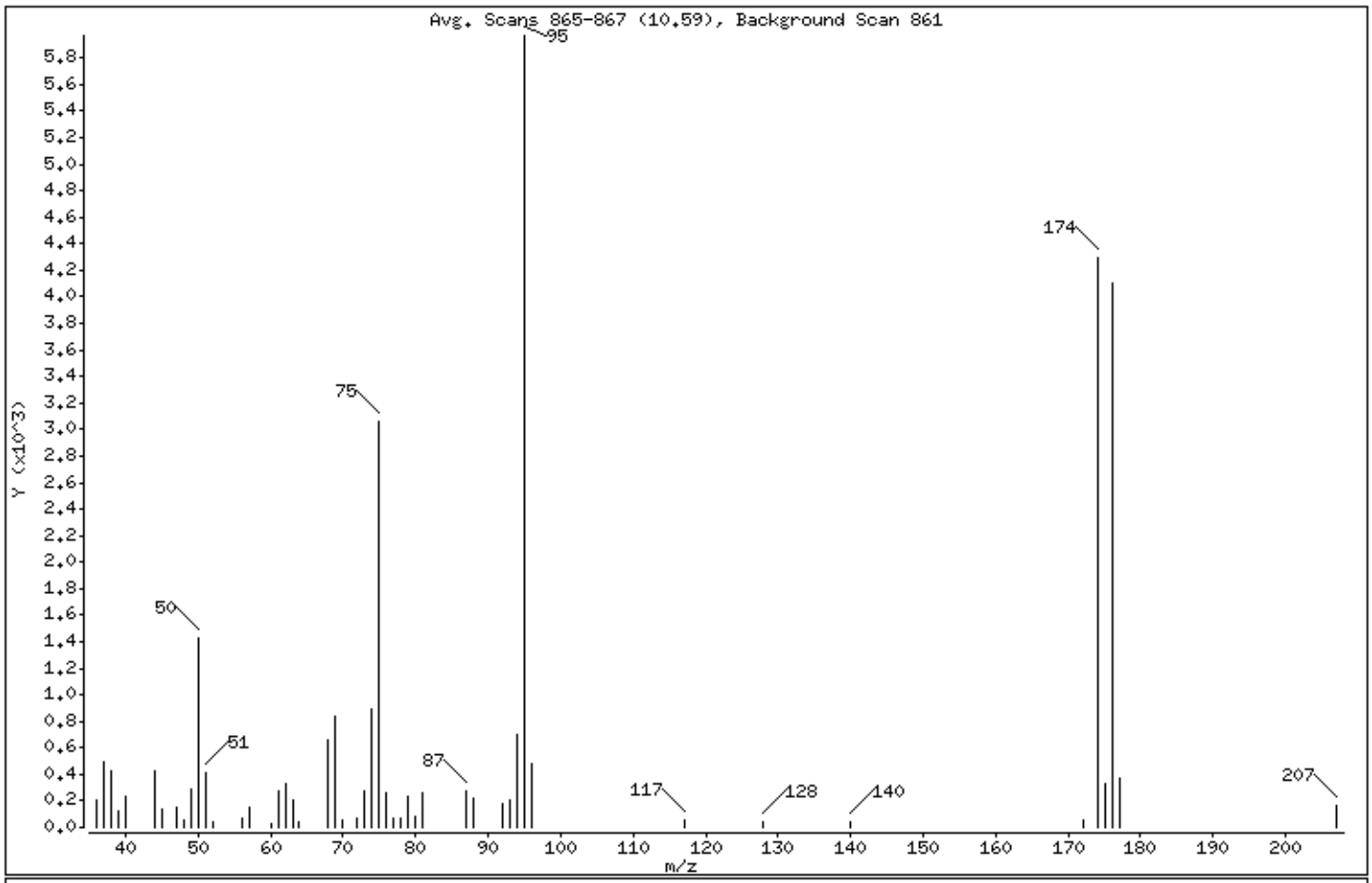
Sample Info: 2UL,BFBJ5,BFBJ5

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	23.99
75	30.00 - 60.00% of mass 95	51.37
96	5.00 - 9.00% of mass 95	8.01
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	71.94
175	5.00 - 9.00% of mass 174	5.53 (7.69)
176	95.00 - 101.00% of mass 174	68.82 (95.67)
177	5.00 - 9.00% of mass 176	6.10 (8.86)

Date : 24-APR-2015 15:33

Client ID: BFBJ5 Instrument: V5.i

Sample Info: 2UL,BFBJ5,BFBJ5

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V5Q0342.D
Spectrum: Avg. Scans 865-867 (10.59), Background Scan 861
Location of Maximum: 95.00
Number of points: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	212	56.00	63	75.00	3066	96.00	478
37.00	490	57.00	151	76.00	255	117.00	53
38.00	425	60.00	34	77.00	63	128.00	40
39.00	124	61.00	274	78.00	70	140.00	47
40.00	229	62.00	326	79.00	239	172.00	54
44.00	431	63.00	199	80.00	83	174.00	4294
45.00	136	64.00	36	81.00	255	175.00	330
47.00	150	68.00	658	87.00	270	176.00	4108
48.00	59	69.00	837	88.00	213	177.00	364
49.00	287	70.00	59	92.00	179	207.00	159
50.00	1432	72.00	74	93.00	206		
51.00	407	73.00	275	94.00	699		
52.00	45	74.00	889	95.00	5969		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-81892

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0346.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2015

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-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-81892

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0346.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2015

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

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0346.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0346.D
Lab Smp Id: MB-81892 Client Smp ID: MB-81892
Inj Date : 24-APR-2015 17:15
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,MB-81892,MB-81892,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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 * 5/Vo * CpndVariable

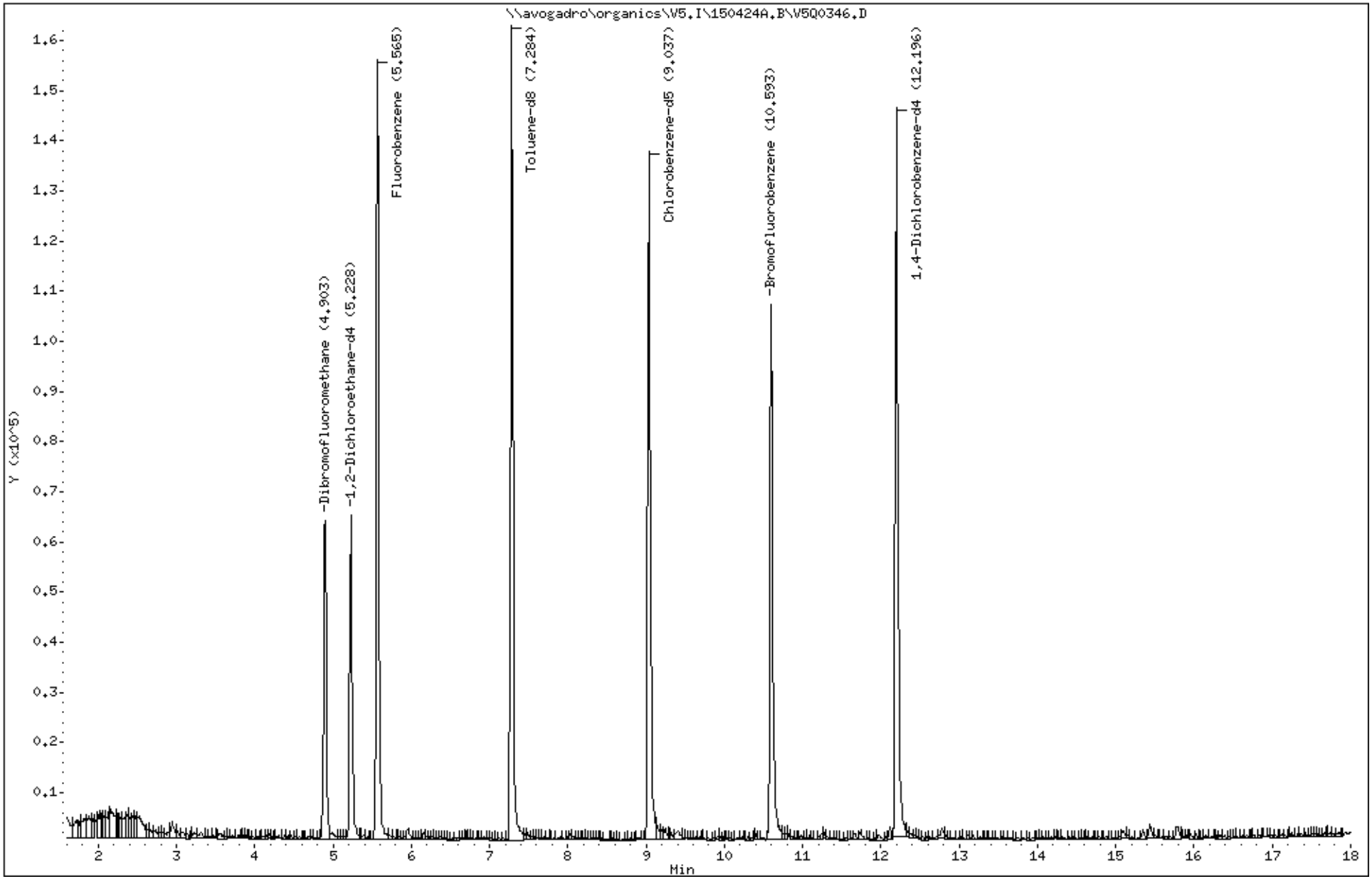
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 37 Dibromofluoromethane	113	4.891	4.886	(0.879)	49878	51.8018	52
$ 43 1,2-Dichloroethane-d4	102	5.228	5.223	(0.939)	10062	45.4085	45
* 47 Fluorobenzene	96	5.564	5.560	(1.000)	161218	50.0000	
$ 60 Toluene-d8	98	7.283	7.279	(0.806)	135394	42.7630	43
* 70 Chlorobenzene-d5	117	9.037	9.032	(1.000)	121003	50.0000	
$ 81 Bromofluorobenzene	95	10.593	10.588	(1.172)	52740	47.4373	47
* 94 1,4-Dichlorobenzene-d4	152	12.196	12.191	(1.000)	58606	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0346.D
Date : 24-APR-2015 17:15
Client ID: MB-81892
Instrument: V5.i
Sample Info: 5ML,MB-81892,MB-81892,81892
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-9-042115MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0367.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/25/2015

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	55	
74-87-3	Chloromethane	50	
75-01-4	Vinyl chloride	53	
74-83-9	Bromomethane	54	
75-00-3	Chloroethane	57	
75-69-4	Trichlorofluoromethane	67	
75-35-4	1,1-Dichloroethene	59	
67-64-1	Acetone	52	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	54	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	52	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	54	
594-20-7	2,2-Dichloropropane	56	
74-97-5	Bromochloromethane	56	
67-66-3	Chloroform	54	
71-55-6	1,1,1-Trichloroethane	57	
563-58-6	1,1-Dichloropropene	57	
56-23-5	Carbon tetrachloride	62	
107-06-2	1,2-Dichloroethane	58	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	58	
78-87-5	1,2-Dichloropropane	55	
74-95-3	Dibromomethane	54	
75-27-4	Bromodichloromethane	56	
10061-01-5	cis-1,3-Dichloropropene	57	
108-10-1	4-Methyl-2-pentanone	49	
108-88-3	Toluene	57	
10061-02-6	trans-1,3-Dichloropropene	58	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	43	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-042115MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0367.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/25/2015

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	38	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	46	
108-90-7	Chlorobenzene	49	
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	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	51	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	54	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	52	
106-43-4	4-Chlorotoluene	53	
98-06-6	tert-Butylbenzene	54	
95-63-6	1,2,4-Trimethylbenzene	55	
135-98-8	sec-Butylbenzene	51	
99-87-6	4-Isopropyltoluene	52	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	50	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	52	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	47	
87-68-3	Hexachlorobutadiene	54	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	52	

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0367.D
Report Date: 28-Apr-2015 12:09

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0367.D
Lab Smp Id: P0622-03AMS Client Smp ID: MW-9-042115MS
Inj Date : 25-APR-2015 02:10
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-03AMS,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.535	1.565	(0.276)	97951	50.0000	54(Q)
2	Chloromethane	50	1.721	1.716	(0.309)	143288	50.0000	50
3	Freon114	85	1.535	1.646	(0.276)	164990	50.0000	100(TQ)
4	Vinyl Chloride	62	1.813	1.809	(0.326)	114937	50.0000	53
5	Bromomethane	94	2.139	2.134	(0.384)	90040	50.0000	54
6	Chloroethane	64	2.208	2.204	(0.397)	64587	50.0000	57
7	Trichlorofluoromethane	101	2.429	2.424	(0.437)	134170	50.0000	67
8	Ethanol	46	2.603	2.599	(0.468)	21170	5000.00	2600(Q)
9	Ether	59	2.684	2.680	(0.482)	94265	50.0000	54
10	Acrolein	55	2.789	2.784	(0.501)	89647	250.000	500
11	1,1-Dichloroethene	96	2.882	2.877	(0.518)	92915	50.0000	59(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.893	2.889	(0.520)	51955	50.0000	49(Q)
13	Acetone	58	2.928	2.924	(0.526)	15605	50.0000	52
14	Iodomethane	142	3.021	3.017	(0.543)	189753	50.0000	56
15	Carbon Disulfide	76	3.079	3.075	(0.553)	260753	50.0000	54
16	Acetonitrile	41	3.195	3.191	(0.574)	381809	500.000	520
17	Allyl Chloride	39	3.195	3.191	(0.574)	143883	50.0000	54
18	Methyl Acetate	43	3.219	3.214	(0.578)	176341	50.0000	49
19	Methylene Chloride	84	3.300	3.295	(0.593)	108441	50.0000	54
20	tert-Butanol	59	3.416	3.423	(0.614)	19124	100.000	81
21	Acrylonitrile	53	3.521	3.516	(0.633)	50818	50.0000	53
22	trans-1,2-Dichloroethene	96	3.544	3.539	(0.637)	102604	50.0000	53
23	Methyl tert-butyl ether	73	3.555	3.551	(0.639)	236581	50.0000	55

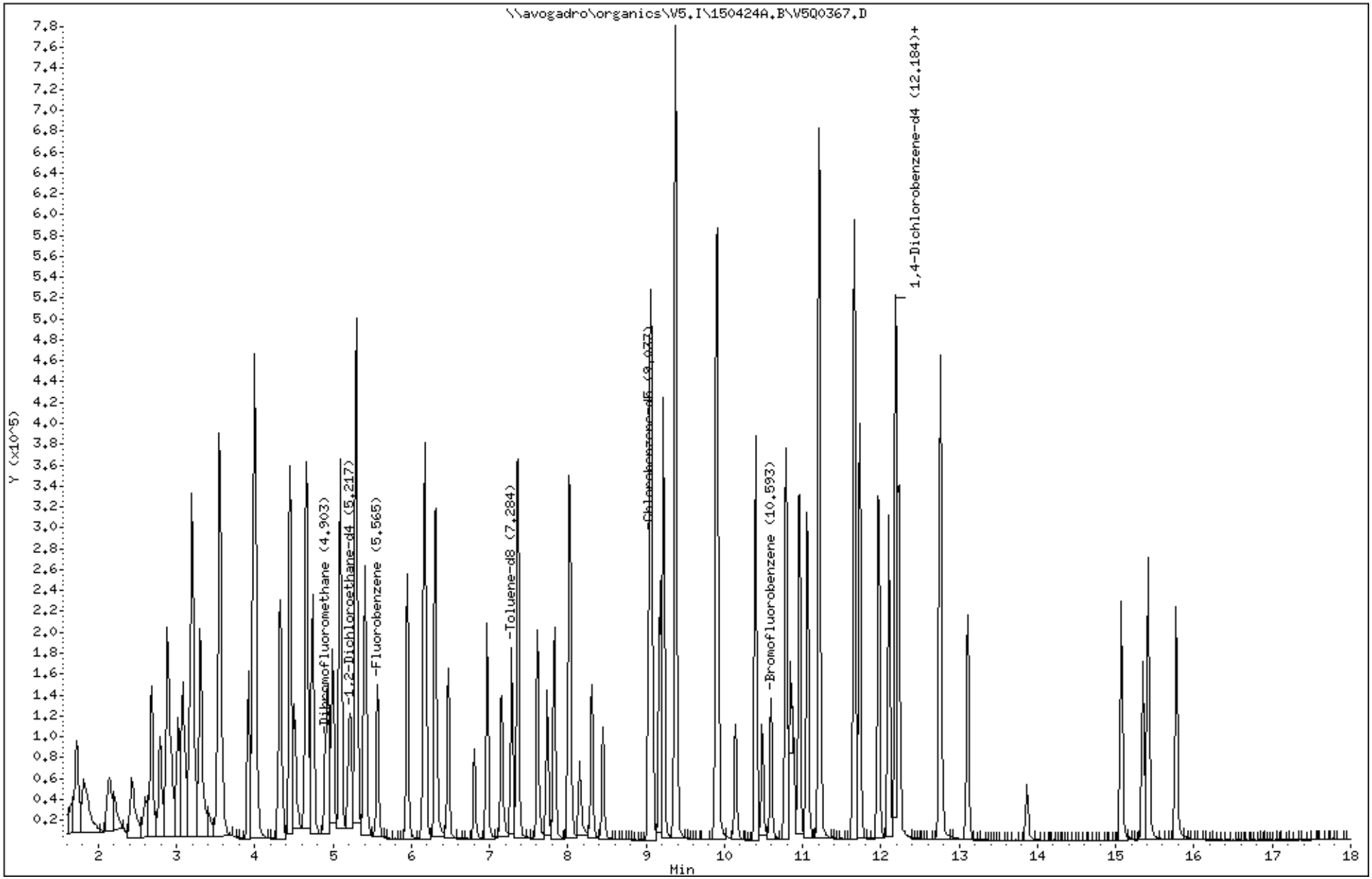
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 1,1-Dichloroethane	63	3.915	3.911	(0.704)	179467	50.0000	53
	25 Vinyl acetate	43	3.985	3.969	(0.716)	283786	50.0000	52
	26 Diisopropyl Ether	45	3.985	3.981	(0.716)	409264	50.0000	51
	27 2-Chloro-1,3-Butadiene	53	3.997	4.004	(0.718)	140038	50.0000	56
	28 Ethyl tert-butyl ether	59	4.322	4.317	(0.777)	304406	50.0000	58
	29 cis-1,2-Dichloroethene	96	4.450	4.445	(0.800)	103459	50.0000	54
	30 2-Butanone	72	4.461	4.457	(0.802)	15844	50.0000	51
	31 2,2-Dichloropropane	77	4.461	4.457	(0.802)	101276	50.0000	56
	32 Propionitrile	54	4.508	4.503	(0.810)	180706	500.000	520
	33 Methacrylonitrile	41	4.647	4.654	(0.835)	159236	100.000	98
	34 Bromochloromethane	128	4.670	4.666	(0.839)	59479	50.0000	56
	35 Tetrahydrofuran	72	4.728	4.724	(0.850)	27423	100.000	100
	36 Chloroform	83	4.740	4.735	(0.852)	153770	50.0000	54
$	37 Dibromofluoromethane	113	4.903	4.886	(0.881)	49329	50.0000	54
	38 1,1,1-Trichloroethane	97	4.937	4.933	(0.887)	119709	50.0000	57
	39 Cyclohexane	56	4.995	4.991	(0.898)	117961	50.0000	58
	40 1,1-Dichloropropene	110	5.088	5.084	(0.914)	46154	50.0000	57
	41 Carbon Tetrachloride	117	5.100	5.095	(0.917)	121007	50.0000	62
	42 Isobutyl Alcohol	43	5.193	5.200	(0.933)	100035	1000.00	960
$	43 1,2-Dichloroethane-d4	102	5.228	5.223	(0.939)	10109	50.0000	48
	44 Benzene	78	5.297	5.293	(0.952)	343124	50.0000	54
	45 1,2-Dichloroethane	62	5.297	5.293	(0.952)	137188	50.0000	58
	46 tert-Amyl methyl ether	73	5.414	5.409	(0.973)	263090	50.0000	56
*	47 Fluorobenzene	96	5.564	5.560	(1.000)	153581	50.0000	
	48 Trichloroethene	130	5.948	5.943	(1.069)	100099	50.0000	58
	49 Methylcyclohexane	83	6.157	6.152	(1.106)	98843	50.0000	55
	51 1,2-Dichloropropane	63	6.180	6.176	(1.111)	97735	50.0000	55
	52 Methyl Methacrylate	69	6.308	6.303	(1.134)	85816	50.0000	51
	53 Dibromomethane	93	6.296	6.303	(1.131)	64713	50.0000	54
	54 1,4-Dioxane	88	6.331	6.326	(1.138)	16335	1000.00	1000(Q)
	55 Bromodichloromethane	83	6.470	6.466	(1.163)	117319	50.0000	56
M	56 1,2-Dichloroethene (Total)	96				206063	100.000	110
	57 2-Chloroethyl vinyl ether	63	6.807	6.803	(1.223)	42230	50.0000	28
	58 cis-1,3-Dichloropropene	75	6.970	6.965	(1.253)	135080	50.0000	57
	59 4-Methyl-2-pentanone	43	7.155	7.151	(1.286)	158075	50.0000	49
$	60 Toluene-d8	98	7.283	7.279	(0.806)	139794	50.0000	42
	61 Toluene	91	7.365	7.360	(1.323)	335807	50.0000	57
	62 trans-1,3-Dichloropropene	75	7.608	7.616	(1.367)	127961	50.0000	58
	63 Ethyl Methacrylate	69	7.736	7.732	(1.390)	94387	50.0000	57
	64 1,1,2-Trichloroethane	97	7.829	7.825	(1.407)	81435	50.0000	54
	65 Tetrachloroethene	164	8.015	8.010	(0.887)	71639	50.0000	46
	66 1,3-Dichloropropane	76	8.026	8.034	(0.888)	131032	50.0000	43
	67 2-Hexanone	43	8.154	8.150	(0.902)	99598	50.0000	38
	68 Dibromochloromethane	129	8.305	8.301	(0.919)	99536	50.0000	47
	69 1,2-Dibromoethane	107	8.445	8.440	(0.934)	92870	50.0000	46
*	70 Chlorobenzene-d5	117	9.037	9.032	(1.000)	125507	50.0000	
	71 1-Chlorohexane	91	9.060	9.056	(1.003)	107558	50.0000	46
	72 Chlorobenzene	112	9.072	9.067	(1.004)	234605	50.0000	49
	73 1,1,1,2-Tetrachloroethane	131	9.176	9.172	(1.015)	91299	50.0000	52
	74 Ethylbenzene	106	9.223	9.218	(1.021)	121757	50.0000	52
	75 m,p-Xylene	106	9.374	9.381	(1.037)	301710	100.000	100
	76 o-Xylene	106	9.896	9.892	(1.095)	145867	50.0000	50
	77 Styrene	104	9.919	9.915	(1.098)	249169	50.0000	50
	78 Bromoform	173	10.140	10.136	(1.122)	71777	50.0000	46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	79	Isopropylbenzene	105	10.396	10.391	(1.150)	350425	50.0000	49
	80	trans-1,4-Dichloro-2-butene	75	10.477	10.484	(1.159)	32523	50.0000	45
$	81	Bromofluorobenzene	95	10.593	10.588	(1.172)	57046	50.0000	49
	82	Bromobenzene	156	10.790	10.786	(0.885)	93234	50.0000	51
	83	1,1,2,2-Tetrachloroethane	83	10.790	10.798	(0.885)	110033	50.0000	46
	84	1,2,3-Trichloropropane	75	10.848	10.844	(0.890)	129300	50.0000	49
	85	n-Propylbenzene	120	10.965	10.960	(0.899)	89343	50.0000	54
	86	2-Chlorotoluene	126	11.057	11.065	(0.907)	86882	50.0000	51
	87	4-Chlorotoluene	126	11.220	11.216	(0.920)	91160	50.0000	53
	88	1,3,5-Trimethylbenzene	105	11.208	11.216	(0.919)	280631	50.0000	52
	89	tert-Butylbenzene	119	11.661	11.657	(0.956)	301507	50.0000	54
	90	1,2,4-Trimethylbenzene	105	11.731	11.727	(0.962)	294303	50.0000	55
	91	sec-Butylbenzene	105	11.963	11.970	(0.981)	349151	50.0000	51
	92	1,3-Dichlorobenzene	146	12.103	12.098	(0.992)	173843	50.0000	50
	93	4-Isopropyltoluene	119	12.184	12.179	(0.999)	302080	50.0000	52
*	94	1,4-Dichlorobenzene-d4	152	12.196	12.191	(1.000)	62891	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	12.230	12.226	(1.003)	188295	50.0000	50
	96	1,2-Dichlorobenzene	146	12.753	12.749	(1.046)	167474	50.0000	52
	97	n-Butylbenzene	91	12.765	12.760	(1.047)	232397	50.0000	50
M	98	Xylene (Total)	106				447577	150.000	150
	99	Hexachloroethane	117	13.113	13.109	(1.075)	63723	50.0000	46
	100	1,2-Dibromo-3-chloropropane	75	13.868	13.863	(1.137)	19092	50.0000	45
	102	1,2,4-Trichlorobenzene	180	15.076	15.071	(1.236)	114050	50.0000	47
	103	Hexachlorobutadiene	225	15.354	15.350	(1.259)	57230	50.0000	54
	104	Naphthalene	128	15.412	15.420	(1.264)	319234	50.0000	52
	105	1,2,3-Trichlorobenzene	180	15.772	15.780	(1.293)	110451	50.0000	47

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0367.D
Date : 25-APR-2015 02:10
Client ID: MW-9-042115MS
Instrument: V5.i
Sample Info: 5ML,P0622-03AMS,,81892
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-9-042115MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0368.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/25/2015

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	53	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	48	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	63	
75-35-4	1,1-Dichloroethene	55	
67-64-1	Acetone	45	
74-88-4	Iodomethane	50	
75-15-0	Carbon disulfide	53	
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	52	
108-05-4	Vinyl acetate	43	
78-93-3	2-Butanone	43	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	41	
74-97-5	Bromochloromethane	54	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	55	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	58	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	56	
78-87-5	1,2-Dichloropropane	52	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	39	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	47	
142-28-9	1,3-Dichloropropane	40	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-042115MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0368.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/25/2015

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	43	
591-78-6	2-Hexanone	31	
124-48-1	Dibromochloromethane	44	
106-93-4	1,2-Dibromoethane	42	
108-90-7	Chlorobenzene	49	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	50	
179601-23-1	m,p-Xylene	97	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	49	
75-25-2	Bromoform	43	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	42	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	40	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	46	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	42	
120-82-1	1,2,4-Trichlorobenzene	48	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	43	
91-20-3	Naphthalene	46	

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0368.D
Report Date: 28-Apr-2015 12:09

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0368.D
Lab Smp Id: P0622-03AMSD Client Smp ID: MW-9-042115MSD
Inj Date : 25-APR-2015 02:35
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,P0622-03AMSD,,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.D
Als bottle: 27 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	1.559	1.565	(0.280)	86929	50.0000	45
2	Chloromethane	50	1.722	1.716	(0.309)	164494	50.0000	53
3	Freon114	85	1.652	1.646	(0.297)	78418	50.0000	46(Q)
4	Vinyl Chloride	62	1.803	1.809	(0.324)	117330	50.0000	51
5	Bromomethane	94	2.128	2.134	(0.382)	86599	50.0000	48
6	Chloroethane	64	2.209	2.204	(0.397)	65293	50.0000	54
7	Trichlorofluoromethane	101	2.430	2.424	(0.437)	134438	50.0000	62
8	Ethanol	46	2.592	2.599	(0.466)	29919	5000.00	3400(Q)
9	Ether	59	2.674	2.680	(0.480)	94099	50.0000	51
10	Acrolein	55	2.790	2.784	(0.501)	76748	250.000	400
11	1,1-Dichloroethene	96	2.883	2.877	(0.518)	91966	50.0000	55
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.894	2.889	(0.520)	44409	50.0000	39
13	Acetone	58	2.918	2.924	(0.524)	14538	50.0000	45(Q)
14	Iodomethane	142	3.011	3.017	(0.541)	181310	50.0000	50
15	Carbon Disulfide	76	3.080	3.075	(0.553)	271746	50.0000	53
16	Acetonitrile	41	3.185	3.191	(0.572)	366053	500.000	460
17	Allyl Chloride	39	3.196	3.191	(0.574)	145029	50.0000	51(Q)
18	Methyl Acetate	43	3.208	3.214	(0.576)	128357	50.0000	33
19	Methylene Chloride	84	3.301	3.295	(0.593)	105008	50.0000	49
20	tert-Butanol	59	3.405	3.423	(0.612)	19236	100.000	76
21	Acrylonitrile	53	3.510	3.516	(0.631)	46142	50.0000	45
22	trans-1,2-Dichloroethene	96	3.545	3.539	(0.637)	103215	50.0000	50
23	Methyl tert-butyl ether	73	3.556	3.551	(0.639)	237895	50.0000	52

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	24	1,1-Dichloroethane	63	3.916	3.911	(0.704)	186958	50.0000	52
	25	Vinyl acetate	43	3.974	3.969	(0.714)	251814	50.0000	43
	26	Diisopropyl Ether	45	3.986	3.981	(0.716)	429176	50.0000	50
	27	2-Chloro-1,3-Butadiene	53	3.998	4.004	(0.718)	143155	50.0000	53
	28	Ethyl tert-butyl ether	59	4.311	4.317	(0.775)	313247	50.0000	56
	29	cis-1,2-Dichloroethene	96	4.451	4.445	(0.800)	103923	50.0000	50
	30	2-Butanone	72	4.462	4.457	(0.802)	14585	50.0000	43(Q)
	31	2,2-Dichloropropane	77	4.451	4.457	(0.800)	80164	50.0000	41
	32	Propionitrile	54	4.509	4.503	(0.810)	164736	500.000	440
	33	Methacrylonitrile	41	4.648	4.654	(0.835)	156198	100.000	90
	34	Bromochloromethane	128	4.671	4.666	(0.839)	60792	50.0000	54
	35	Tetrahydrofuran	72	4.718	4.724	(0.848)	24022	100.000	82
	36	Chloroform	83	4.741	4.735	(0.852)	161273	50.0000	53
$	37	Dibromofluoromethane	113	4.892	4.886	(0.879)	53320	50.0000	54
	38	1,1,1-Trichloroethane	97	4.927	4.933	(0.885)	123505	50.0000	55
	39	Cyclohexane	56	4.996	4.991	(0.898)	111817	50.0000	51
	40	1,1-Dichloropropene	110	5.089	5.084	(0.914)	46717	50.0000	53
	41	Carbon Tetrachloride	117	5.101	5.095	(0.917)	122294	50.0000	58
	42	Isobutyl Alcohol	43	5.194	5.200	(0.933)	84882	1000.00	760
$	43	1,2-Dichloroethane-d4	102	5.229	5.223	(0.939)	11430	50.0000	50
	44	Benzene	78	5.287	5.293	(0.950)	343918	50.0000	50
	45	1,2-Dichloroethane	62	5.298	5.293	(0.952)	134952	50.0000	53
	46	tert-Amyl methyl ether	73	5.403	5.409	(0.971)	265000	50.0000	53
*	47	Fluorobenzene	96	5.565	5.560	(1.000)	164910	50.0000	
	48	Trichloroethene	130	5.949	5.943	(1.069)	104552	50.0000	56
	49	Methylcyclohexane	83	6.158	6.152	(1.106)	93745	50.0000	48
	51	1,2-Dichloropropane	63	6.169	6.176	(1.108)	99856	50.0000	52
	52	Methyl Methacrylate	69	6.297	6.303	(1.131)	79472	50.0000	44
	53	Dibromomethane	93	6.297	6.303	(1.131)	63245	50.0000	49
	54	1,4-Dioxane	88	6.332	6.326	(1.138)	17720	1000.00	1000
	55	Bromodichloromethane	83	6.471	6.466	(1.163)	118211	50.0000	53
M	56	1,2-Dichloroethene (Total)	96				207138	100.000	100
	58	cis-1,3-Dichloropropene	75	6.971	6.965	(1.252)	125708	50.0000	49
	59	4-Methyl-2-pentanone	43	7.145	7.151	(1.284)	134641	50.0000	39
$	60	Toluene-d8	98	7.284	7.279	(0.806)	144386	50.0000	43
	61	Toluene	91	7.354	7.360	(1.321)	328424	50.0000	52
	62	trans-1,3-Dichloropropene	75	7.609	7.616	(1.367)	126121	50.0000	53
	63	Ethyl Methacrylate	69	7.737	7.732	(1.390)	85091	50.0000	48
	64	1,1,2-Trichloroethane	97	7.830	7.825	(1.407)	76853	50.0000	47
	65	Tetrachloroethene	164	8.016	8.010	(0.887)	68206	50.0000	43
	66	1,3-Dichloropropane	76	8.027	8.034	(0.888)	124645	50.0000	40
	67	2-Hexanone	43	8.144	8.150	(0.901)	82023	50.0000	31
	68	Dibromochloromethane	129	8.306	8.301	(0.919)	97393	50.0000	44
	69	1,2-Dibromoethane	107	8.445	8.440	(0.934)	88532	50.0000	42
*	70	Chlorobenzene-d5	117	9.038	9.032	(1.000)	128959	50.0000	
	71	1-Chlorohexane	91	9.049	9.056	(1.001)	110064	50.0000	45
	72	Chlorobenzene	112	9.073	9.067	(1.004)	239141	50.0000	48
	73	1,1,1,2-Tetrachloroethane	131	9.177	9.172	(1.015)	88933	50.0000	49
	74	Ethylbenzene	106	9.224	9.218	(1.021)	120204	50.0000	50
	75	m,p-Xylene	106	9.375	9.381	(1.037)	300868	100.000	97
	76	o-Xylene	106	9.897	9.892	(1.095)	147240	50.0000	49
	77	Styrene	104	9.909	9.915	(1.096)	248464	50.0000	49
	78	Bromoform	173	10.141	10.136	(1.122)	68604	50.0000	43
	79	Isopropylbenzene	105	10.396	10.391	(1.150)	348898	50.0000	48

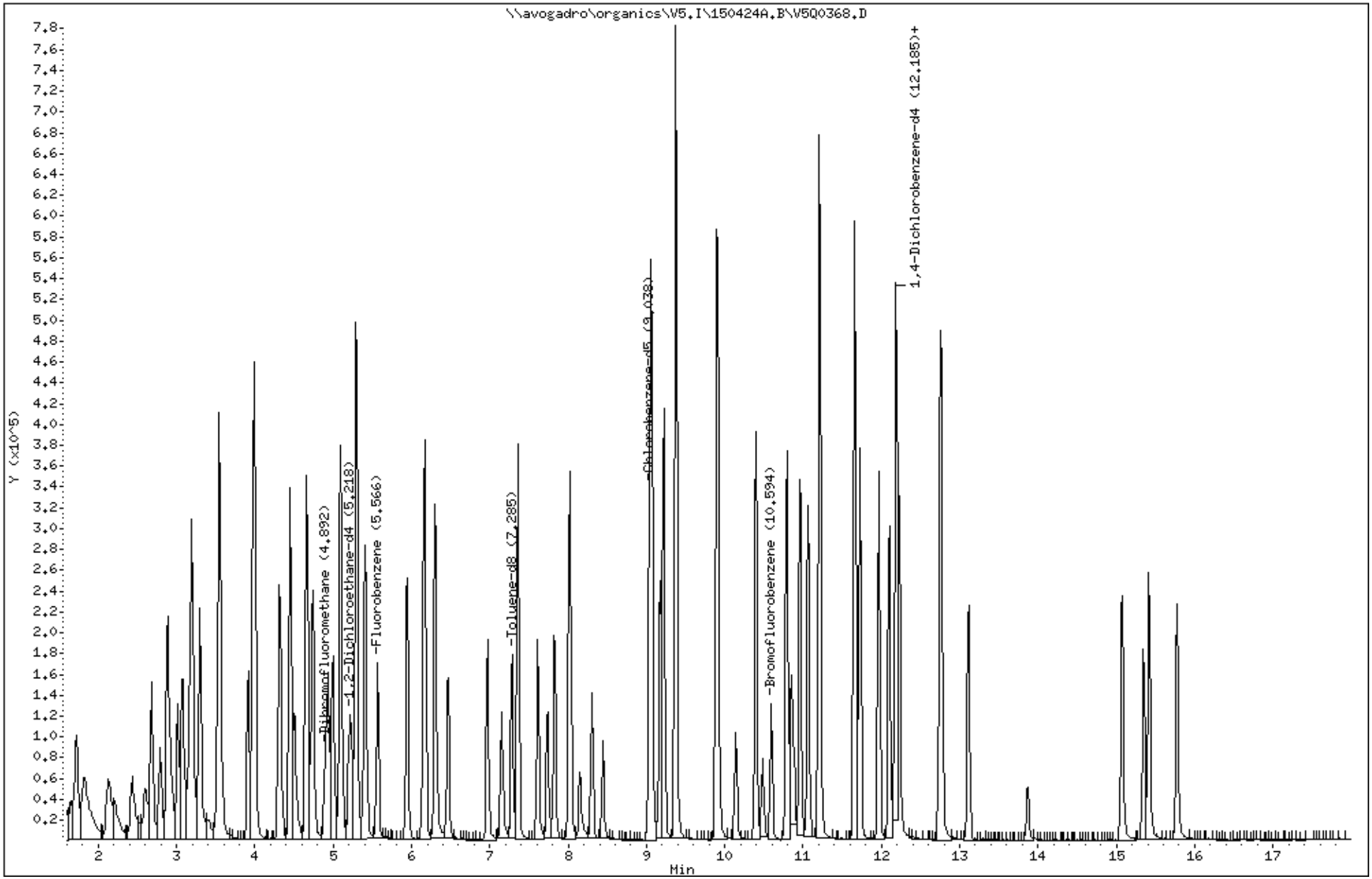
Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0368.D
Report Date: 28-Apr-2015 12:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	80	trans-1,4-Dichloro-2-butene	75	10.478	10.484	(1.159)	24102	50.0000	32
$	81	Bromofluorobenzene	95	10.594	10.588	(1.172)	55760	50.0000	47
	82	Bromobenzene	156	10.791	10.786	(0.885)	91419	50.0000	48
	83	1,1,2,2-Tetrachloroethane	83	10.791	10.798	(0.885)	106016	50.0000	42
	84	1,2,3-Trichloropropane	75	10.849	10.844	(0.890)	111820	50.0000	40
	85	n-Propylbenzene	120	10.966	10.960	(0.899)	85464	50.0000	49
	86	2-Chlorotoluene	126	11.058	11.065	(0.907)	85114	50.0000	48
	87	4-Chlorotoluene	126	11.209	11.216	(0.919)	88831	50.0000	49
	88	1,3,5-Trimethylbenzene	105	11.209	11.216	(0.919)	275158	50.0000	49
	89	tert-Butylbenzene	119	11.662	11.657	(0.956)	298013	50.0000	51
	90	1,2,4-Trimethylbenzene	105	11.732	11.727	(0.962)	294716	50.0000	53
	91	sec-Butylbenzene	105	11.964	11.970	(0.981)	349041	50.0000	49
	92	1,3-Dichlorobenzene	146	12.104	12.098	(0.992)	174270	50.0000	49
	93	4-Isopropyltoluene	119	12.185	12.179	(0.999)	299894	50.0000	50
*	94	1,4-Dichlorobenzene-d4	152	12.197	12.191	(1.000)	65460	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	12.231	12.226	(1.003)	181672	50.0000	46
	96	1,2-Dichlorobenzene	146	12.754	12.749	(1.046)	171699	50.0000	51
	97	n-Butylbenzene	91	12.766	12.760	(1.047)	237110	50.0000	49
M	98	Xylene (Total)	106				448108	150.000	140
	99	Hexachloroethane	117	13.114	13.109	(1.075)	66102	50.0000	46
	100	1,2-Dibromo-3-chloropropane	75	13.857	13.863	(1.136)	18093	50.0000	42
	102	1,2,4-Trichlorobenzene	180	15.077	15.071	(1.236)	120320	50.0000	48
	103	Hexachlorobutadiene	225	15.344	15.350	(1.258)	57594	50.0000	52
	104	Naphthalene	128	15.413	15.420	(1.264)	294275	50.0000	46
	105	1,2,3-Trichlorobenzene	180	15.773	15.780	(1.293)	105542	50.0000	43

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0368.D
Date : 25-APR-2015 02:35
Client ID: MW-9-042115MSD
Instrument: V5.i
Sample Info: 5ML,P0622-03AMSD,,81892
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-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-81892

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0344.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2015

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	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	53	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	56	
67-64-1	Acetone	41	
74-88-4	Iodomethane	50	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	47	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	53	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	48	
78-93-3	2-Butanone	43	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	51	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	54	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	55	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	49	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	52	
74-95-3	Dibromomethane	50	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	41	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	48	
142-28-9	1,3-Dichloropropane	43	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-81892

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-81892

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0344.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 04/24/2015

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	35	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	45	
108-90-7	Chlorobenzene	49	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	51	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	52	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	43	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	42	
103-65-1	n-Propylbenzene	52	
95-49-8	2-Chlorotoluene	52	
108-67-8	1,3,5-Trimethylbenzene	52	
106-43-4	4-Chlorotoluene	51	
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	51	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	51	
95-50-1	1,2-Dichlorobenzene	53	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	55	
87-61-6	1,2,3-Trichlorobenzene	48	
91-20-3	Naphthalene	50	

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0344.D
Report Date: 28-Apr-2015 12:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\150424A.B\V5Q0344.D
Lab Smp Id: LCS-81892 Client Smp ID: LCS-81892
Inj Date : 24-APR-2015 16:24
Operator : WL SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,LCS-81892,LCS-81892,81892
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\150424A.B\v5_8260W.m
Meth Date : 28-Apr-2015 11:48 V5.i Quant Type: ISTD
Cal Date : 20-APR-2015 19:01 Cal File: V5Q0166.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 * 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	1.548	1.565	(0.278)	96552	50.0000	48
2	Chloromethane	50	1.722	1.716	(0.309)	153157	50.0000	48
3	Freon114	85	1.548	1.646	(0.278)	196793	50.0000	110(TQ)
4	Vinyl Chloride	62	1.803	1.809	(0.324)	119458	50.0000	49
5	Bromomethane	94	2.128	2.134	(0.382)	91819	50.0000	49
6	Chloroethane	64	2.198	2.204	(0.395)	67807	50.0000	53
7	Trichlorofluoromethane	101	2.430	2.424	(0.437)	115736	50.0000	51
8	Ethanol	46	2.593	2.599	(0.466)	33920	5000.00	3700(Q)
9	Ether	59	2.674	2.680	(0.481)	94106	50.0000	48
10	Acrolein	55	2.790	2.784	(0.501)	56295	250.000	280
11	1,1-Dichloroethene	96	2.883	2.877	(0.518)	99065	50.0000	56(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.895	2.889	(0.520)	54270	50.0000	45(Q)
13	Acetone	58	2.918	2.924	(0.524)	13730	50.0000	41
14	Iodomethane	142	3.011	3.017	(0.541)	188623	50.0000	50
15	Carbon Disulfide	76	3.081	3.075	(0.554)	270576	50.0000	50
16	Acetonitrile	41	3.185	3.191	(0.572)	383275	500.000	460
17	Allyl Chloride	39	3.185	3.191	(0.572)	138368	50.0000	46
18	Methyl Acetate	43	3.208	3.214	(0.576)	166189	50.0000	41
19	Methylene Chloride	84	3.301	3.295	(0.593)	106499	50.0000	47
20	tert-Butanol	59	3.417	3.423	(0.614)	19752	100.000	74
21	Acrylonitrile	53	3.510	3.516	(0.631)	50435	50.0000	47
22	trans-1,2-Dichloroethene	96	3.545	3.539	(0.637)	106494	50.0000	49
23	Methyl tert-butyl ether	73	3.557	3.551	(0.639)	254462	50.0000	53

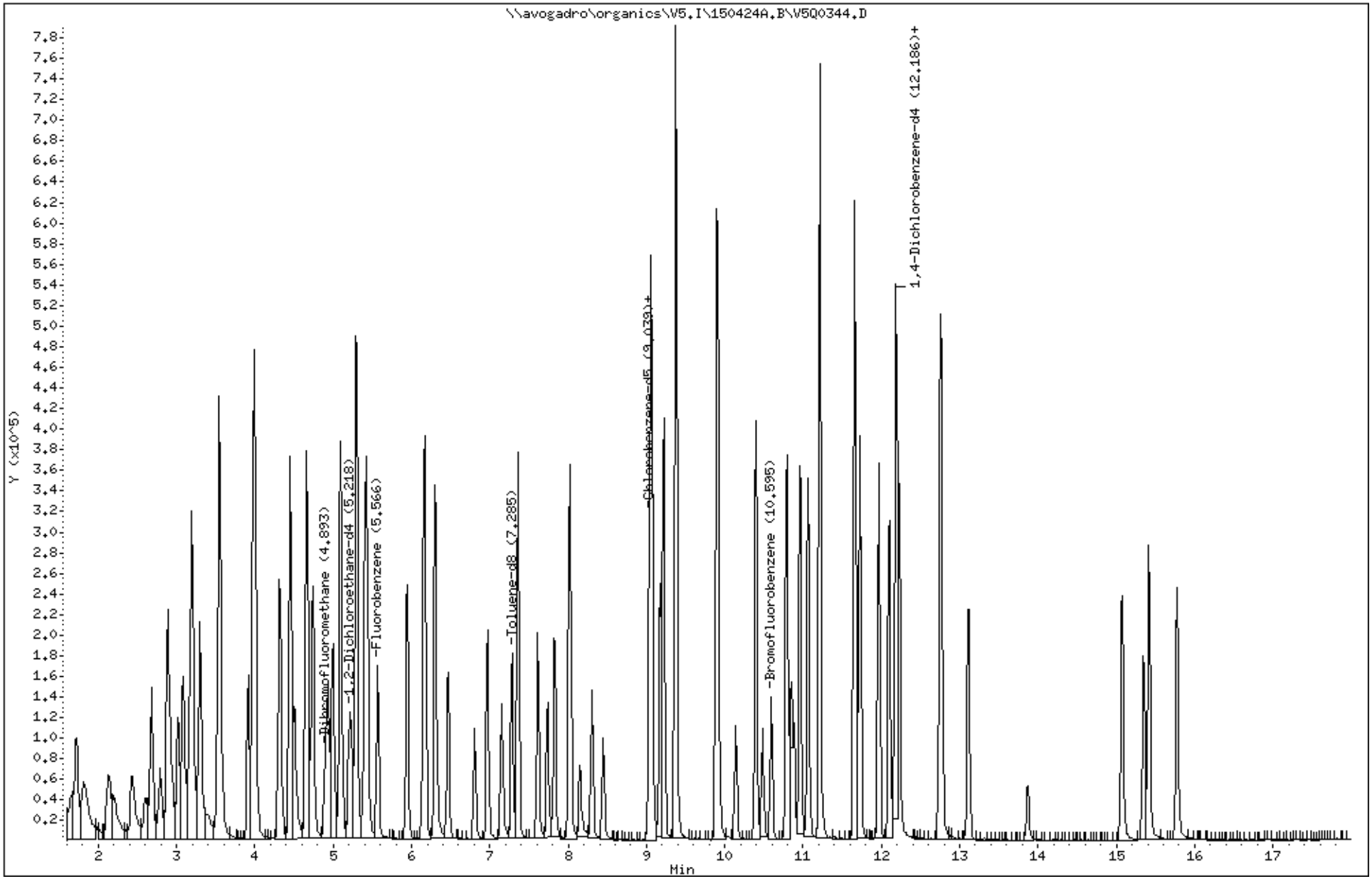
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	1,1-Dichloroethane	63	3.917	3.911	(0.704)	183909	50.0000	49
25	Vinyl acetate	43	3.975	3.969	(0.714)	294715	50.0000	48
26	Diisopropyl Ether	45	3.986	3.981	(0.716)	438039	50.0000	48
27	2-Chloro-1,3-Butadiene	53	3.998	4.004	(0.718)	146341	50.0000	52
28	Ethyl tert-butyl ether	59	4.312	4.317	(0.775)	326542	50.0000	56
29	cis-1,2-Dichloroethene	96	4.451	4.445	(0.800)	108097	50.0000	50
30	2-Butanone	72	4.463	4.457	(0.802)	15196	50.0000	43
31	2,2-Dichloropropane	77	4.451	4.457	(0.800)	103292	50.0000	51
32	Propionitrile	54	4.509	4.503	(0.810)	177296	500.000	460
33	Methacrylonitrile	41	4.648	4.654	(0.835)	166596	100.000	91
34	Bromochloromethane	128	4.672	4.666	(0.839)	65089	50.0000	55
35	Tetrahydrofuran	72	4.718	4.724	(0.848)	27911	100.000	92
36	Chloroform	83	4.741	4.735	(0.852)	165626	50.0000	52
$ 37	Dibromofluoromethane	113	4.892	4.886	(0.879)	50680	50.0000	49
38	1,1,1-Trichloroethane	97	4.927	4.933	(0.885)	127340	50.0000	54
39	Cyclohexane	56	4.997	4.991	(0.898)	123696	50.0000	54
40	1,1-Dichloropropene	110	5.090	5.084	(0.914)	47313	50.0000	52
41	Carbon Tetrachloride	117	5.101	5.095	(0.917)	121035	50.0000	55
42	Isobutyl Alcohol	43	5.194	5.200	(0.933)	90362	1000.00	770
$ 43	1,2-Dichloroethane-d4	102	5.229	5.223	(0.939)	11122	50.0000	47
44	Benzene	78	5.287	5.293	(0.950)	352336	50.0000	49
45	1,2-Dichloroethane	62	5.299	5.293	(0.952)	134843	50.0000	51
46	tert-Amyl methyl ether	73	5.403	5.409	(0.971)	286109	50.0000	54
* 47	Fluorobenzene	96	5.566	5.560	(1.000)	172679	50.0000	
48	Trichloroethene	130	5.949	5.943	(1.069)	104040	50.0000	53
49	Methylcyclohexane	83	6.158	6.152	(1.106)	108318	50.0000	53
51	1,2-Dichloropropane	63	6.170	6.176	(1.108)	103538	50.0000	52
52	Methyl Methacrylate	69	6.297	6.303	(1.131)	87475	50.0000	46
53	Dibromomethane	93	6.297	6.303	(1.131)	66672	50.0000	50
54	1,4-Dioxane	88	6.332	6.326	(1.138)	19759	1000.00	1100
55	Bromodichloromethane	83	6.472	6.466	(1.163)	119352	50.0000	51
M 56	1,2-Dichloroethene (Total)	96				214591	100.000	99
57	2-Chloroethyl vinyl ether	63	6.808	6.803	(1.223)	58138	50.0000	34
58	cis-1,3-Dichloropropene	75	6.971	6.965	(1.252)	142256	50.0000	53
59	4-Methyl-2-pentanone	43	7.145	7.151	(1.284)	149076	50.0000	41
$ 60	Toluene-d8	98	7.285	7.279	(0.806)	145694	50.0000	44
61	Toluene	91	7.354	7.360	(1.321)	334911	50.0000	50
62	trans-1,3-Dichloropropene	75	7.610	7.616	(1.367)	129614	50.0000	52
63	Ethyl Methacrylate	69	7.737	7.732	(1.390)	87719	50.0000	47
64	1,1,2-Trichloroethane	97	7.819	7.825	(1.405)	81197	50.0000	48
65	Tetrachloroethene	164	8.016	8.010	(0.887)	74117	50.0000	47
66	1,3-Dichloropropane	76	8.028	8.034	(0.888)	131401	50.0000	43
67	2-Hexanone	43	8.144	8.150	(0.901)	92789	50.0000	35
68	Dibromochloromethane	129	8.306	8.301	(0.919)	100673	50.0000	46
69	1,2-Dibromoethane	107	8.446	8.440	(0.934)	93353	50.0000	45
* 70	Chlorobenzene-d5	117	9.038	9.032	(1.000)	127365	50.0000	
71	1-Chlorohexane	91	9.050	9.056	(1.001)	115392	50.0000	48
72	Chlorobenzene	112	9.073	9.067	(1.004)	238735	50.0000	49
73	1,1,1,2-Tetrachloroethane	131	9.177	9.172	(1.015)	89421	50.0000	50
74	Ethylbenzene	106	9.224	9.218	(1.021)	121065	50.0000	51
75	m,p-Xylene	106	9.375	9.381	(1.037)	308560	100.000	100
76	o-Xylene	106	9.897	9.892	(1.095)	151282	50.0000	51
77	Styrene	104	9.909	9.915	(1.096)	258294	50.0000	52
78	Bromoform	173	10.141	10.136	(1.122)	72461	50.0000	46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	79	Isopropylbenzene	105	10.397	10.391	(1.150)	358784	50.0000	50
	80	trans-1,4-Dichloro-2-butene	75	10.478	10.484	(1.159)	31408	50.0000	43
$	81	Bromofluorobenzene	95	10.594	10.588	(1.172)	60083	50.0000	51
	82	Bromobenzene	156	10.780	10.786	(0.884)	95690	50.0000	50
	83	1,1,2,2-Tetrachloroethane	83	10.792	10.798	(0.885)	111424	50.0000	43
	84	1,2,3-Trichloropropane	75	10.850	10.844	(0.890)	117990	50.0000	42
	85	n-Propylbenzene	120	10.966	10.960	(0.899)	92641	50.0000	52
	86	2-Chlorotoluene	126	11.059	11.065	(0.907)	94468	50.0000	52
	87	4-Chlorotoluene	126	11.210	11.216	(0.919)	93952	50.0000	51
	88	1,3,5-Trimethylbenzene	105	11.210	11.216	(0.919)	294638	50.0000	52
	89	tert-Butylbenzene	119	11.663	11.657	(0.956)	310506	50.0000	52
	90	1,2,4-Trimethylbenzene	105	11.732	11.727	(0.962)	305538	50.0000	53
	91	sec-Butylbenzene	105	11.965	11.970	(0.981)	366468	50.0000	50
	92	1,3-Dichlorobenzene	146	12.104	12.098	(0.992)	184934	50.0000	50
	93	4-Isopropyltoluene	119	12.185	12.179	(0.999)	314839	50.0000	51
*	94	1,4-Dichlorobenzene-d4	152	12.197	12.191	(1.000)	66977	50.0000	(Q)
	95	1,4-Dichlorobenzene	146	12.232	12.226	(1.003)	192584	50.0000	48
	96	1,2-Dichlorobenzene	146	12.743	12.749	(1.045)	182568	50.0000	53
	97	n-Butylbenzene	91	12.766	12.760	(1.047)	249611	50.0000	50
M	98	Xylene (Total)	106				459842	150.000	150
	99	Hexachloroethane	117	13.103	13.109	(1.074)	69164	50.0000	47
	100	1,2-Dibromo-3-chloropropane	75	13.869	13.863	(1.137)	19526	50.0000	44
	102	1,2,4-Trichlorobenzene	180	15.077	15.071	(1.236)	124618	50.0000	48
	103	Hexachlorobutadiene	225	15.344	15.350	(1.258)	61976	50.0000	55
	104	Naphthalene	128	15.414	15.420	(1.264)	330789	50.0000	50
	105	1,2,3-Trichlorobenzene	180	15.774	15.780	(1.293)	118445	50.0000	48

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\150424A.B\V5Q0344.D
Date : 24-APR-2015 16:24
Client ID: LCS-81892
Instrument: V5.i
Sample Info: 5ML,LCS-81892,LCS-81892,81892
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



METHOD:
INITIAL CAL:
COMMENTS:

CAL ID:
IS/SS ID:
ICV ID:

ANALYST:
ARCHIVE:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: 8260-W
ICAL DATE: 4/2-/15

ANALYST: WL

BATCH: 150420.B

Start: 20-APR-15 16:28
End: 20-APR-15 19:52

Comments:

Standards: IS/SS-VW150407A ___ uL
STD-VW150408A ___ uL
BFB-VW150226A ___ uL
_____ ___ uL

Reviewed By: 4-21-15

Manual Integration: OK

MI Review: WL

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
V5Q0160	16:28	BFBB5	BFBB5		AQ									1		OK	
V5Q0161	16:53	VSTD001B5	VSTD001B5		AQ		99	96	97					1		OK MI_100	
V5Q0162	17:19	VSTD005B5	VSTD005B5		AQ		99	99	100					1		OK	
V5Q0163	17:44	VSTD020B5	VSTD020B5		AQ		96	96	100					1		OK	
V5Q0164	18:10	VSTD050B5	VSTD050B5		AQ		100	100	100					1		OK	
V5Q0165	18:36	VSTD100B5	VSTD100B5		AQ		102	101	102					1		OK	
V5Q0166	19:01	VSTD200B5	VSTD200B5		AQ		101	111	94					1		OK	
V5Q0167	19:52	VICV050B5	VICV050B5		AQ		92	100	85	99	97	92	97	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 4/21/15

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: 8260_W ANALYST: WL BATCH: 150424A.B
ICAL DATE: 4/20/15 Start: 24-APR-15 15:33
End: 25-APR-15 03:26

Comments:

Standards: ES/55-VW150407A ___ uL
STD-VW150408A ___ uL
BFB-VW150226A ___ uL
___ ___ uL

Reviewed By: [signature] Manual Integration: NA MI Review: WL 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
V5Q0342	15:33	BFBJ5	BFBJ5		AQ									1		OK	
V5Q0343	15:58	VSTD050J5	VSTD050J5		AQ		100	100	100					1		OK	
V5Q0344	16:24	LCS-81892	LCS-81892	81892	AQ		103	96	100	98	94	87	103	1		OK	
V5Q0345	16:50	MB-81892	MB-81892	81892	AQ		99	97	92	102	97	85*	95	1		RRX1	
V5Q0346	17:15	MB-81892	MB-81892	81892	AQ		96	91	87	104	91	86	95	1		OK	
V5Q0347	17:40	P0622-01A	MW-2-042115	81892	AQ	1	97	94	87	105	96	87	96	1		OK	2
V5Q0348	18:05	P0622-02A	MW-1-042115	81892	AQ	1	94	90	85	106	99	87	96	1		OK	2
V5Q0349	18:31	P0622-03A	MW-9-042115	81892	AQ	1	94	89	87	107	98	91	99	1		OK	2
V5Q0350	18:56	P0622-04A	MW-6-042115	81892	AQ	1	96	89	83	103	99	91	102	1		OK	2
V5Q0351	19:21	P0622-05A	MW-3R-042115	81892	AQ	1	96	90	85	102	103	86	97	1		OK	2
V5Q0352	19:47	P0622-06A	MW-8-042115	81892	AQ	1	92	85	85	107	92	93	98	1		OK	2
V5Q0353	20:12	P0622-07A	TRIP BLANK	81892	AQ	1	94	86	79	104	96	89	98	1		OK	2
V5Q0354	20:38	P0622-08A	DUP-1-042115	81892	AQ	1	94	89	87	108	103	87	94	1		OK	2
V5Q0355	21:04	P0622-09A	MW-4-042215	81892	AQ	1	94	85	84	101	96	91	100	1		OK	2
V5Q0356	21:30	P0622-10A	MW-5-042215	81892	AQ	1	93	88	83	111	98	88	100	1		OK	2
V5Q0357	21:55	P0622-11A	MW-7-042215	81892	AQ	1	92	91	85	107	94	85	93	1		OK	2
V5Q0358	22:20	P0622-12A	TRIP BLANK	81892	AQ	1	93	89	81	102	105	86	91	1		OK	2
V5Q0359	22:46	P0620-01A	TRIP BLANK_4/21	81892	AQ	1	94	88	83	102	92	90	92	1		OK	2
V5Q0360	23:12	P0620-02A	73759	81892	AQ	1	93	90	85	108	101	86	91	1		OK	2
V5Q0361	23:37	P0620-03A	73756	81892	AQ	1	97	88	86	101	93	89	96	1		OK	2
V5Q0362	00:03	P0620-04A	BLIND DUPLICATE	81892	AQ	1	91	87	85	110	100	88	101	1		OK	2
V5Q0363	00:28	P0620-05A	73752	81892	AQ	1	95	88	84	102	102	86	100	1		OK	2
V5Q0364	00:54	P0620-06A	TRIP BLANK_4/22	81892	AQ	1	92	86	84	109	98	89	97	1		OK	2
V5Q0365	01:20	P0620-07A	73754	81892	AQ	1	93	86	85	105	99	89	100	1		OK	2
V5Q0366	01:45	P0620-08A	73761(R)	81892	AQ	1	96	90	84	103	97	86	92	1		OK	2
V5Q0367	02:10	P0622-03AMS	MW-9-042115MS	81892	AQ	2	91	95	94	108	96	85	99	1	R	OK	2
V5Q0368	02:35	P0622-03AMSD	MW-9-042115MSD	81892	AQ	3	98	97	98	108	101	86	94	1	R	OK	2
V5Q0369	02:59	P0620-05AMS	73752MS	81892	AQ	2	92	95	97	108	96	85	100	1	R	OK	2
V5Q0370	03:26	P0620-05AMSD	73752MSD	81892	AQ	3	99	101	101	103	106	87	98	1	R	OK	2

* - 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 4/28/15

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
4/20/15	P0594	LaBella	05-07, 09-11	KP	WL	H	R9	
4/21/15	P0605	SOVEREIGN	11-19	WJL		H	R8	
4/21/15	P0607	SOVEREIGN	01-13	WJL		H	R8	
4/21/15	P0605	↓	01-10	KP		H	R8	
4/22/15	P0622	GZA	01-08	KP		H	R10	
4/22/15	P0631	spectrum	01-02	KP		US	R9	
4/22/15	P0616	sovereign	01-09	KP		H	R10	
4/22/15	P0620	Durkee	01-05	KP		H	R10	
4/23/15	P0622	GZA	09-12	WJL		H	R8	
↓	P0637	EPA	01-13	↓		T	R4	
	P0638	EPA	01-02			H	R13	
	P0651	AECOM	01-06			H	R8	
↓	P0605	SOVEREIGN	20-28	↓		H	R8	
4/23/15	P0620	DURKA	06-09	WJL	WL	H	R8	

Logbook ID 90.0191-08/14

Reviewed By: WL 4/27/15

"Preservative Used" Key

UA = Unpreserved Aqueous **H** = HCL **A** = Air **M** = MeOH **E** = Encore

US = Unpreserved Soil **N** = $NaHSO_4$ **P**=PE ampule **F** = Freeze **T** = Trace, HCL

* Wet Chemistry *

REPORT NARRATIVE

Spectrum Analytical, Inc. , RI Division.

Client : GZA GeoEnvironmental of NY Buffalo

Project: Maple Street

Laboratory Workorder / SDG #: P0622

SM 3500D Cr+

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: SM 3500D Cr+

IV. PREPARATION

Samples were prepared following procedures in laboratory test code: SM 3500D Cr+

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: SPEC2
Instrument Type: SP

Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

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

Matrix spikes were performed on sample: MW-9-042115 (P0622-03BMS).

Percent recoveries were within the QC limits.

D. Duplicate sample:

Duplicate analyses were performed on sample: MW-9-042115 (P0622-03BDUP).

Relative percent differences were within the QC limits.

E. Dilutions:

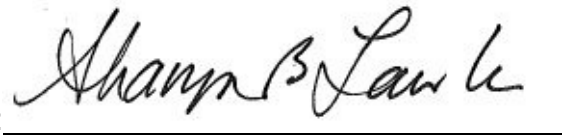
The following samples were analyzed at dilution:

MW-5-042215 (P0622-10B), dilution factor: 5 for Chromium, Hexavalent

F. Samples:

No other unusual occurrences were noted during sample analysis.

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

Signed: 

Date: 04/27/2015

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

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-042115
Lab ID: P0622-01
Project: Maple Street
Collection Date: 04/21/15 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:05	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-042115
Lab ID: P0622-02
Project: Maple Street
Collection Date: 04/21/15 11:55

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:08	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-042115
Lab ID: P0622-03
Project: Maple Street
Collection Date: 04/21/15 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:10	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-042115
Lab ID: P0622-04
Project: Maple Street
Collection Date: 04/21/15 14:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:19	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-042115
Lab ID: P0622-05
Project: Maple Street
Collection Date: 04/21/15 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:21	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-042115
Lab ID: P0622-06
Project: Maple Street
Collection Date: 04/21/15 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.064		0.030	mg/L	1	04/22/2015 10:24	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-042115
Lab ID: P0622-08
Project: Maple Street
Collection Date: 04/21/15 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:27	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-042215
Lab ID: P0622-09
Project: Maple Street
Collection Date: 04/22/15 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/23/2015 10:52	81870

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-042215
Lab ID: P0622-10
Project: Maple Street
Collection Date: 04/22/15 11:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	1.5		0.15	mg/L	5	04/23/2015 11:00	81870

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-042215
Lab ID: P0622-11
Project: Maple Street
Collection Date: 04/22/15 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/23/2015 11:07	81870

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: GZA GeoEnvironmental of NY Buffalo

Work Order: P0622

Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+

SM 3500D -- CR VI by Colorimetric Method

Sample ID: **MB-81848** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **04/22/15 10:00** Run ID: **SPEC2_150422B**

Client ID: **MB-81848** Batch ID: **81848** Units: **mg/L** Analysis Date: **04/22/15 10:00** SeqNo: **2257388**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030									

Sample ID: **MB-81870** SampType: **MBLK** TestCode: **SM3500_CR+** Prep Date: **04/23/15 10:30** Run ID: **SPEC2_150423A**

Client ID: **MB-81870** Batch ID: **81870** Units: **mg/L** Analysis Date: **04/23/15 10:30** SeqNo: **2258352**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030									

Sample ID: **LCS-81848** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **04/22/15 10:00** Run ID: **SPEC2_150422B**

Client ID: **LCS-81848** Batch ID: **81848** Units: **mg/L** Analysis Date: **04/22/15 10:02** SeqNo: **2257389**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3940	0.030	0.030	0.4000	0	98.5	80	120	0			

Sample ID: **LCS-81870** SampType: **LCS** TestCode: **SM3500_CR+** Prep Date: **04/23/15 10:30** Run ID: **SPEC2_150423A**

Client ID: **LCS-81870** Batch ID: **81870** Units: **mg/L** Analysis Date: **04/23/15 10:37** SeqNo: **2258353**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3910	0.030	0.030	0.4000	0	97.8	80	120	0			

Sample ID: **LCSD-81870** SampType: **LCSD** TestCode: **SM3500_CR+** Prep Date: **04/23/15 10:30** Run ID: **SPEC2_150423A**

Client ID: **LCSD-81870** Batch ID: **81870** Units: **mg/L** Analysis Date: **04/23/15 10:45** SeqNo: **2258354**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3950	0.030	0.030	0.4000	0	98.8	80	120	0.3910	1.02	20	

Sample ID: **P0622-03BDUP** SampType: **DUP** TestCode: **SM3500_CR+** Prep Date: **04/22/15 10:00** Run ID: **SPEC2_150422B**

Client ID: **MW-9-042115** Batch ID: **81848** Units: **mg/L** Analysis Date: **04/22/15 10:13** SeqNo: **2257393**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.030	0.030	0	0	0	0	0	0	0	20	

Qualifiers: ND - Not Detected at the MDL; S - Recovery outside accepted recovery limits; MDL - Method Detection Limit; B - Analyte detected in the associated Method Blank

m15.04.26.1446 J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

CLIENT: GZA GeoEnvironmental of NY Buffalo
Work Order: P0622
Project: Maple Street

ANALYTICAL QC SUMMARY REPORT

SM3500_CR+
SM 3500D -- CR VI by Colorimetric Method

Sample ID: **P0622-03BMS** SampType: **MS** TestCode: **SM3500_CR+** Prep Date: **04/22/15 10:00** Run ID: **SPEC2_150422B**
Client ID: **MW-9-042115** Batch ID: **81848** Units: **mg/L** Analysis Date: **04/22/15 10:16** SeqNo: **2257394**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.3890	0.030	0.030	0.4000	0	97.3	75	125	0			

Qualifiers: ND - Not Detected at the MDL; S - Recovery outside accepted recovery limits; MDL - Method Detection Limit; B - Analyte detected in the associated Method Blank
J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

P0622

Spectrum Analytical, Inc. RI Div. — Hexavalent Chromium Colorimetric Analysis Logbook

Analysis Date: 4/23/15 10:30-11:15 **SPEC#** 2 **Analyst:** JKD

Sample ID	pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
S0	1	25	0.000	-0.004	1	-0.004		
S0.2	↓	0.4/25	0.151	0.191	↓	0.191	95.5%	
MB-81870		25	0.003	0.000		0.000		
LCS-81870		1/25	0.306	0.391		0.391	98%	
LCSD-81870		1/25	0.309	0.395		0.395	99%	
P0622-09B		25	0.002	-0.001	1	-0.001		
↓ 10B		25	0.232	0.296	5	1.480		
P0622-11B	↓	25	<0.026 / 0.019	0.005	1	0.005		
S0.4	1	0.8/25	0.301	0.385	1	0.385	96%	

JKD 4/23/15

Wavelength= 540 nm
Pathlength= 1.0cm
MRL= 0.03 mg/L
ChromaVer 3 Lot #: A41176
Diphenylcarbizide Solution ID: -

Method# : SM3500 Cr B / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

CCV = IWI 140703C

CCS = IWI 1S042301 CV = 0.4 mg/L

m= 0.77401
b= 0.0031
r= 0.99946
Date of last Calib: 9/18/14

Logbook ID: 100.0056-09/14

LIMS entry: SBL

Reviewed By: SBL 4/23/15

P0622

Spectrum Analytical, Inc. RI Div. **Hexavalent Chromium Colorimetric Analysis Logbook**

Analysis Date: 4/22/15 10:00 - 10:45 **SPEC#** 2 **Analyst:** JAP

Sample ID	pH (Aqueous Samples)	Sample Volume (ml)	Absorbance (Abs)	Calc. CONC (mg/l)	DF	Result (mg/l)	% Rec	comments
S0	1	25	0.000	-0.004	1	-.004		
S0.2		0.4/25	0.153	0.194		0.194	97%	
MB-81848		25	0.002	-0.001		-0.001		
LCS-81848		~~0.4/25~~ 1/25 JKD 4/22/15	0.308	0.394		0.394	98.5%	
P0622-01B		25	0.007	0.005		0.005		
02B			~~0.036~~ JKD 4/22/15 < 0.036	-0.004		-0.004		
03B			0.006	0.004		0.004		
03BDUP			0.008	0.006		0.006		
03BMS			~~0.288~~ JKD 4/22/15 0.304	0.389		0.389	97%	
04B			0.008	0.006		0.006		
05B			0.018	0.019		0.019		
P0622-06B		25	0.053	0.064		0.064		
S0.4		0.8/25	0.299	0.382		0.382	95.5%	
P0622-08B		25	0.006	0.004		0.004		
S0.2	1	0.4/25	0.155	0.196	1	0.196	98%	
			JMD 4/22/15					

Wavelength= 540 nm (colored background)
Pathlength= 1.0 cm
MRL= 0.03 mg/L
ChromaVer 3 Lot #: A41176
Diphenylcarbizide Solution ID:

Method# : SM3500 Cr B / SW7196A (circle one)

Conc of Analyte = (Abs-b)/m

CCV = IWP140703C

LCS/MS = IWI 150422O1 TV=2.4mg/L

m= 0.77401
b= 0.0031
r= 0.99996
Date of last Calib: 9/18/14

Logbook ID: 100.0056-09/14 **LIMS entry:** SBL **Reviewed By:** SBL 4/23/15

Internal Chain of Custody

Client: GZA_BUFFALO

Work Order: P0622 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
01A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
01B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
01B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
01B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
02A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
02A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
02B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
02B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
02B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
03A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03A	003	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03A	004	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03A	005	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03A	006	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
03B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
03B	002	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03B	002	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
03B	002	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
03B	003	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
03B	003	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
03B	003	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
04A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
04A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
04B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
04B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
04B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
05A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
05A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM

Internal Chain of Custody

Client: GZA_BUFFALO

Work Order: P0622 **Profile Name:** MAPLE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
05B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
05B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
05B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
06A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
06A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
06B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
06B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
06B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
07A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
07A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
08A	001	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
08A	002	SW8260_W	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
08B	001	SM3500_CR+	In	LOGIN: kpierce	4/22/2015 10:28:00 AM
08B	001	SM3500_CR+	Out	James Kyle Dorsey	4/22/2015 10:39:16 AM
08B	001	SM3500_CR+	In	James Kyle Dorsey	4/22/2015 11:41:30 AM
09A	001	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
09A	002	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
09B	001	SM3500_CR+	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
09B	001	SM3500_CR+	Out	James Kyle Dorsey	4/23/2015 10:42:28 AM
09B	001	SM3500_CR+	In	James Kyle Dorsey	4/23/2015 11:23:24 AM
10A	001	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
10A	002	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
10B	001	SM3500_CR+	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
10B	001	SM3500_CR+	Out	James Kyle Dorsey	4/23/2015 10:42:28 AM
10B	001	SM3500_CR+	In	James Kyle Dorsey	4/23/2015 11:23:24 AM
11A	001	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
11A	002	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
11B	001	SM3500_CR+	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
11B	001	SM3500_CR+	Out	James Kyle Dorsey	4/23/2015 10:42:28 AM
11B	001	SM3500_CR+	In	James Kyle Dorsey	4/23/2015 11:23:24 AM
12A	001	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM
12A	002	SW8260_W	In	LOGIN: Kpierce	4/23/2015 10:23:00 AM

Last Page of Data Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

May 20, 2015

Daniel Troy
GZA GeoEnvironmental of New York
535 Washington St. 11th Floor
Buffalo, NY 14203

RE: Data Usability Summary Report (DUSR) Validation of Analytical Data for the 312 Maple Street Site
Spectrum Analytical, Inc SDG No. P0622

Dear Mr. Troy:

Review has been completed for the data package generated by Spectrum Analytical, Inc that pertains to samples collected between 04/21/15 and 04/22/15 at the 312 Maple Street site. Nine aqueous samples and a field duplicate were processed for a full list of volatile analytes, and hexavalent chromium. The analytical methodologies utilized are those of the USEPA SW846 method 8260B and the Standard Methods SM3200B.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers, using guidance from the USEPA Region 2 validation SOPs and the USEPA CLP National Functional Guidelines for Organic Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Case Narratives
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Preparation/Calibration Blanks
* Laboratory Control Samples
* Instrumental Tunes and IDLs
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative.

In summary, sample results are usable either as reported or with minor edit/qualification.

Copies of the NYSDEC Sample Identification and Analytical Requirement Summary Forms are attached to this text. Included with this report are qualified laboratory results forms.

The following text discusses quality issues of concern.

Field Duplicates

The blind field duplicate evaluation was performed on MW-6-042115. Correlations are within validation guidelines.

Volatiles by EPA 8260B

Matrix spikes of MW-9-042115 show acceptable recoveries and duplicate correlations.

Surrogate and internal standard recoveries are within required ranges. Blanks show no contamination.

Calibrations standards showed responses within analytical protocol and validation guidelines, with the exception of those for 2-hexanone and 1,2-dibromo-3-chloropropane (36%RSD and 43%RSD), results for which are qualified as estimated in the project samples.

Hexavalent Chromium by SM3200B

Matrix spike/laboratory duplicate evaluations were performed on MW-9-042115 show recoveries and correlations within recommended ranges.

Blanks show no contamination above the reporting limits, and calibration standards show compliant responses.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

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

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

Project Name : Maple Street -- 21.0056127.10 **SDG :** P0622

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-2-042115	P0622-01	SW8260_W				SEE DATA
MW-1-042115	P0622-02	SW8260_W				SEE DATA
MW-9-042115	P0622-03	SW8260_W				SEE DATA
MW-6-042115	P0622-04	SW8260_W				SEE DATA
MW-3R-042115	P0622-05	SW8260_W				SEE DATA
MW-8-042115	P0622-06	SW8260_W				SEE DATA
TRIP BLANK_04/21/15	P0622-07	SW8260_W				
DUP-1-042115	P0622-08	SW8260_W				SEE DATA
MW-4-042215	P0622-09	SW8260_W				SEE DATA
MW-5-042215	P0622-10	SW8260_W				SEE DATA
MW-7-042215	P0622-11	SW8260_W				SEE DATA
TRIP BLANK_04/22/15	P0622-12	SW8260_W				

QUALIFIED SAMPLE RESULTS FORMS

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0347.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.3	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	52	
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

EPA SAMPLE NO.

MW-2-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0347.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0348.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	8.8	
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	1.7	J
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	1.4	J
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.

MW-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0348.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0349.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	2.3	J
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

EPA SAMPLE NO.

MW-9-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0349.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0350.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.8	J
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

EPA SAMPLE NO.

MW-6-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0350.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3R-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0351.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

EPA SAMPLE NO.

MW-3R-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0351.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0352.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.1	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.1	J
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	1.3	J
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

EPA SAMPLE NO.

MW-8-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0352.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/21/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0353.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/21/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0353.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0354.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.8	J
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

EPA SAMPLE NO.

DUP-1-042115

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0354.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/22/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0355.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	3.4	J
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

EPA SAMPLE NO.

MW-4-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0355.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0356.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	15	
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	29	
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

EPA SAMPLE NO.

MW-5-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0356.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7-042215

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0357.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/22/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK_04/22/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0622 Mod. Ref No.: SDG No.: SP0622

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0622-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5Q0358.D

Level: (TRACE/LOW/MED) LOW Date Received: 04/23/2015

% Moisture: not dec. Date Analyzed: 04/24/2015

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U UJ
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 UJ
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

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-2-042115
Lab ID: P0622-01
Project: Maple Street
Collection Date: 04/21/15 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:05	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-1-042115
Lab ID: P0622-02
Project: Maple Street
Collection Date: 04/21/15 11:55

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:08	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-9-042115
Lab ID: P0622-03
Project: Maple Street
Collection Date: 04/21/15 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:10	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-6-042115
Lab ID: P0622-04
Project: Maple Street
Collection Date: 04/21/15 14:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:19	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-3R-042115
Lab ID: P0622-05
Project: Maple Street
Collection Date: 04/21/15 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:21	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-8-042115
Lab ID: P0622-06
Project: Maple Street
Collection Date: 04/21/15 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	0.064		0.030	mg/L	1	04/22/2015 10:24	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: DUP-1-042115
Lab ID: P0622-08
Project: Maple Street
Collection Date: 04/21/15 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/22/2015 10:27	81848

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-4-042215
Lab ID: P0622-09
Project: Maple Street
Collection Date: 04/22/15 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/23/2015 10:52	81870

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-5-042215
Lab ID: P0622-10
Project: Maple Street
Collection Date: 04/22/15 11:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	1.5		0.15	mg/L	5	04/23/2015 11:00	81870

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: GZA GeoEnvironmental of NY Buffalo
Client Sample ID: MW-7-042215
Lab ID: P0622-11
Project: Maple Street
Collection Date: 04/22/15 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 3500D -- CR VI by Colorimetric Method							**SM3500_CR+**
Chromium, Hexavalent	ND		0.030	mg/L	1	04/23/2015 11:07	81870

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

APPENDIX D

ENVIRONMENTAL EASEMENT

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 29th day of December, 2015, between Owner(s) County of Broome, having an office at 60 Hawley Street, Binghamton, New York 13902, County of Broome, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 312 Maple Street and 1-3 Duane Avenue North in the Village of Endicott, County of Broome and State of New York, known and designated on the tax map of the County Clerk of Broome as tax map parcel numbers: Section 156.12 Block 4 Lots 11 and 12, being the same as that property conveyed to Grantor by deed dated February 9, 1994 and recorded in the Broome County Clerk's Office in Liber and Page 1834/1075. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.924 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 13, 2002 and last revised on July 22, 2005 prepared by Paul A. Waters, NYCLPS of Shumaker Consulting Engineering and Land Surveying, P.C., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation

established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of State Assistance Contract Number: NYWII-B00168-12-14, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Broome County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation

pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: B00168
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

County of Broome:

By: Debra Preston

Print Name: Debra A. Preston

Approved as to form
By
BROOME COUNTY
ATTORNEY'S OFFICE

Title: County Executive Date: 12/11/15

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Broome)

On the 10th day of December, in the year 2015, before me, the undersigned, personally appeared Debra A. Preston, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Karen M. Veruto
Notary Public - State of New York

KAREN M VERUTO
Notary Public, State of New York
No. 01VE5042801
Qualified in Broome County
Commission Expires April 24, 2019

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 29 day of December, in the year 2015, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

ENVIRONMENTAL EASEMENT DESCRIPTION
312 MAPLE STREET, ERP SITE NO. B00168
VILLAGE OF ENDICOTT, BROOME COUNTY

ALL THAT TRACT OR PARCEL OF LAND situate in Village of Endicott, in the Town of Union, County of Broome, and the State of New York, and described as follows:

BEGINNING at point at on the southerly boundary Maple Street at its intersection with the division line between the property of Susan M. Barnes and Karl E. Spencer (reputed owners) on the west and the property of the County of Broome on the east;

RUNNING THENCE South 86°46'25" E along the southerly boundary of Maple Street a distance of 268.61 feet to a point at the intersection the southerly boundary of said Maple Street and the westerly boundary of North Duane Avenue;

RUNNING THENCE South 10°53'25" W along the westerly boundary of North Duane Avenue a distance of 134.81 feet to a point at the intersection the westerly boundary of said North Duane Avenue with the northerly Right of Way of Pennsylvania Lines LLC (Formerly Erie Railroad Company);

RUNNING THENCE South 83°24'56" W along the northerly Right of Way of Pennsylvania Lines LLC (Formerly Erie Railroad Company) a distance of 255.85 feet to a point at the intersection with the division line between the property of Susan M. Barnes and Karl E. Spencer (reputed owners) on the west and the property of the County of Broome on the east;

RUNNING THENCE North 03°42'14" E along said division a distance of 177.21 feet to the POINT OF BEGINNING.

The above described parcel contains 40248± sq.ft. or 0.9240± acres.