ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

New York State Department of Environmental Conservation

Remedial Investigation Report, Former Plaza Cleaners OU#1 Port Washington, NY

New York State Department of Environmental Conservation Site #130108

June 30, 2014

ARCADIS

Daniel J. Loewenstein, P.E., BCEE
Senior Vice President

Daniel C. Lang, P.H.G.
Principal Hydrogeologist

Remedial Investigation Report
Former Plaza Cleaners OU-1

New York State Department of Environmental Conservation Site #130108

Prepared for:
New York State Department of Environmental Conservation

Prepared by:
Malcolm Pirnie, Inc.
855 Route 146, Suite 210
Clifton Park, NY 12065

Tel: 518.250.7300
Fax: 518.250.7301

Our Ref.:
00266408.0000

Date:
June 30, 2014

Malcolm Pirnie, Inc. was acquired by ARCADIS in July 2009.

ARCADIS

Table of Contents

1. INTRODUCTION **1**

Section 1.01 Standards, Criteria and Guidance (SCGs) 1

2. BACKGROUND **2**

Section 2.01 Site Description 2

Section 2.02 Physical Setting 3

Section 2.03 Hydrogeology 3

Section 2.04 Regional Geology 4

Section 2.05 Previous Investigation and Remediation Activities 5

3. SUMMARY OF REMEDIAL ACTIVITIES **6**

Section 3.01 Test Pit and Onsite UST Investigation 6

Section 3.02 On-site Sampling 7

(a) Soil Vapor Sampling 7

(b) AS/SVE Sampling 7

(c) Stormwater and Sediment Sampling 8

(d) Groundwater Sampling 8

4. AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM EVALUATION **8**

Section 4.01 AS/SVE Technology Overview 9

Section 4.02 AS/SVE Equipment Observed at the Site 9

(a) Primary equipment components of the shallow SVE system: 10

(b) Primary equipment components of the deep SVE system: 10

(c) Primary equipment components of the AS system: 11

Section 4.03 SVE/AS Well Construction Details 11

Section 4.04 Site-Specific Process Flow Description 12

Section 4.05 System Operation and Performance 13

(a) Summary of System Operational Parameters: 13

(b) AS/AVE System Analytical Data 14

Section 4.06 Data Evaluation and Conclusions 15

(a) Shallow SVE: 15

(b) Deep SVE system: 15

(c) Air Sparge System: 16

Section 4.07 AS/SVE System Recommendations 16

(a) Shallow SVE System: 17

(b) Deep SVE System: 17

(c) Air Sparge System: 18

(d) System Operation and Maintenance: 18

5. NATURE AND EXTENT OF CONTAMINATION 19

Section 5.01 Soil Vapor Sampling Results 19

Section 5.02 AS/SVE Sampling Results 19

Section 5.03 Stormwater and Sediment Sampling Results 20

Section 5.04 Groundwater Sampling Results 20

Section 5.05 Test Pit/Tank Removal Soil Sampling Results 20

6. HUMAN HEALTH EXPOSURE PATHWAYS ANALYSIS 20

7. CONCLUSIONS 21

8. RECOMMENDATIONS 22

9. REFERENCES 23

Tables

TABLE 1. Summary of Soil Sampling Results

TABLE 2. Summary of Soil Vapor Sampling Results

TABLE 3. Summary of Stormdrain Sampling Results – Aqueous

TABLE 4. Summary of Stormdrain Sampling Results - Sediment

TABLE 5. Summary of Groundwater Sampling Results - VOCs

TABLE 6. Summary of Groundwater Sampling Results - SVOCs

TABLE 7. Summary of Groundwater Sampling Results - Metals

TABLE 8. Summary of Groundwater Sampling Results – Pesticides & PCBs

TABLE 9. AS/SVE System Operating Parameters

TABLE 10. AS/SVE System Performance Readings

TABLE 11A. System Performance Calculations

TABLE 11B. Estimated Carbon Treatment Efficiency

TABLE 11C. Estimated Annual Impact Percentage of DAR-1 Guidance Concentrations

Figures

FIGURE 1. Site Location

FIGURE 2. Aerial Photograph

FIGURE 3. Soil Gas Sampling and Monitoring Well Locations

FIGURE 4. Groundwater Sampling Locations

FIGURE 5. Shallow Soil Vapor Extraction System Schematic

FIGURE 6. Deep Soil Vapor Extraction System Schematic

FIGURE 7. Air Sparge System Schematic

FIGURE 8. Schematic Legend, Notes and Abbreviations

Appendices

A Field Forms and Photo Logs

B Data Usability Summary Report - Data Validation Services

C Laboratory Data Summary Packages - Con-Test Analytical Laboratory

1. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) tasked Malcolm Pirnie, Inc. (Malcolm Pirnie) to perform a Remedial Investigation (RI) at the former Plaza Cleaners Operable Unit 1 site (NYSDEC Site #130108) in the Town of North Hempstead, New York. The RI activities were conducted under the NYSDEC State Superfund Standby Contract No. D007618-15 and in accordance with the October 2012 Former Plaza Cleaners OU-1 Remedial Investigation/Feasibility Study Work Plan. The purpose of this RI is to obtain additional data relating to a potential source area for a tentatively-identified underground storage tank (UST), contaminant impacts to storm/wastewater sewer, and conduct an evaluation on the existing air sparge/soil vapor extraction system (AS/SVE) at the Site.

Section 1.01 Standards, Criteria and Guidance (SCGs)

Title 6 of the NYSCRR Part 375 requires that SCGs are identified and that remedial actions conform with SCGs unless "good cause exists why conformity should be dispensed with." Standards and Criteria are clean-up standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address a hazardous substance, pollutant, contaminant, remedial action, or location. Guidance includes non-promulgated criteria and guidelines that are not legal requirements; however, the site's remedial program should be designed with consideration given to guidance that, based on professional judgment, is determined to be applicable to the former Plaza Cleaners site.

The principle SCGs for the former Munsey and Plaza Cleaners sites are listed below:

General:

6 NYCRR Part 375 – Environmental Remediation Programs, including the Inactive Hazardous Waste Disposal Site Remedial Program

6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes

NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation

Soil:

6 NYCRR Part 375 – Soil Clean-up Objectives

Water:

6 NYCRR Part 700-705, Water Quality Regulations for Surface Water and Groundwater

NYSDEC Division of Water TOGS 1.1.1 – Ambient Water Quality Standards and Groundwater Effluent Limitations

Indoor Air:

NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York

2. BACKGROUND

Section 2.01 Site Description

The former Plaza Cleaners site is located at the junction of Port Washington Boulevard and Maple Street in an urban area in the Hamlet of Port Washington, Nassau County, Long Island, New York (Figures 1 and 2). Port Washington is located on the approximately 13.5 square-mile, Manhasset Neck peninsula. The Manhasset Neck is surrounded by the Long Island Sound toward the north, Manhasset Harbor to the east and Hempstead Harbor to the west.

Previous investigations of these sites included offsite remedial investigations of the former Munsey Cleaners OU#2 and former Plaza Cleaners OU#2. The former Munsey Cleaners site is located at the southeastern corner of Port Washington Boulevard and Main Street and is approximately 250 feet northeast of the former Plaza Cleaners site. Under the direction of the NYSDEC, the two remedial investigations were combined because of the likelihood of comingled dissolved-phase VOC plumes downgradient of the sites. In November 2011, a finalized RI Report was submitted to the NYSDEC summarizing the results of the offsite remedial activities. A remedial alternative Feasibility Study was conducted by Malcolm Pirnie at the direction of the NYSDEC upon finalization of the RI Report in November 2011. A final Feasibility Study was submitted to the NYSDEC in February 2012, which analyzed remedial alternatives, associated implementation and long-term maintenance costs, and the effectiveness of alternatives to remediate VOC concentrations in groundwater to pre-existing conditions.

Section 2.02 Physical Setting

Land use is mixed-use commercial and residential in the vicinity of the Plaza Cleaners site. Most businesses are on Port Washington Boulevard and Main Street. Residential areas are generally north of Main Street, and in the Village of Baxter Estates (Figure 2).

The topography of the investigation area generally slopes irregularly downward from the former Plaza Cleaners property toward the north and west and upward toward the east. The topography consists of small hummocks (< 5 to 10 feet), kame moraines, and glacial meltwater-incised valleys.

The former Plaza Cleaners property is situated at an elevation of approximately 125 feet above mean sea level (AMSL) on the Manhasset Neck in northern Nassau County (Figure 1). Regional topography consists of irregular inland highlands that slope toward the water bodies, with a gentle slope toward the west and steeper slopes toward the east.

Section 2.03 Hydrogeology

The upper glacial aquifer present beneath the former Plaza Cleaners site is a shallow, unconsolidated aquifer of variable thickness. The water table occurs at varying depths in this area because of the irregular topography, and ranges in elevation from approximately 10 to 150 feet AMSL (Stumm, et al. 2002). The upper glacial aquifer is underlain by the North Shore confining unit (NScu). The upper surface elevation of the NScu ranges from approximately 35 to 150 feet below mean sea level (BMSL) across the Manhasset Neck (Stumm, et al. 2002).

Mean annual groundwater pumping from the upper glacial aquifer was 365.6 million gallons through 1992-1996 (data from the Albertson, Manhasset-Lakeville, Port Washington and Roslyn Water Districts; Sands Point Water Department, and New York State Department of Environmental Conservation, in Stumm et al., 2002). The Manhasset Neck is heavily developed with residential and commercial properties. As such, surface run-off is controlled by pavement and stormwater drainage systems.

In the vicinity of the former Plaza Cleaners site, treated groundwater is used as a local potable water source. The Port Washington Water District (PWWD) receives a portion of its water from two supply wells (N-06087 & N-04860) located approximately 4,100 feet from the former Plaza site. These wells are in the Sandy Hollow Well Field, which is downgradient of the former Munsey and Plaza Cleaners sites, and are screened in the upper glacial aquifer. An additional potable water supply well from the PWWD is present at the east end of Bar Beach Road, which is approximately 0.5 miles southeast

of the former Munsey and Plaza Cleaners sites. The PWWD serves an area of approximately six square miles that includes the communities of Port Washington, Manorhaven, Port Washington North, Baxter Estates and parts of Flower Hill and Plandome Manor.

Section 2.04 Regional Geology

The former Plaza Cleaners site is located in northwestern Long Island, which has a surficial geology dominated by glacial deposits including moraines, kame deposits, fluvial sands, outwash deposits, shallow marine clays, and eroded valley-fill deposits. Based on regional geologic maps (Cadwell, 1989), surficial deposits in the vicinity of the Site includes Upper and Lower Pleistocene glacial deposits. The Magothy Formation, the Raritan Formation deposits, and the Lloyd Sand Member are generally located south of the site (Stumm, et al. 2002). Geologic cross-sections in Stumm et al. (2002) indicate the Magothy is not present in the vicinity of the site; however, the NScu and North Shore aquifer are present. Soil at the site is mapped by the Nassau County Soil Survey as Riverhead – Enfield Soil – Urban Land Complex, which consists of nearly level to strongly sloping, well drained, moderately coarse textured and medium textured soils, urban land sands, (fill) and silty sands. The uppermost geologic unit, the upper glacial aquifer, is composed of sediments deposited during the Pleistocene.

The Magothy Formation is composed of unconsolidated sands with discontinuous layers of silts and clays, with a bottom unit of coarse sand and gravel. The formation is exposed along the coast on the north shore of Long Island, with the top of the unit dipping southerly to a depth of approximately 600 feet below sea level at the south shore. The Magothy Formation thickens toward the south, and is approximately 1,000 feet thick in southwestern Suffolk County. The Raritan Formation consists of an upper clay member and a lower sand member (Lloyd Sand). The clay member is a confining unit, resulting in confining conditions within the Lloyd Aquifer. The top of the Lloyd Aquifer is approximately 200 feet below sea level beneath the north shore and dips southerly to approximately 1,500 feet beneath the south shore. Stumm et al. (2002) suggests that the correlation of the Lloyd Sands Aquifer and Raritan Confining Unit along the north shore of Long Island is “questionable” and therefore assigned the nomenclature of North Shore Aquifer and North Shore Confining Unit.

The bedrock basement beneath Long Island is comprised principally of gneissic metamorphic rocks, which are part of a belt of metamorphic rocks underlying most of eastern North America. Exposures of this rock are found in the Bronx and Yonkers and in a belt extending northeasterly through New Jersey into upstate New York. Based on

information from cross sections in Stumm et al. 2002, bedrock elevation (biotite-garnet schist of the Hartland Formation) varies from approximately 150 to 400 feet BMSL.

Section 2.05 Previous Investigation and Remediation Activities

The 0.25-acre Plaza Cleaners site includes a one-story concrete building in the southwestern corner of the lot that is currently being used as a dry cleaner business. The remaining portion of the property is covered with asphalt. This property has operated as a dry cleaner since 1964. In 1998, a Phase I Environmental Site Assessment indicated recognized environmental conditions associated with an underground storage tank (UST) on-site and the long-term operation of a dry cleaner. PCE was subsequently identified in a floor drain within the building and in sub-slab soils during a Phase II Environmental Audit. In 1998 and 1999, under the oversight of the Nassau County Department of Health, approximately 941 tons of contaminated soil was excavated and disposed of off-site at a permitted disposal facility. An Order on Consent was negotiated between NYSDEC and the responsible party in March 2001. During a 2003 Phase II subsurface soil and groundwater investigation conducted under NYSDEC oversight, PCE was detected in on-site groundwater samples at concentrations ranging from 3 µg/L to 809 µg/L. Residual PCE was detected in on-site soil ranging from non-detect to 1.01 ppm. An RI/FS was initiated by the responsible party and, in February 2007, a Remedial Action Plan/Feasibility Study (RAP/FS) plan was submitted to NYSDEC; however, in May 2007, the Consent Order was terminated by NYSDEC. In October 2007, the Plaza Cleaners site was listed as a Class 2 site and the completion of the RI/FS was referred to the State Superfund. An air sparge and soil vapor extraction system was installed at the Plaza Cleaners site by the responsible party but was not operated until approximately March 2012.

An extensive analytical and field data collection program was implemented during the Remedial Investigation for the Munsey Cleaners OU#2 and former Plaza Cleaners OU#2 sites. The dissolved-phase VOC plume associated with former dry cleaning activities has been generally defined both horizontally and vertically within the underlying upper glacial aquifer in Port Washington, NY. The dissolved-phase VOC plume consists primarily of PCE, TCE, and cis-1,2 DCE. Total VOC concentrations in groundwater were detected as high as 1,520 µg/L in the January 2008 sample collected from MC-B-04, which is near the MC-7 well cluster along South Bayles Avenue. The PCE concentration in this sample was 1,500 µg/L. PCE degradation products, TCE and cis-1,2 DCE, were detected at relatively lower concentrations in groundwater and VC was not detected, indicating that little natural attenuation of PCE is occurring within the aquifer.

Based on data collected prior to and during the Munsey and Plaza Cleaners OU#2 RIs, these sites are sources of VOC groundwater contamination in this area. An investigation of soil vapor intrusion was implemented during the OU#2 RI, and where applicable, sub-slab depressurization systems were installed to mitigate the potential for vapor intrusion. Six sub-slab depressurization (SSD) systems have been installed to address soil vapor intrusion at 10 properties located above the dissolved-phase VOC plumes. Soil vapor intrusion is monitored on an annual basis at other locations where concentrations did not warrant the installation of a SSD system. The Sandy Hollow Well Field, the local source of drinking water is in the general vicinity of the dissolved-phase VOC plume; however, water treatment capabilities have already been established to remove VOCs from drinking water at this facility. The Port Washington Water District routinely monitors water quality, including VOC analysis. Groundwater sampling conducted in accordance with the Plaza and Munsey Cleaners OU-2 work assignments have not detected any contaminants of concern at concentrations greater than NYS Standards in these potable water supply wells.

3. SUMMARY OF REMEDIAL ACTIVITIES

Section 3.01 Test Pit and Onsite UST Investigation

Previous investigation of the Former Plaza Cleaners site included a ground-penetrating radar (GPR) survey to evaluate the potential for buried USTs. The results of the GPR survey indicated a subsurface anomaly north of the building on site. On June 21st, 2013 a confirmatory excavation occurred under the direction of the current property owner and their consultant. During the excavation a UST was located approximately 1 foot below ground surface (bgs). The UST was approximately 6 feet in length and 4 feet in diameter and contained a small amount of liquid believed to be fuel oil. Excavated soils were screened with a photoionization detector (PID) and staged onsite. Once the UST was removed, soil was excavated to a depth of approximately 8 feet then backfilled with soil brought on-site prior to excavating. Two soil samples were collected during the tank excavation and analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The compounds detected in the samples analyzed were consistent with fuel oil detections. Results of the soil samples are illustrated on Table 1. One sample was collected directly beneath the UST, and one at the bottom of the excavation. Concentrations of total xylenes in the shallowest soil sample had a result equal to the 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective (260 µg/kg). Other concentrations of detected compounds

were below the respective 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Section 3.02 On-site Sampling

(a) Soil Vapor Sampling

Soil vapor sampling was conducted at the Site on September 12, 2013 (Figure 3). Field logs and photographs taken during the RI are included in Appendix A. A Data Usability Summary Report (DUSR) was conducted on the September 12, 2013 data by Data Validation Services of North Creek, NY and is included as Appendix A. Soil vapor samples were collected from 13 sampling locations and analyzed for USEPA TO-15 constituents by Con-Test Analytical Laboratory in East Longmeadow, MA. Laboratory data summary packages are included as Appendix B. The soil vapor sampling event included five sampling locations from outside the former Plaza Cleaners building and eight locations from inside the building. An outdoor ambient air sample was also collected at the northeast corner of the building. Results of the soil vapor sampling event are provided in Table 2 and are summarized in greater detail below, but in general chlorinated solvents including PCE, TCE and a degradation product Cis 1,2 DCE are detected in soil gas in the vicinity of the former Plaza Cleaners property.

(b) AS/SVE Sampling

An AS/SVE system was previously installed at the Site under the direction of the current property owner. During the September, 2013 soil gas sampling event, the existing AS/SVE system was sampled at points upstream and downstream from the granular activated carbon (GAC) vessels to evaluate the system's effectiveness at soil vapor extraction and treatment. The configuration and effectiveness of the existing AS/SVE system is described in greater detail below, but sampling was conducted at four locations in the treatment train; two influent and two effluent air samples. Influent sampling locations included a location before a fresh-air dilution valve and a sampling location after the fresh air dilution. These locations were sampled to evaluate the effectiveness of the fresh-air dilution valve within the system. One effluent sample was collected between GAC vessels; the remaining effluent sample was collected after the final GAC vessel.

On February 18, 2014 the influent soil gas from each of the deep and shallow SVE wells was screened for VOCs via sample ports using a PID. The concentrations ranged from 343 parts per billion by volume (ppbv) at SVE-5D to 2,889 ppbv at SVE-3D. One

influent soil gas sample was collected from SVE-3D and analyzed for volatiles using Method TO-15.

(c) Stormwater and Sediment Sampling

While onsite for the September 2013 soil vapor sampling event, Malcolm Pirnie staff collected one sediment and one stormwater sample from the stormwater manhole on the former Plaza Cleaners property. The sediment and water samples were analyzed for VOC constituents to evaluate the extent of the contamination at the Site. In general, no contaminants of concern were detected in either the sediment and water samples collected in the manhole on the former Plaza Cleaners property (Tables 3 and 4).

(d) Groundwater Sampling

Groundwater samples were collected on February 18, 2014 from monitoring well MW-3 and air sparge wells AS-3, AS-4, and AS-5. Monitoring wells and air sparge wells are shown on Figure 3. Groundwater samples that exceeded applicable NYSDEC groundwater standards are shown on Figure 4. Prior to sampling, the deep SVE and AS system was temporarily taken off-line to allow the water table to equilibrate for approximately 1 hour. Samples were collected in general accordance with EPA Low-Flow Sampling Protocol and submitted to Con-Test Analytical Laboratory in East Longmeadow, MA. All groundwater samples were analyzed for VOCS by USEPA Method 8260C. The groundwater sample collected at AS-5 was also analyzed for SVOCS (USEPA Method 8270D), metals (USEPA Methods 6010C and 7470A), cyanide (SM 4500-CN E), pesticides (USEPA Method 8081B), and PCBs (USEPA Method 8082A). Laboratory data summary packages are included as Appendix B. Results of the groundwater sampling event are provided in Tables 5 through 8 and are summarized in greater detail below, but in general, PCE is the primary contaminant and was detected in each groundwater sample collected at concentrations that exceeded the NYSDEC Class GA Standard.

4. AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM EVALUATION

During August and September 2013 Malcolm Pirnie conducted an inspection of the existing AS/SVE system at the former Plaza Cleaners site. The AS/SVE system was constructed at the Site by the property owner to remediate a dissolved-phase VOC plume, primarily containing PCE and TCE. According to the site owner's consultant, Mr. Russell Furia of Zytel Industries, the AS/AVE system has been operational since approximately March, 2012. The purpose of the system evaluation was to determine

the effectiveness of the AS/SVE remedial system and whether it has been effective at reducing the concentrations of absorbed-phase and dissolved-phase VOCs in subsurface soil and groundwater at the Site. To assist with this evaluation, the following data were collected:

- System operating parameters, which include extracted soil gas flow rates, applied and induced vacuums (i.e., pneumatic conductivity), radius of vacuum influence, contaminant concentrations and mass flowrates, and air injection pressures and flow rates.

- System component and equipment specifications, including: number and spacing of remedial wells, well construction, equipment sizing, instrumentation and gauging, process piping layout; and vapor treatment.

Section 4.01 AS/SVE Technology Overview

Soil vapor extraction (SVE) involves inducing airflow in the subsurface with an applied vacuum, and thus enhancing in-situ volatilization. The SVE process takes advantage of the volatility of contaminants and promotes mass transfer from adsorbed and free phases in the soil to the vapor phase. The vapor is then conveyed via vacuum and treated above ground. SVE can be applied for the removal of VOCs utilizing volatilization as the primary mass transfer mechanism. Air exchange rates for sufficient volatilization are typically in the range of 2 to 10 pore volumes per day (Suthersan et al, 1999).

The air sparge (AS) process can be described as injection of air at controlled pressures and volumes into water-saturated soils (i.e., below the water table). The two primary contaminant mass removal mechanisms that occur during the operation of AS systems include; in-situ air stripping of dissolved VOCs and volatilization of trapped and sorbed phase contamination present below the water table and in the capillary fringe. Both AS and SVE technologies are commonly used together to remediate sites impacted with VOCs below the water table.

Section 4.02 AS/SVE Equipment Observed at the Site

The deep SVE and AS skid mounted equipment installed at the Site is a packaged system manufactured by Carbtrol Corporation, model # SVXR-3.5. The configuration of the SVE system at the Site includes both shallow and deep extraction well array. Schematics representing the complete AS/SVE system at the former Plaza Cleaners

Site are provided as Figures 5, 6 and 7. A summary of the equipment and specifications is provided below.

(a) Primary equipment components of the shallow SVE system:

- Inline radon fan. Manufacturer and model number are unknown.
- Flow switch manufactured by Flotec, model # V8-WP2.
- Soil vapor sampling port – post inline radon fan.

(b) Primary equipment components of the deep SVE system:

- Regenerative blower manufactured by AMETEK/Rotron, model # EN808A72MLX, 7.5 horse power (hp). The blower is rated for a volumetric flowrate of 330 cubic feet per minute (cfm) at an applied vacuum of 10 inches of water column (in. W.C.).
- Flowmeter manufactured by AMETEK/Rotron, model # Minihelic II, 0-475 standard cubic feet per minute (SCFM).
- Dilution valve located on the influent (suction) side of the blower to adjust the vacuum level applied to the SVE manifold.
- Air water knockout tank (i.e., moisture trap) with a 7-gallon working hydraulic capacity installed on the influent (i.e., suction) side of the blower.
- The moisture trap is equipped with a high water level switch, vacuum gauge, and air particulate filter.
- Temperature and pressure gauges are installed on the effluent (i.e., pressure) side of the blower pre-carbon.
- Two, 170 pound vapor phase granular activated carbon (GAC) units piped in series.
- Four soil vapor sample ports (pre-dilution valve, pre-GAC, mid-GAC, and post-GAC).

- Flow switch manufactured by Flotec, model # V8-WP2.

(c) Primary equipment components of the AS system:

- Oil-less rotary vane air compressor manufactured by Becker, model # KDT 3.60. The compressor is capable of 28 cfm at an applied pressure output of 21 pounds per square inch gauge (psig).

- Air compressor is equipped with a pressure regulator to adjust air flowrate and injection pressure to the AS manifold.

- Flowmeter manufactured by AMETEK/Rotron model # Minihelic II, 0-225 SCFM.

Section 4.03 SVE/AS Well Construction Details

The AS/SVE system is comprised of five shallow SVE wells (SVE-1S through SVE-5S), five deep SVE wells (SVE-1D through SVE-5D), and five air sparge wells (AS-1 through AS-5). Each of the SVE, AS, and SG wells are installed within the current building footprint. Each AS/SVE well is equipped with a ball valve located at the well head. Soil vapor monitoring at the Site is conducted through a network of 20 interior soil gas monitoring points; 10 shallow (SG-1S through SG-10S) and 10 deep (SG-1D through SG-10D), and 14 exterior soil gas monitoring points; 7 shallow (ESG-2S through ESG-7S) and 7 deep (ESG-2D through ESG-7D). The well locations and soil gas monitoring points are shown on Figure 3. Well construction details were not available for review, however, according to Mr. Russell Furia (Zytel Industries) the wells were constructed as follows:

- SVE wells were constructed with 2-inch diameter schedule (SCH) 40 PVC screen. The shallow and deep SVE wells were screened from approximately 10 to 15 feet and 15 to 25 feet below finished floor (bff), respectively. Each SVE well casing extends vertically through the finished floor and ties into their respective manifold located overhead.

- AS wells were constructed with 2-inch diameter SCH 40 PVC screen. The AS wells were screened from approximately 20 to 30 ft bff. Each AS well casing extends vertically through the finished floor and ties into the AS manifold located overhead.

- SG monitoring points were constructed of 3/8-inch diameter polyethylene tubing with 5-feet long SCH 40 PVC screens. The shallow and deep SG monitoring points were screened from approximately 10 to 15 feet and 15 to 20 feet (bff), respectively. Each SG monitoring point was enclosed with flush mount water tight protective casing equipped with an aluminum cover.

It should be noted that on February 18, 2014 the depth to bottom of the shallow and deep SVE wells were recorded at approximately 9 feet and 19 feet, respectively. As such the information provided by Zytel Industries does not correspond to these measurements. Therefore, well construction logs for each well above should be verified by Zytel Industries for accuracy, and if possible, provide As-Built well construction logs for each. Although As-Built well construction logs were requested, none were provided by Zytel Industries.

Section 4.04 Site-Specific Process Flow Description

Soil vapors are extracted at the former Plaza Cleaners site from five shallow extraction wells (SVE-1S through SVE-5S) via a low (less than 3 in.W.C.) vacuum and flow (less than 25 cfm). The low vacuum is induced by a radon-type inline fan. The soil vapors are conveyed to a common manifold valve which allows exterior air into the system to dilute the influent, and then exhausted to the atmosphere above the facility roofline through a 4-inch SCH 40 PVC pipe. A process flow schematic of the shallow SVE system is provided as Figure 5.

Soil vapors are also extracted from five deep extraction wells at the Site (SVE-1D through SVE-5D) via vacuum created by a regenerative blower. The soil vapors are conveyed to a common manifold and then flow through the moisture trap tank and into a particulate filter prior to flowing through the blower. Soil vapors then flow through two vapor phase carbon vessels prior to being exhausted to the atmosphere above the facility roofline through a 4-inch SCH 40 PVC pipe. A process flow schematic of the deep SVE system is provided as Figure 6.

Air is injected into the vadose zone at the Site through five air sparge wells (AS-1 through AS-5). The injected air is generated by a rotary-vane air compressor. A process flow schematic of the AS system is provided as Figure 7.

Section 4.05 System Operation and Performance

During site visits on August 13 and September 12, 2013 the AS/SVE system was operational upon arrival. The following field parameters were recorded during each site inspection:

- Applied vacuum at the SVE blower and wellheads;
- Extracted soil vapor flow rate from the SVE systems;
- Induced vacuum at each monitoring well points;
- SVE system effluent vapor stream pressure and temperatures;
- VOC concentrations of extracted soil vapors; and
- Air sparge pressure and injection flowrate.

Four vapor samples were collected from the deep SVE extraction system for the analysis of VOCs via USEPA Method TO-15. Samples were submitted to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts. The results of the system sampling are summarized below. The system operational and performance parameters have also been summarized and are provided in Tables 9 and 10.

(a) Summary of System Operational Parameters:

The shallow SVE system extracted soil vapor flowrate was approximately 8.7 cfm. The applied vacuum readings at the shallow SVE wellheads ranged from 2.4 to 2.5 in.W.C. Induced vacuum measurements at shallow soil gas monitoring points SG-1S through SG-10S ranged from 0.5 in.W.C. to 3.7 in.W.C.

The deep SVE system applied vacuum measurements at the moisture trap ranged from 20 to 21 in.W.C. The corresponding extracted soil vapor flowrate was approximately 206 to 215 cfm. The applied vacuum readings at the deep SVE wellheads ranged from 12 to 15 in.W.C. Induced vacuum measurements at deep soil gas monitoring points SG-1D through SG-10D ranged from 0.7 in.W.C. to 3.5 in.W.C.

Induced vacuum readings were also measured at seven deep (ESG-2D through ESG-8D), and five shallow (ESG-2S through ESG-5S, and ESG-8S) soil gas monitoring

points located on the north and east side of the building. The induced vacuum at the deep and shallow locations range from 0.2 to 1.3 in.W.C., and 0 to 0.8 in.W.C., respectively.

The field mounted gauge on the AS system injection air compressor, indicated an injection pressure of less than 1 pound per square inch gauge (psig). The injected air flowrates at the AS manifold was measured at approximately 24 cfm. The injection pressure measured at each AS wellhead was measured with a handheld instrument and ranged from 4.4 to 5.7 in.W.C.

During the February 18, 2014 sampling event, vacuum measurements were collected at the ESG-6S, ESG-6D, ESG-7S, and ESG-7D while the deep SVE and AS system were temporarily offline. During this time, the shallow SVE was allowed to operate. No vacuum was observed at these locations while the deep SVE and AS system were temporarily offline.

Groundwater elevations were unable to be recorded at any of the SVE well locations due to their construction, however, groundwater elevations were recorded at seven monitoring wells located on the perimeter of the property (MW-1 through MW-7). The depth to groundwater ranged from 23 to 27 feet bgs.

(b) AS/AVE System Analytical Data

Four soil vapor samples were collected from the treatment train of the AS/SVE system at the former Plaza Cleaners site (i.e., pre-dilution, pre-carbon, mid-carbon and system effluent) and were analyzed for USEPA method TO-15 constituents. The samples are named PRE-DIL-91213, PRE-GAC-91213, MID-GAC-91213, and POST-GAC-91213 to represent their relation in the treatment process and the date at which the sample was collected. The concentrations of PCE in air sampled within the AS/SVE system show low variability from one sampling location to another (PRE-DIL-91213 = 2,700 $\mu g/m^3$, PRE-GAC-91213 = 2,400 $\mu g/m^3$, MID-GAC-91213 = 2,700 $\mu g/m^3$, and POST-GAC-91213 = 2,000 $\mu g/m^3$).

Based on the single pre-dilution vapor sample result and the measured deep SVE system effluent vapor flowrate, the system has removed an estimated 25 pounds (lbs) of PCE between March 2012 and September 2013. This cumulative mass removed value corresponds to 0.05 lbs per day. The mass removed calculation is provided in Table 11A.

Section 4.06 Data Evaluation and Conclusions

Specific data collected during the site inspections, and conclusions are provided below.

(a) Shallow SVE:

As noted above the shallow SVE system is applying a minimum vacuum on the shallow SVE well network. However, it is unclear whether the induced vacuum at each shallow SG well located within the building is being influenced by the shallow or deep SVE system. Based on the measured applied vacuum and flowrates at both systems, and the close proximity of both deep and shallow well screens, the majority of the induced vacuum and flowrates is more than likely being generated by the deep SVE system. As a result, it is unlikely that the shallow SVE system is providing any remedial benefit.

(b) Deep SVE system:

Extracted soil vapor flow from the deep SVE system ranged from 206 to 215 cfm at an applied vacuum of 20 in. W.C. Applied vacuums at each deep SVE well were recorded at approximately 15 in. W.C., indicating relatively equal flow recovery from each location, which corresponds to approximately 41 cfm per well.

The deep SVE system achieved an induced radius of vacuum influence greater than 60 feet, indicating homogeneity of the subsurface soils. Induced vacuums at each of the soil gas and groundwater monitoring wells also indicate pneumatic conductivity in the subsurface, which suggests that the deep SVE system is generating lateral air flow movement in the subsurface onsite.

Based on the field measurements including flowrate, temperature, and the analytical data collected, the vapor phase carbon treatment vessels are inefficient at removing the target VOC (PCE) from the vapor stream. The percent reduction of PCE in the post-GAC (i.e., effluent) vapor sample was 26%. The carbon efficiency calculations are provided in Table 11B. These low adsorption rates are most likely related to the carbon in each vessel being nearly 100% depleted, resulting in limited adsorption sites remaining. Additionally, the post-blower/pre-carbon vapor stream temperature was measured at greater than 148 degrees Fahrenheit (^{o}F), which exceeds the carbon vessel and SCH 40 PVC pipe manufacturer's maximum operating temperature rating of 140^{o}F. High post-blower vapor stream temperatures were also evident by noted signs of pipe discoloration and deformation. These noted high vapor temperatures

negatively affect carbon adsorption and system efficiency and will contribute to the breakthrough of VOCs.

Based on the mass flow rates calculated using the measured extraction flow rates, vapor phase VOC concentration, and default model parameters, the system effluent mass flow rates were calculated to be less than the percent of maximum allowable annual mass flow set forth by NYSDEC Division of Air Resources (DAR)-1 Modeler and associated AGC Tables. The mass flow rate calculations are provided in Table 11C.

(c) Air Sparge System:

Based on the field measurements and AS well construction details provided by Zytel Industries, the air sparge system is injecting air into the vadose through the upper portion of the AS well screens which are screened well above the groundwater surface. As a result, it is unlikely that the AS system is providing the benefit of in-situ air stripping. Additionally, the AS system at the Site is likely short-circuiting the deep SVE system by injecting clean air into the vadose zone.

Section 4.07 AS/SVE System Recommendations

The primary site contaminant, PCE, is highly strippable and has a high volatility rate. SVE and AS technologies are often applicable in settings where treatment of chemicals with these attributes is being sought, as in the case of the former Plaza Cleaners site. Additionally, the site characteristics (e.g., nature of shallow unconsolidated soils, and surface seal conditions) are favorable for these technologies. Based on observations made at the Site, and in correspondence with the system operator, opportunities for system improvement and enhancement exist.

During the AS/SVE system evaluation, it became apparent that limited data was being provided by the current system operator. The development of a complete site model, which would include providing the most technical and cost beneficial recommendations on improving the current AS/SVE system, would require the following data (if available):

- Contaminant concentration and distribution within the soil matrix;
- AS/SVE system well construction logs;

- System operational logs;
- Groundwater and soil gas concentration trends; and
- SVE system influent sampling results.

Based on the data collected from the system operator and analytical data collected during the two site visits, the following system modifications are recommended to improve the system performance. The recommendations are driven by the goal of removing VOC mass at the highest achievable rate and minimizing overall system operational costs.

(a) Shallow SVE System:

The shallow SVE system should be temporarily taken offline as it is unlikely to be providing significant remedial benefit at the Site. This interpretation is based on the limited measured vacuum and soil extraction rates. If soil concentration data becomes available, and indicates that soils within the shallow SVE well network are impacted, one or more of the shallow SVE wells could be brought back online by tying them into the deep SVE system.

The shallow SVE wells and existing radon mitigation fan may be useful in the future to mitigate potential vapor intrusion issues resulting from any residual PCE and TCE concentrations in groundwater and soils. Accordingly, it is recommended that the radon fan remain in-place for possible future use.

(b) Deep SVE System:

Based on the PCE concentrations in each of the soil gas monitoring wells and the SVE system pre-dilution vapor sample, the deep SVE system appears to be providing remedial benefit at the Site. Induced vacuum was measured at each deep soil gas monitoring points and groundwater monitoring wells installed on the property. This data indicates an effective radius of vacuum influence of greater than 60 feet. However, based on the close proximity of the deep SVE wells located within the footprint of the building, the soil gas extraction rates are limited to these areas. Therefore, in order to focus the soil gas extraction and pore volume exchange rates in areas with the highest PCE concentrations, the deep SVE well network could be cycled and adjusted to maximize flow to wells with higher mass removal rates.

As noted above the post-blower vapor stream temperature was exceeding the maximum allowable temperature of the process equipment downstream of the blower. As such, the post-blower SCH 40 PVC piping should be replaced with a pipe material which is rated for the maximum effluent vapor stream temperature. This is determined by the maximum temperature rise across the blower as predicted by the blower manufacturer and ambient temperature conditions. In order to improve the performance of the GAC treatment system, the carbon media should be replaced in both GAC vessels. Additionally, the observed high temperature condition of the pre-GAC vapor stream should also be addressed. This may require the relocation of the GAC vessels to the vacuum side of the blower, or the addition of a heat exchanger/cooling loop in order to reduce the vapor stream temperature prior to GAC treatment.

(c) Air Sparge System:

Based on the AS well construction information provided by the system operator, most notably the size and vertical placement of the screens, it is unlikely that the current AS system is providing remedial benefit. Several modifications to the AS system would be needed in order to maximize the remedial benefit of the AS system at the Site. It is recommended that the current AS well construction be modified such that the sparge injection point is below the water table. Upon retrofitting each AS well, startup and testing would be needed to determine the correct sparge pressures and radius of influence in order to optimize the AS system.

(d) System Operation and Maintenance:

Once modifications to the AS system have been made to improve its remedial benefit at the Site, the SVE and AS systems could be reanalyzed to maximize remedial benefit utilizing the current system well configuration. However, as noted above the distribution of the SVE and AS wells is currently limited to the interior of the building. Accordingly, the AS radius of influence would most likely to be restricted to an area within the building footprint.

A formal system operation and maintenance (O&M) plan and schedule would be beneficial to overall success of the SVE and AS system. This plan should include at a minimum, the following:

- System operational procedures/schedule;
- Formal maintenance operational logs;

- Sampling frequency and procedures; and,
- Semi-annual system O&M and performance summary report.

5. NATURE AND EXTENT OF CONTAMINATION

Section 5.01 Soil Vapor Sampling Results

The results of the soil vapor sampling event conducted at the former Plaza Cleaners site indicate the presence of dissolved phase PCE, TCE and Cis 1,2 DCE (Table 2). The highest concentration of PCE detected in soil gas sampled at the Site was at ESG-6S (16,000 µg/m^3 [micrograms per cubic meter]), which is a shallow soil vapor sampling point. The second highest detected concentration of PCE in soil gas sampled occurred from nearby soil gas sampling point, ESG-7S (4,500 µg/m^3). Concentrations of TCE were also higher at the ESG-6S sampling location (110 µg/m^3) than other soil gas locations sampled during the September 2013 event. Cis 1,2 DCE was detected at ESG-6S (25 µg/m^3) during the September, 2013 soil gas sampling event. Based on information provided by Zytel Industries, the approximate depths of soil vapor sampling screens at ESG-6S and ESG-7S are 10.5 and 8.5 feet bgs, respectively. As shown on Figure 3, ESG-6S and ESG-7S sampling points are located in the parking area east of the former Plaza Cleaners building.

Five soil gas samples were collected from the sub-slab of the former Plaza Cleaners building at locations SG-1D, SG-6D, SVE-3D, SG-7D, and SG-10D. PCE was detected in each of the sub-slab sampling locations. The greatest concentration of PCE detected in the sub-slab samples occurred at SVE-3D (9,400 µg/m^3). This sampling point is located in the central part of the building and extends to approximately 19 feet bgs. The second highest concentration of PCE detected in the sub-slab samples was observed at SG-10D (2,600 µg/m^3), which is located in the southwest portion of the former Plaza Cleaners building and is screened approximately 17 feet bgs.

Section 5.02 AS/SVE Sampling Results

In general, there was very little variability in PCE concentration across the treatment train, indicating the GAC vessels within the system are nearly depleted. Although the calculated percent reduction in PCE within the AS/AVE system is minimal (26%), effluent mass flow rates are less than the maximum allowable annual mass flow set forth by NYSDEC Division of Air Resources (DAR)-1 Modeler. The associated calculations are provided in Table 11.

Section 5.03 Stormwater and Sediment Sampling Results

Sediment and stormwater samples were collected from the onsite stormwater manhole at the former Plaza Cleaners property and analyzed for VOCs. No contaminants of concern were detected in either of the manhole samples. Acetone and methylene chloride were detected in these samples, however, these constituents are believed to be laboratory artifacts. These results are shown in Tables 3 and 4.

Section 5.04 Groundwater Sampling Results

The primary contaminant measured in the five on-site groundwater samples collected was PCE. PCE concentrations ranged from 7.1 µg/l at well AS-5 to 46 µg/l at well MW-3. The only other VOC measured in these five groundwater samples was TCE (0.14 µg/l) at AS-3. The concentration of bis(2-Ethylhexyl)phthalate measured at AS-5 (5.7 µg/l) exceeded the NYSDEC Class GA Standard (5 µg/l). No other SVOCs were measured in this groundwater sample. No PCBs were measured in the groundwater sample collected at AS-5 and no pesticides were measured at concentrations that exceeded NYSDEC Class GA Standards. Iron and sodium were the only two metals measured in the groundwater sample collected at AS-5 at concentrations that exceeded the respective standards. These results are provided in Tables 5 through 8.

Section 5.05 Test Pit/Tank Removal Soil Sampling Results

A UST was located at the Site approximately one foot bgs. The UST and excavated soils were removed from the Site. Soil results of samples collected from the excavation were consistent with fuel oil detections. One sample was collected directly beneath the UST (PC-01), and one at the bottom of the excavation (PC-02). Concentrations of total xylenes in the shallowest soil sample had a result equal to the 6 NYCRR part 375 Unrestricted Use Soil Cleanup Objective (260 µg/kg). Other concentrations of detected compounds were below the respective 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective. The results of the tank removal soil sampling event are shown in Table 1.

6. HUMAN HEALTH EXPOSURE PATHWAYS ANALYSIS

A qualitative human health exposure assessment was performed to identify potential exposure pathways of site contaminants to the general public. A quantitative assessment was not conducted.

Soil vapors at the Site are being captured and conveyed to the atmosphere at the Site at effluent mass flow rates less than the maximum allowable annual mass flow set forth by NYSDEC Division of Air Resources (DAR)-1 Modeler. Soils at the Site are capped by the existing building and the parking lot. Surficial soils are not exposed at the Site. Groundwater is not being used by the existing site owner, as municipal water is provided by the Port Washington Water District. Groundwater in the vicinity of the Site is being used as a drinking water source at the Sandy Hollow well field; however, water treatment capabilities have already been established to remove VOCs from drinking water at this facility. The Port Washington Water District routinely monitors water quality, including VOC analysis.

Soil vapors in the vicinity of the Site were sampled and analyzed during the OU#2 RI at properties with willing owners. Sub-slab depressurization systems were installed to mitigate the potential for vapor intrusion where applicable (10 buildings out of 50 sampled).

7. CONCLUSIONS

Activities conducted for this RI involved:

- oversight of UST removal with confirmatory soil sampling;
- soil vapor sampling of shallow and deep sampling points at the Site;
- sampling of stormwater and sediment within a stormwater manhole at the Plaza Cleaners OU#1 Site;
- evaluation of the existing air sparge and soil vapor extraction system; and,
- sampling of on-site groundwater.

Based on information gathered during the RI conducted at the Plaza Cleaners OU#1 Site, concentrations of PCE, TCE and Cis 1,2 DCE are present in onsite soils and groundwater. An air sparge and soil vapor extraction system is operating at the Site to mitigate vapor intrusion and remove VOC mass from soils and groundwater at the Site.

An evaluation of the treatment system at the Site was conducted for this RI. Based upon the information collected during the treatment system evaluation, it is apparent that the treatment system is removing VOC mass from soils and groundwater at the Site although deficiencies in its operation and maintenance exist. These deficiencies include, but are not limited to;

- low vacuum pressures in the shallow soil vapor extraction system which are providing limited to no remedial benefit;
- low sparging pressures within the air sparge system which are providing limited to no remedial benefit;
- partially submerged sparge well screens (sparge well screens should be fully submerged to enhance volatilization of contaminants in groundwater);
- exceedance of the process equipment (e.g., PVC piping) maximum allowable operating temperature, per the manufacturer's recommendation; and,
- apparent depletion of GAC in vessels.

Communication with the soil vapor extraction system was verified with pressure measurements in perimeter wells at the Site, however, the soil vapor extraction and air sparge wells are located within the footprint of the building which likely limits the remedial benefit of the system. Based on information provided by the system operator, no formal operation and maintenance plan has been established. Additionally, any air sampling that may have been conducted by the system operator to evaluate PCE concentrations over time either do not exist or were not provided by the system operator.

8. RECOMMENDATIONS

Based upon the findings of this RI, it is recommended that a formal operation and maintenance plan of the air sparge and soil vapor extraction system at the former Plaza Cleaners OU#1 Site be prepared by site owner and submitted to the NYSDEC for approval. The operation and maintenance plan of the system at the Site should address the system deficiencies outlined above. It is anticipated that verification of adherence to the operation and maintenance plan will be conducted by NYSDEC or its agents through development and implementation of a Site Management Plan (SMP).

Alternatively, the NYSDEC could commence a feasibility study (FS) to evaluate the costs associated with modifications to improve efficiency of the existing AS/SVE system at the Site. As indicated above, the remedial technologies currently implemented are appropriate and effective at removing VOC mass from soils at the Site.

9. REFERENCES

Cadwell, D.H. and others, 1989. Surficial Deposits Map of New York State – Lower Hudson Sheet. New York State Museum, Albany, New York.

Stumm, Frederick, Lange, Andrew D., and Jennifer Candela, 2002. Hydrogeology and Extent of Saltwater Intrusion on Manhasset Neck, Nassau County, New York: U.S. Geological Survey – Water Resources Investigations Report 00-4193, p. 42.

Suthan S. Suthersan, Remediation Engineering: Design Concepts, CRC Press LLC 1999, Chapter 3: Soil Vapor Extraction: Section 3.5.2.1

ARCADIS

Tables

TABLE 1. SUMMARY OF SOIL SAMPLING RESULTS (VOCs & SVOCs)
REMEDIAL INVESTIGATION
FORMER PLAZA CLEANERS SITE
SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective µg/kg	6 NYCRR Part 375 Residential Soil Cleanup Objective µg/kg	PC-01 6/21/13 SOIL µg/kg	PC-02 6/21/13 SOIL µg/kg
VOCs				
1,1,1-Trichloroethane	800	100,000	5 U	4.6 U
1,1,2,2-Tetrachloroethane	600		5 U	4.6 U
1,1,2-Trichloroethane			5 U	4.6 U
1,1-Dichloroethane	200	19,000	5 U	4.6 U
1,1-Dichloroethene	400	100,000	5 U	4.6 U
1,2,3-Trichlorobenzene			5 U	4.6 U
1,2,4-Trichlorobenzene	3400		5 U	4.6 U
1,2,4-Trimethylbenzene			390 E	4.6 U
1,2-Dibromoethane			5 U	4.6 U
1,2-Dichlorobenzene	7900	100,000	5 U	4.6 U
1,2-Dichloroethane	100	2,300	5 U	4.6 U
1,2-Dichloropropane			5 U	4.6 U
1,3-Dichlorobenzene	1600	17,000	5 U	4.6 U
1,3,5-Trimethylbenzene			170	4.6 U
1,4-Dichlorobenzene	8500	9,800	5 U	4.6 U
2-Butanone (MEK)		100,000	5 U	4.6 U
2-Hexanone			5 U	4.6 U
4-Methyl-2-Pentanone	1000		5 U	4.6 U
Acetone	50	100,000	8.5	8
Benzene		2,900	5 U	4.6 U
Bromochloromethane			5 U	4.6 U
Bromodichloromethane			5 U	4.6 U
Bromoform			5 U	4.6 U
Bromomethane			5 U	4.6 U
Carbon Disulfide			5 U	4.6 U
Carbon Tetrachloride		1,400	5 U	4.6 U
Chlorobenzene		100,000	5 U	4.6 U
Chloroethane			5 U	4.6 U
Chloroform		10,000	5 U	4.6 U
Chloromethane			5 U	4.6 U
cis-1,2-Dichloroethene	250	59,000	5 U	4.6 U
cis-1,3-Dichloropropene			5 U	4.6 U
Dibromochloromethane			5 U	4.6 U
Dichlorodifluoromethane			5 U	4.6 U
Ethyl Benzene	1,000	30,000	17	4.6 U
Isopropylbenzene			15	4.6 U
m/p-Xylenes			150	4.6 U
Methyl tert-butyl Ether		62,000	5 U	4.6 U
Methylene Chloride		51,000	5 U	4.6 U
Naphthalene			210 E	2.7 J
n-Butylbenzene			67	4.6 U
o-Xylene			120	4.6 U
sec-Butylbenzene			24	4.6 U
Styrene			3.5 J	4.6 U
Tetrachloroethene	1,300	5,500	21	4.6 U
Toluene	700	100,000	8.7	4.6 U
trans-1,2-Dichloroethene	190	100,000	5 U	4.6 U
trans-1,3-Dichloropropene			5 U	4.6 U
Trichloroethene	470	10,000	5 U	4.6 U
Trichlorofluoromethane			5 U	4.6 U
Vinyl Chloride	20	210	5 U	4.6 U
Xylene (total)	260	100,000	260	4.6 U

TABLE 1. SUMMARY OF SOIL SAMPLING RESULTS (VOCs & SVOCs)
REMEDIAL INVESTIGATION
FORMER PLAZA CLEANERS SITE
SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective µg/kg	6 NYCRR Part 375 Residential Soil Cleanup Objective µg/kg	PC-01 6/21/13 SOIL µg/kg	PC-02 6/21/13 SOIL µg/kg
SVOCs				
2,2-oxybis(1-Chloropropane)			340 U	340 U
2,4,5-Trichlorophenol			680 U	690 U
2,4,6-Trichlorophenol			340 U	340 U
2,4-Dichlorophenol			340 U	340 U
2,4-Dimethylphenol			340 U	340 U
2,4-Dinitrophenol			680 U	690 U
2,6-Dinitrotoluene			340 U	340 U
2-Chloronaphthalene			340 U	340 U
2-Chlorophenol			340 U	340 U
2-Methylnaphthalene			2100	340 U
2-Methylphenol			340 U	340 U
2-Nitroaniline			680 U	690 U
2-Nitrophenol			340 U	340 U
3,3-Dichlorobenzidine			340 U	340 U
3-Nitroaniline			680 U	690 U
4,6-Dinitro-2-methylphenol			680 U	690 U
4-Bromophenyl-phenylether			340 U	340 U
4-Chloro-3-Methylphenol			340 U	340 U
4-Chloroaniline			340 U	340 U
4-Chlorophenyl-phenylether			340 U	340 U
4-Methylphenol			340 U	340 U
4-Nitroaniline			680 U	690 U
4-Nitrophenol			680 U	690 U
Acenaphthene	20,000	100,000	340 U	340 U
Acenaphthylene	100,000	100,000	340 U	340 U
Anthracene	100,000	100,000	340 U	340 U
Benzo(a,h)anthracene	1,000	1,000	340 U	340 U
Benzo(a)pyrene	1,000	1,000	340 U	340 U
Benzo(b)fluoranthene	1,000	1,000	340 U	340 U
Benzo(g,h,i)perylene	100,000	100,000	340 U	340 U
Benzo(k)fluoranthene	800	1,000	340 U	340 U
bis(2-Chloroethoxy)methane			340 U	340 U
bis(2-Chloroethyl)Ether			340 U	340 U
bis(2-Ethylhexyl)phthalate			79 J	70 J
Butylbenzylphthalate			340 U	340 U
Carbazole			340 U	340 U
Chrysene	1,000	1,000	340 U	340 U
Di-n-butylphthalate			340 U	340 U
Di-n-octylphthalate			340 U	340 U
Dibenzo(a,h)anthracene	330	330	340 U	340 U
Dibenzofuran			340 U	340 U
Diethylphthalate			340 U	340 U
Dimethylphthalate			340 U	340 U
Fluoranthene	100,000	100,000	340 U	340 U
Fluorene	30,000	100,000	340 U	340 U
Hexachlorobenzene			340 U	340 U
Hexachlorobutadiene			340 U	340 U
Hexachlorocyclopentadiene			340 U	340 U
Hexachloroethane			340 U	340 U
Indeno(1,2,3-cd)pyrene	500	500	340 U	340 U
Isophorone			340 U	340 U
N-Nitroso-di-n-propylamine			340 U	340 U
N-Nitrosodiphenylamine(1)			340 U	340 U
Naphthalene	12,000	100,000	150 J	340 U
Nitrobenzene			340 U	340 U
Pentachlorophenol			680 U	690 U
Phenanthrene	100,000	100,000	560	340 U
Phenol		100,000	340 U	340 U
Pyrene	100,000	100,000	340 U	340 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

U: Compound was not detected, reporting limit shown

J - The concentration given is an estimated value.

E - Compound concentration exceeded the calibration range.

TABLE 2. SUMMARY OF SOIL VAPOR SAMPLING RESULTS
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

SAMPLE ID	ESC-7S-91213	ESC-6S-91213	ESC-8D-91213	ESC-5D-91213	ESC-3D-91213	SG-1D-91213
UNITS	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
SAMPLE DATE	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013
1,1,1-Trichloroethane	0.55 U	5.5 U	0.55 U	0.55 U	0.55 U	0.55 U
1,1,2,2-Tetrachloroethane	0.69 U	6.9 U	0.69 U	0.69 U	0.69 U	0.69 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.77 U	7.7 U	0.77 U	0.77 U	0.77 U	0.77 U
1,1,2-Trichloroethane	0.55 U	5.5 U	0.55 U	0.55 U	0.55 U	0.55 U
1,1-Dichloroethane	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1-Dichloroethylene	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2,4-Trichlorobenzene	0.74 U	7.4 U	0.74 U	0.74 U	0.74 U	0.92
1,2,4-Trimethylbenzene	1.3	4.9 U	1.2	0.84	0.88	4.9
1,2-Dibromoethane (EDB)	0.77 U	7.7 U	0.77 U	0.77 U	0.77 U	0.77 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.7 U	7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,2-Dichlorobenzene	0.6 U	6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloroethane	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloropropane	0.46 U	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U
1,3,5-Trimethylbenzene	0.61	4.9 U	0.49 U	0.49 U	0.49 U	1
1,3-Butadiene	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U
1,3-Dichlorobenzene	0.91	6 U	1.9	1.8	3.8	0.6 U
1,4-Dichlorobenzene	0.6 U	6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,4-Dioxane	3.6 U	36 U	3.6 U	3.6 U	3.6 U	3.6 U
2-Butanone (MEK)	7.7 J	5.1 J	2.3 J	3.5 J	2.1 J	3.3 J
2-Hexanone (MBK)	0.91	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U
4-Ethyltoluene	0.49 U	4.9 U	0.49 U	0.49 U	0.49 U	0.76
4-Methyl-2-pentanone (MIBK)	0.65	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U
Acetone	32	37 J	15	22	15	20
Benzene	4.2	3.2 U	0.32 U	0.59	0.32 U	0.34
Benzyl chloride	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U
Bromodichloromethane	0.67 U	6.7 U	0.67 U	0.67 U	0.67 U	0.67 U
Bromoform	1 U	10 U	1 U	1 U	1 U	1 U
Bromomethane	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U
Carbon Disulfide	0.35 J	31 U	0.54 J	3.1 U	0.43 J	1 J
Carbon Tetrachloride	0.63 U	6.3 U	0.63 U	0.63 U	0.63 U	0.63 U
Chlorobenzene	0.46 U	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U
Chloroethane	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U
Chloroform	0.49 U	15	0.49 U	1.5	0.49 U	1.4
Chloromethane	0.44	4.1 U	0.41 U	0.28 J	0.5	0.41 U
cis-1,2-Dichloroethylene	3.9	25	0.4 U	0.4 U	0.4 U	0.4 U
cis-1,3-Dichloropropene	0.45 U	4.5 U	0.45 U	0.45 U	0.45 U	0.45 U
Cyclohexane	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	0.34 U
Dibromochloromethane	0.85 U	8.5 U	0.85 U	0.85 U	0.85 U	0.85 U
Dichlorodifluoromethane (Freon 12)	2.5	4.9 U	2.6	2.7	2.5	3.4
Ethanol	12	75 U	11	16	14	17
Ethyl Acetate	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U
Ethylbenzene	1.3	4.3 U	0.43 U	0.43 U	0.43 U	0.43 U
Heptane	0.6	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U
Hexachlorobutadiene	1.1 U	11 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	1.9 J	140 U	14 U	0.92 J	0.7 J	0.66 J
Isopropanol	1.8 J	98 U	1.3 J	1.4 J	1 J	1.6 J
m&p-Xylene	2.8	8.7 U	1.2	0.97	0.66 J	1
Methyl tert-Butyl Ether (MTBE)	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U
Methylene Chloride	1.5 J	6.6 J	1.5 J	1.5 J	1.7 J	1.5 J
Naphthalene	0.59	5.2 U	0.7	0.52 U	0.63	0.74
o-Xylene	1.1	4.3 U	0.56	0.43 U	0.43 U	0.59
Propene	6.1 J	69 U	6.9 U	6.9 U	1.7 J	6.9 U
Styrene	0.43 U	4.3 U	0.43 U	0.43 U	0.43 U	0.43 U
Tetrachloroethylene	4500	16000	35	340	220	230
Tetrahydrofuran	0.29 U	2.9 U	0.29 U	0.29 U	0.29 U	0.51
Toluene	5.5	3.8 U	0.56	0.94	0.47	1.4
trans-1,2-Dichloroethylene	0.65	4 U	0.4 U	0.41	0.4 U	0.4 U
trans-1,3-Dichloropropene	0.45 U	4.5 U	0.45 U	0.45 U	0.45 U	0.45 U
Trichloroethylene	21	110	0.54 U	1.3	0.96	6.9
Trichlorofluoromethane (Freon 11)	1.3	5.6 U	1.4	1.3	1.2	1.3
Vinyl Acetate	7 U	70 U	7 U	7 U	7 U	7 U
Vinyl Chloride	0.26 U	2.6 U	0.26 U	0.26 U	0.26 U	0.26 U

NOTES:
J: Compund was detected but below reporting limit
U: Compound was not detected, reporting limit shown
SVE-3D results reported with a dilution factor of 20.

TABLE 2. SUMMARY OF SOIL VAPOR SAMPLING RESULTS
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

SAMPLE ID	SG-7D-91213	SG-6D-91213	SG-10D-91213	FD091213	OA-1-91213
UNITS	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
SAMPLE DATE	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013
1,1,1-Trichloroethane	0.55 U	0.55 U	0.55 U	0.55 U	0.19 U
1,1,2,2-Tetrachloroethane	0.69 U	0.69 U	0.69 U	0.69 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.77 U	0.77 U	0.77 U	0.77 U	0.67
1,1,2-Trichloroethane	0.55 U	0.55 U	0.55 U	0.55 U	0.19 U
1,1-Dichloroethane	0.4 U	0.4 U	0.4 U	0.4 U	0.14 U
1,1-Dichloroethylene	0.4 U	0.4 U	0.4 U	0.4 U	0.14 U
1,2,4-Trichlorobenzene	0.74 U	0.74 U	0.74 U	0.74 U	0.26 U
1,2,4-Trimethylbenzene	2.2	2.1	0.88	1.2	0.46
1,2-Dibromoethane (EDB)	0.77 U	0.77 U	0.77 U	0.77 U	0.27 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.7 U	0.7 U	0.7 U	0.7 U	0.25 U
1,2-Dichlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U	0.21 U
1,2-Dichloroethane	0.4 U	0.4 U	0.4 U	0.4 U	0.14 U
1,2-Dichloropropane	0.46 U	0.46 U	0.46 U	0.46 U	0.16 U
1,3,5-Trimethylbenzene	0.49 U	0.49 U	0.49 U	0.49 U	0.17 U
1,3-Butadiene	0.22 U	0.22 U	0.22 U	0.22 U	0.078 U
1,3-Dichlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U	0.21 U
1,4-Dichlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U	0.21 U
1,4-Dioxane	3.6 U	3.6 U	3.6 U	3.6 U	1.3 U
2-Butanone (MEK)	3.1 J	2.4 J	4.1 J	2.5 J	2 J
2-Hexanone (MBK)	0.48	0.41 U	0.41 U	0.41 U	0.14 U
4-Ethyltoluene	0.49 U	0.49 U	0.49 U	0.49 U	0.17 U
4-Methyl-2-pentanone (MIBK)	0.41 U	0.41 U	0.41 U	0.41 U	0.21
Acetone	21	14	25	19	23
Benzene	0.49	0.49	0.46	0.77	0.91
Benzyl chloride	0.52 U	0.52 U	0.52 U	0.52 U	0.18 U
Bromodichloromethane	0.67 U	0.67 U	0.67 U	0.67 U	0.24 U
Bromoform	1 U	1 U	1 U	1 U	0.36 U
Bromomethane	0.39 U	0.39 U	0.39 U	0.39 U	0.14 U
Carbon Disulfide	3.1 U	3.1 U	1 J	0.33 J	1.1 U
Carbon Tetrachloride	0.63 U	0.63 U	0.63 U	0.63 U	0.44
Chlorobenzene	0.46 U	0.46 U	0.46 U	0.46 U	0.16 U
Chloroethane	0.26 U	0.26 U	0.26 U	0.26 U	0.093 U
Chloroform	0.57	1.3	1	0.97	0.17 U
Chloromethane	0.28 J	0.41 U	0.41 U	0.27 J	1
cis-1,2-Dichloroethylene	2.9	0.4 U	0.4 U	0.4 U	0.14 U
cis-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U	0.16 U
Cyclohexane	0.34 U	0.34 U	0.34 U	0.34 U	0.12 U
Dibromochloromethane	0.85 U	0.85 U	0.85 U	0.85 U	0.3 U
Dichlorodifluoromethane (Freon 12)	2.4	2.5	2.5	2.5	2.5
Ethanol	18	18	14	15	8.8
Ethyl Acetate	0.36 U	0.36 U	0.36 U	0.36 U	0.13 U
Ethylbenzene	0.71	0.63	0.43 U	0.43 U	0.23
Heptane	0.41 U	0.41 U	0.41 U	0.41 U	0.29
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	0.37 U
Hexane	14 U	14 U	1.1 J	0.68 J	1 J
Isopropanol	2 J	6.8 J	1.9 J	1.7 J	1.2 J
m&p-Xylene	2.6	2.3	1.1	1.2	0.75
Methyl tert-Butyl Ether (MTBE)	0.36 U	0.36 U	0.36 U	0.36 U	0.13 U
Methylene Chloride	1.7 J	1.1 J	2.3 J	1.4 J	1.5
Naphthalene	0.83	0.75	0.52 U	0.52 U	0.29
o-Xylene	0.95	0.84	0.43	0.47	0.28
Propene	6.9 U	6.9 U	6.9 U	6.9 U	2.4 U
Styrene	0.43 U	0.43 U	0.43 U	0.43 U	0.15 U
Tetrachloroethylene	130	1000	2600	2700	1.3
Tetrahydrofuran	0.29 U	0.29 U	0.29 U	0.29 U	0.1 U
Toluene	1.9	1.5	0.78	0.8	2.1
trans-1,2-Dichloroethylene	0.4 U	0.4 U	0.4 U	0.4 U	0.14 U
trans-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U	0.16 U
Trichloroethylene	7.1	1.2	5.1	5.1	0.19 U
Trichlorofluoromethane (Freon 11)	1.3	1.4	1.3	1.3	1.3
Vinyl Acetate	7 U	7 U	7 U	7 U	2.5 U
Vinyl Chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.09 U

NOTES:
J: Compund was detected but below reporting limit
U: Compound was not detected, reporting limit shown
SVE-3D results reported with a dilution factor of 20.

TABLE 2. SUMMARY OF SOIL VAPOR SAMPLING RESULTS
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

SAMPLE ID	PRE-DIL-91213	PRE-GAC-91213	MID-GAC-91213	POST-GAC-91213	SVE-3D
UNITS	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
SAMPLE DATE	9/12/2013	9/12/2013	9/12/2013	9/12/2013	2/18/2014
1,1,1-Trichloroethane	1.3	1.1	0.6	0.64	0.98 U
1,1,2,2-Tetrachloroethane	0.69 U	0.69 U	0.69 U	0.69 U	1.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.77 U	0.77 U	0.77 U	0.77 U	2.1 U
1,1,2-Trichloroethane	0.55 U	0.55 U	0.55 U	0.55 U	1.7 U
1,1-Dichloroethane	0.4 U	0.4 U	0.4 U	0.4 U	1.1 U
1,1-Dichloroethylene	0.4 U	0.4 U	0.4 U	0.4 U	0.97 U
1,2,4-Trichlorobenzene	0.74 U	0.74 U	0.74 U	0.74 U	2.8 U
1,2,4-Trimethylbenzene	3.5	3.4	2.4	3.1	1.8 J
1,2-Dibromoethane (EDB)	0.77 U	0.77 U	0.77 U	0.77 U	1.7 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.7 U	0.7 U	0.7 U	0.7 U	1.7 U
1,2-Dichlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U	1.6 U
1,2-Dichloroethane	0.4 U	0.4 U	0.4 U	0.4 U	1.1 U
1,2-Dichloropropane	0.46 U	0.46 U	0.46 U	0.46 U	1.6 U
1,3,5-Trimethylbenzene	0.59	0.61	0.49 U	0.54	0.98 U
1,3-Butadiene	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U
1,3-Dichlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U	1.3 U
1,4-Dichlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U	1.5 U
1,4-Dioxane	3.6 U	3.6 U	3.6 U	3.6 U	23 U
2-Butanone (MEK)	4.8 J	2.6 J	3 J	3 J	4.4 J
2-Hexanone (MBK)	0.41 U	0.41 U	0.41 U	0.41 U	1 U
4-Ethyltoluene	0.49 U	0.62	0.49 U	0.49 U	1.1 U
4-Methyl-2-pentanone (MIBK)	0.41 U	0.41 U	0.41 U	0.61	0.98 U
Acetone	23	14	12	30	33 U
Benzene	0.82	1.4	2.2	0.58	9.6
Benzyl chloride	0.52 U	0.52 U	0.52 U	0.52 U	1 U
Bromodichloromethane	0.67 U	0.67 U	0.67 U	0.67 U	1.5 U
Bromoform	1 U	1 U	1 U	1 U	2 U
Bromomethane	0.39 U	0.39 U	0.39 U	0.39 U	2.7 U
Carbon Disulfide	3.1 U	3.1 U	3.1 U	15	1.1 U
Carbon Tetrachloride	0.63 U	0.63 U	0.63 U	0.63 U	1.5 U
Chlorobenzene	0.46 U	0.46 U	0.46 U	0.46 U	1.6 U
Chloroethane	0.26 U	0.26 U	0.26 U	0.26 U	1 U
Chloroform	3.4	2.9	2.7	2.6	2 J
Chloromethane	0.41 U	0.41 U	0.41 U	0.41 U	0.9 U
cis-1,2-Dichloroethylene	2.2	2	1.7	1.6	2.5 J
cis-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U	1.2 U
Cyclohexane	0.34 U	0.34 U	0.34 U	0.34 U	2 U
Dibromochloromethane	0.85 U	0.85 U	0.85 U	0.85 U	2.3 U
Dichlorodifluoromethane (Freon 12)	3	2.9	2.7	2.8	3.3 J
Ethanol	31	23	17	28	34 U
Ethyl Acetate	0.36 U	0.36 U	0.36 U	0.36 U	2.7 U
Ethylbenzene	0.92	0.97	0.44	0.85	2.3 J
Heptane	0.41 U	0.41 U	0.41 U	0.41 U	18
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	4 U
Hexane	1 J	0.74 J	1.5 J	1.8 J	72 J
Isopropanol	3.5 J	3.2 J	3 J	4.3 J	3 U
m&p-Xylene	3.5	3.5	1.6	3	6.4 J
Methyl tert-Butyl Ether (MTBE)	0.36 U	0.36 U	0.36 U	0.36 U	1.1 U
Methylene Chloride	2.3 J	1.5 J	2.1 J	2.5 J	14 J
Naphthalene	1.7	1.3	1.1	1.2	2.9 U
o-Xylene	1.3	1.3	0.64	1.2	3 J
Propene	6.9 U	6.9 U	6.9 U	6.9 U	5.3 U
Styrene	0.43 U	0.43 U	0.43 U	0.43 U	0.83 U
Tetrachloroethylene	2700	2400	2700	2000	9400
Tetrahydrofuran	1.5	0.73	2	0.52	1.2 U
Toluene	1.5	1.6	0.84	2.3	33
trans-1,2-Dichloroethylene	0.4 U	0.4 U	0.4 U	0.4 U	1 U
trans-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U	1.2 U
Trichloroethylene	8.9	7.9	8	8.5	23
Trichlorofluoromethane (Freon 11)	1.5	1.4	1	1.1	2.1 J
Vinyl Acetate	7 U	7 U	7 U	7 U	1.8 U
Vinyl Chloride	0.26 U	0.26 U	0.26 U	0.26 U	1.1 U

NOTES:
J: Compund was detected but below reporting limit
U: Compound was not detected, reporting limit shown
SVE-3D results reported with a dilution factor of 20.

TABLE 3. Storm Drain Results - Aqueous
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID	CB-W1-91213	CB-W2-91213 (DUP)
Sampling Date	9/12/2013	9/12/2013
Matrix	WATER	WATER
Units	µg/L	µg/L
Volatile Organic Compounds		
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	5.0 U
1,1-Dichloroethene	5.0 U	5.0 U
1,1-Dichloropropene	5.0 U	5.0 U
1,2,3-Trichlorobenzene	5.0 U	5.0 U
1,2,3-Trichloropropane	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U
1,2,4-Trimethylbenzene	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	5.0 U	5.0 U
1,2-Dibromoethane	5.0 U	5.0 U
1,2-Dichlorobenzene	5.0 U	5.0 U
1,2-Dichloroethane	5.0 U	5.0 U
1,2-Dichloropropane	5.0 U	5.0 U
1,3,5-Trimethylbenzene	5.0 U	5.0 U
1,3-Dichlorobenzene	5.0 U	5.0 U
1,3-Dichloropropane	5.0 U	5.0 U
1,4-Dichlorobenzene	5.0 U	5.0 U
2,2-Dichloropropane	5.0 U	5.0 U
2-Butanone	5.0 U	5.0 U
2-Chlorotoluene	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U
4-Chlorotoluene	5.0 U	5.0 U
4-Isopropyltoluene	5.0 U	5.0 U
4-Methyl-2-pentanone	5.0 U	5.0 U
Acetone	5.0 U	5.0 U
Benzene	5.0 U	5.0 U
Bromobenzene	5.0 U	5.0 U
Bromochloromethane	5.0 U	5.0 U
Bromodichloromethane	5.0 U	5.0 U
Bromoform	5.0 U	5.0 U
Bromomethane	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U
Carbon tetrachloride	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U
Chloroethane	5.0 U	5.0 U
Chloroform	5.0 U	5.0 U
Chloromethane	5.0 U	5.0 U
cis-1,2-Dichloroethene	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U
Dibromochloromethane	5.0 U	5.0 U
Dibromomethane	5.0 U	5.0 U
Dichlorodifluoromethane	5.0 U	5.0 U
Ethylbenzene	5.0 U	5.0 U

Sample ID	CB-W1-91213	CB-W2-91213 (DUP)
Sampling Date	9/12/2013	9/12/2013
Matrix	WATER	WATER
Units	µg/L	µg/L
Volatile Organic Compounds		
Hexachlorobutadiene	5.0 U	5.0 U
Iodomethane	5.0 U	5.0 U
Isopropylbenzene	5.0 U	5.0 U
m,p-Xylene	5.0 U	5.0 U
Methyl tert-butyl ether	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U
n-Butylbenzene	5.0 U	5.0 U
n-Propylbenzene	5.0 U	5.0 U
Naphthalene	5.0 U	5.0 U
o-Xylene	5.0 U	5.0 U
sec-Butylbenzene	5.0 U	5.0 U
Styrene	5.0 U	5.0 U
tert-Butylbenzene	5.0 U	5.0 U
Tetrachloroethene	5.0 U	5.0 U
Toluene	5.0 U	5.0 U
trans-1,2-Dichloroethene	5.0 U	5.0 U
trans-1,3-Dichloropropene	5.0 U	5.0 U
Trichloroethene	5.0 U	5.0 U
Trichlorofluoromethane	5.0 U	5.0 U
Vinyl acetate	5.0 U	5.0 U
Vinyl chloride	5.0 U	5.0 U
Xylene (Total)	5.0 U	5.0 U

NOTES:
J: Compund was detected but below reporting limit
U: Compound was not detected, reporting limit shown

TABLE 4. Storm Drain Results - Sediment
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID	CB-S1-91213	CB-S2-91213 (DUP)
Sampling Date	9/12/2013	9/12/2013
Matrix	SEDIMENT	SEDIMENT
Units	µg/Kg	µg/Kg
Volatile Organic Compounds		
1,1,1,2-Tetrachloroethane	6.4 U	6.7 U
1,1,1-Trichloroethane	6.4 U	6.7 U
1,1,2,2-Tetrachloroethane	6.4 U	6.7 U
1,1,2-Trichloroethane	6.4 U	6.7 U
1,1-Dichloroethane	6.4 U	6.7 U
1,1-Dichloroethene	6.4 U	6.7 U
1,1-Dichloropropene	6.4 U	6.7 U
1,2,3-Trichlorobenzene	6.4 U	6.7 U
1,2,3-Trichloropropane	6.4 U	6.7 U
1,2,4-Trichlorobenzene	6.4 U	6.7 U
1,2,4-Trimethylbenzene	6.4 U	6.7 U
1,2-Dibromo-3-chloropropane	6.4 U	6.7 U
1,2-Dibromoethane	6.4 U	6.7 U
1,2-Dichlorobenzene	6.4 U	6.7 U
1,2-Dichloroethane	6.4 U	6.7 U
1,2-Dichloropropane	6.4 U	6.7 U
1,3,5-Trimethylbenzene	6.4 U	6.7 U
1,3-Dichlorobenzene	6.4 U	6.7 U
1,3-Dichloropropane	6.4 U	6.7 U
1,4-Dichlorobenzene	6.4 U	6.7 U
2,2-Dichloropropane	6.4 U	6.7 U
2-Butanone	6.4 U	6.7 U
2-Chlorotoluene	6.4 U	6.7 U
2-Hexanone	6.4 U	6.7 U
4-Chlorotoluene	6.4 U	6.7 U
4-Isopropyltoluene	6.4 U	6.7 U
4-Methyl-2-pentanone	6.4 U	6.7 U
Acetone	4.3 J	3.5 J
Benzene	6.4 U	6.7 U
Bromobenzene	6.4 U	6.7 U
Bromochloromethane	6.4 U	6.7 U
Bromodichloromethane	6.4 U	6.7 U
Bromoform	6.4 U	6.7 U
Bromomethane	6.4 U	6.7 U
Carbon disulfide	6.4 U	6.7 U
Carbon tetrachloride	6.4 U	6.7 U
Chlorobenzene	6.4 U	6.7 U
Chloroethane	6.4 U	6.7 U
Chloroform	6.4 U	6.7 U
Chloromethane	6.4 U	6.7 U
cis-1,2-Dichloroethene	6.4 U	6.7 U
cis-1,3-Dichloropropene	6.4 U	6.7 U
Dibromochloromethane	6.4 U	6.7 U
Dibromomethane	6.4 U	6.7 U
Dichlorodifluoromethane	6.4 U	6.7 U
Ethylbenzene	6.4 U	6.7 U

Sample ID	CB-S1-91213	CB-S2-91213 (DUP)
Sampling Date	9/12/2013	9/12/2013
Matrix	SEDIMENT	SEDIMENT
Units	µg/Kg	µg/Kg
Volatile Organic Compounds		
Hexachlorobutadiene	6.4 U	6.7 U
Iodomethane	6.4 U	6.7 U
Isopropylbenzene	6.4 U	6.7 U
m,p-Xylene	6.4 U	6.7 U
Methyl tert-butyl ether	6.4 U	6.7 U
Methylene chloride	3.1 J	3.0 J
n-Butylbenzene	6.4 U	6.7 U
n-Propylbenzene	6.4 U	6.7 U
Naphthalene	6.4 U	6.7 U
o-Xylene	6.4 U	6.7 U
sec-Butylbenzene	6.4 U	6.7 U
Styrene	6.4 U	6.7 U
tert-Butylbenzene	6.4 U	6.7 U
Tetrachloroethene	6.4 U	6.7 U
Toluene	6.4 U	6.7 U
trans-1,2-Dichloroethene	6.4 U	6.7 U
trans-1,3-Dichloropropene	6.4 U	6.7 U
Trichloroethene	6.4 U	6.7 U
Trichlorofluoromethane	6.4 U	6.7 U
Vinyl acetate	6.4 U	6.7 U
Vinyl chloride	6.4 U	6.7 U
Xylene (Total)	6.4 U	6.7 U

NOTES:
J: Compund was detected but below reporting limit
U: Compound was not detected, reporting limit shown

TABLE 5. SUMMARY OF GROUNDWATER RESULTS (VOCs)
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID		MW-3	AS-3	DUP	AS-4	AS-5	Trip Blank
Sampling Date		2/18/2014	2/18/2014		2/18/2014	2/18/2014	2/18/2014
Matrix		WATER	WATER		WATER	WATER	WATER
Dilution Factor		2	1		1	1	1
Units	NYSDEC Class GA Standard or Guidance Value (ug/l)	µg/L	µg/L		µg/L	µg/L	µg/L
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	5	2 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	5	2 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		2 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	2 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	2 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	2 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloropropene	5	4 U	2 U	2 U	2 U	2 U	2 U
1,2,3-Trichlorobenzene	5	10 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	0.04	4 U	2 U	2 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	10 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	3	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	2 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trichlorobenzene		2 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	2 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropane	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3	2 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane		100 U	50 U	50 U	50 U	50 U	50 U
2,2-Dichloropropane	5	2 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	50	40 U	20 U	20 U	20 U	20 U	20 U
2-Chlorotoluene	5	2 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	50*	20 U	10 U	10 U	10 U	10 U	10 U
4-Chlorotoluene	5	2 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-Pentanone		20 U	10 U	10 U	10 U	10 U	10 U
Acetone	50*	100 U	50 U	50 U	50 U	50 U	5 J
Acrylonitrile		10 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	2 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5	2 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50*	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50*	2 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	4 U	2 U	2 U	2 U	2 U	2 U
Carbon Disulfide		8 U	4 U	4 U	4 U	4 U	4 U
Carbon Tetrachloride	5	10 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
Chlorodibromomethane		1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	5	4 U	2 U	2 U	2 U	2 U	2 U
Chloroform	7	4 U	2 U	2 U	2 U	2 U	2 U
Chloromethane		4 U	2 U	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	5	2 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	5	2 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	4 U	2 U	2 U	2 U	2 U	2 U
Diethyl Ether		4 U	2 U	2 U	2 U	2 U	2 U
Diisopropyl Ether (DIPE)		1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethyl Benzene	5	2 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	0.5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	4 U	2 U	2 U	2 U	2 U	2 U
Methyl tert-butyl Ether	10	2 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	10 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	10*	4 U	2 U	2 U	2 U	2 U	2 U
n-Butylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U

TABLE 5. SUMMARY OF GROUNDWATER RESULTS (VOCs)
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID		MW-3	AS-3	DUP	AS-4	AS-5	Trip Blank
Sampling Date		2/18/2014	2/18/2014		2/18/2014	2/18/2014	2/18/2014
Matrix		WATER	WATER		WATER	WATER	WATER
Dilution Factor		2	1		1	1	1
Units	NYSDEC Class GA Standard or Guidance Value (ug/l)	µg/L	µg/L		µg/L	µg/L	µg/L
Volatile Organic Compounds							
n-Propylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	5	2 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene (p-Cymene)		2 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	2 U	1 U	1 U	1 U	1 U	1 U
tert-Amyl Methyl Ether (TAME)		1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butyl Alcohol (TBA)		40 U	20 U	20 U	20 U	20 U	20 U
tert-Butyl Ethyl Ether (TBEE)		1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	5	2 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	**46**	**35**	**32**	**42**	**7.1**	1 U
Tetrahydrofuran		20 U	10 U	10 U	10 U	10 U	10 U
Toluene	5	2 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	2 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,4-Dichloro-2-butene		4 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene	5	2 U	**0.14 J**	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	4 U	2 U	2 U	2 U	2 U	2 U
Vinyl Chloride	2	4 U	2 U	2 U	2 U	2 U	2 U

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard or Guidance Value.

* Guidance Value

**Sum of these compounds can not exceed 0.4 ug/L.

U - Compound not detected, Reporting Limit provided.

J - Estimated

E - Result exceeded instrument calibration range.

TABLE 6. SUMMARY OF GROUNDWATER RESULTS (SVOCs)
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID	NYSDEC Class GA Standard or Guidance Value (ug/l)	AS-5
Sampling Date		2/18/2014
Matrix		WATER
Dilution Factor		1
Units		µg/L
Semi-Volatile Organic Compounds		
1,2,4,5-Tetrachlorobenzene		10 U
1,2,4-Trichlorobenzene		5 U
1,2-Dichlorobenzene		5 U
1,2-Diphenylhydrazine (as Azobenzene)		10 U
1,3-Dichlorobenzene		5 U
1,4-Dichlorobenzene		5 U
1-Methylnaphthalene		5 U
2,4,5-Trichlorophenol	1	10 U
2,4,6-Trichlorophenol	1	10 U
2,4-Dichlorophenol	5	10 U
2,4-Dimethylphenol	50*	10 U
2,4-Dinitrophenol	10*	10 U
2,4-Dinitrotoluene	5	10 U
2,6-Dinitrotoluene	5	10 U
2-Chloronaphthalene	10*	10 U
2-Chlorophenol		10 U
2-Methylnaphthalene		5 U
2-Methylphenol		10 U
2-Nitroaniline	5	10 U
2-Nitrophenol		10 U
3,3-Dichlorobenzidine	5	10 U
3/4-Methylphenol		10 U
3-Nitroaniline	5	10 U
4,6-Dinitro-2-methylphenol		10 U
4-Bromophenyl-phenylether		10 U
4-Chloro-3-methylphenol		10 U
4-Chloroaniline	5	10 U
4-Chlorophenyl-phenylether		10 U
4-Nitroaniline	5	10 U
4-Nitrophenol		10 U
Acenaphthene		5 U
Acenaphthylene		5 U
Acetophenone		10 U
Aniline		5 U
Anthracene	50*	5 U
Benzidine		20 U
Benzo(a)anthracene	0.002*	5 U
Benzo(a)pyrene	ND	5 U
Benzo(b)fluoranthene	0.002*	5 U
Benzo(g,h,i)perylene		5 U

Sample ID	NYSDEC Class GA Standard or Guidance Value (ug/l)	AS-5
Sampling Date		2/18/2014
Matrix		WATER
Dilution Factor		1
Units		µg/L
Semi-Volatile Organic Compounds		
Benzo(k)fluoranthene	0.002*	5 U
Benzoic Acid		10 U
bis(2-Chloroethoxy)methane	5	10 U
bis(2-Chloroethyl)ether	1	10 U
Bis(2-chloroisopropyl)ether		10 U
bis(2-Ethylhexyl)phthalate	5	5.7 J
Butylbenzylphthalate	50*	10 U
Carbazole		10 U
Chrysene	0.002*	5 U
Dibenz(a,h)anthracene		5 U
Dibenzofuran		5 U
Diethylphthalate	50*	10 U
Dimethylphthalate	50*	10 U
Di-n-butylphthalate	50	10 U
Di-n-octyl phthalate	50*	10 U
Fluoranthene	50*	5 U
Fluorene	50*	5 U
Hexachlorobenzene	0.04	10 U
Hexachlorobutadiene	0.5	10 U
Hexachlorocyclopentadiene	5	10 U
Hexachloroethane	5	10 U
Indeno(1,2,3-cd)pyrene	0.002*	5 U
Isophorone	50*	10 U
Naphthalene	10*	5 U
Nitrobenzene	0.4	10 U
N-Nitrosodimethylamine		10 U
N-Nitroso-di-n-propylamine		10 U
N-Nitrosodiphenylamine	50*	10 U
Pentachloronitrobenzene		10 U
Pentachlorophenol	1	10 U
Phenanthrene	50	5 U
Phenol	1	10 U
Pyrene	50	5 U
Pyridine		5 U

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard or Guidance Value.

* Guidance Value

U - Compound not detected, Reporting Limit provided.

J - Estimated

TABLE 7. SUMMARY OF GROUNDWATER RESULTS (Metals)
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID		AS-5
Sampling Date		2/18/2014
Matrix		WATER
Dilution Factor	NYSDEC Class GA Standard or Guidance Value (mg/l)	1
Units		mg/L
Metals		
Aluminum		0.78
Antimony	0.003	0.05 U
Arsenic	0.025	0.01 U
Barium	1	0.071
Beryllium	0.003	0.004 U
Cadmium	0.005	0.004 U
Calcium		39
Chromium	0.05	0.0051 J
Cobalt		0.05 U
Copper	0.2	0.013
Cyanide		0.01 U
Iron	0.3***	1.6
Lead	0.025	0.017
Magnesium	35*	12
Manganese	0.3***	0.023
Mercury	0.0007	0.0001 U
Nickel	0.1	0.01 U
Potassium		2.7
Selenium	0.01	0.05 U
Silver	0.05	0.0083
Sodium	20	66
Thallium	0.0005*	0.05 U
Vanadium		0.01 U
Zinc	2*	0.045

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard or Guidance Value.

* Guidance Value

***Sum of these compounds can not exceed 0.3 mg/L.

U - Compound not detected, Reporting Limit provided.

J - Estimated

TABLE 8. SUMMARY OF GROUNDWATER RESULTS (Pesticides and PCBS)
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Sample ID Sampling Date Matrix Dilution Factor Units	NYSDEC Class GA Standard or Guidance Value (µg/L)	AS-5 2/18/2014 WATER 1 µg/L
Pesticides		
4,4'-DDD	0.3	0.04 U
4,4'-DDE	0.2	0.04 U
4,4'-DDT	0.2	0.052
Alachlor		0.2 U
Aldrin		0.05 U
alpha-BHC		0.05 U
beta-BHC		0.05 U
Chlordane (alpha)	0.05	0.2 U
delta-BHC		0.05 U
Dieldrin	0.004	0.002 U
Endosulfan I		0.05 U
Endosulfan II		0.08 U
Endosulfan sulfate		0.08 U
Endrin		0.08 U
Endrin aldehyde	5	0.08 U
Endrin ketone	5	0.08 U
gamma-BHC (lindane)	0.05	0.03 U
Heptachlor	0.04	0.05 U
Heptachlor epoxide	0.03	0.05 U
Hexachlorobenzene		0.05 U
Methoxychlor	35	0.5 U
Toxaphene	0.06	1 U
PCBs		
Aroclor-1016	0.09*	0.2 U
Aroclor-1221	0.09*	0.2 U
Aroclor-1232	0.09*	0.2 U
Aroclor-1242	0.09*	0.2 U
Aroclor-1248	0.09*	0.2 U
Aroclor-1254	0.09*	0.2 U
Aroclor-1260	0.09*	0.2 U
Aroclor-1262		0.2 U
Aroclor-1268		0.2 U

Notes:

*Sum of these compounds can not exceed 0.09 ug/L.

U - Compound not detected, Reporting Limit provided.

TABLE 9. AS/AVE System Operating Parameters
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Parameter	Value		Units	Notes:
	8/13/2013	9/12/2013		
Deep Soil Vapor Extraction System				
Applied Vacuum at the Moisture Trap =	-20	-21	in.W.C.	Per tank mounted vacuum gauge, dilution valve open 1/8-1/4%
Applied Vacuum at sample port, SP-1 =	-15	-15.5	in.W.C.	Per 0-100 in.W.C. magnehelic gauge
Post-Blower/Pre-Carbon Temperature , TG	138-140	144-148	^{o}F	Per skid mounted gauge
Post-Carbon Temperature , L =	NR	124	^{o}F	Per handheld laser temperature gun
Post-Blower/Pre-Carbon Pressure, PG_V =	< 2.0	5.7	in.W.C.	Per skid mounted gauge or handheld micromanometer
Pre-Blower Flowrate, FM =	200	200	scfm	Per skid mounted gauge
Pre-Blower Flowrate, FM_H =	215	206	acfm	Per handheld anemometer, drilled hole in 3" dia. influent header pre-KOT to collect reading.
Shallow Soil Vapor Extraction System				
Inline Fan Flowrate =	NR	8.7	acfm	Per handheld anemometer, 1/4" hole drilled into 4" dia. influent header pre-Radon Fan to collect reading.
Air Sparge System				
Post-Air Compressor Pressure, PG_A =	<2.0	<1.0	psig	Per skid mounted gauge.
Post-Air Compressor Flowrate =	NR	24	acfm	Per handheld anemometer, 1/4" hole drilled into 2" dia. distribution header pre-Air Compressor to collect reading.

Notes:
1. Data recorded on 8/13/2013 and 9/12/2013.
2. Ambient AS/SVE room temperature = 103 F.
3. Pressures and flows recorded with a TSI 5815 DP-Calc Micromanometer.

Definitions:
^{o}F - Fahrenheit
in.W.C. - inches of water column
MW - monitoring well
NR - not recorded
scfm - standard cubic feet per minute
acfm - actual cubic feet per minute
psig - pounds per square inch gauge

TABLE 10. AS/AVE System Performance Readings
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Well ID	Pressure (in.W.C.)	
	8/13/2013	9/12/2013
Interior Soil Gas Monitoring Points		
SG-1S	-1.927	-1.944
SG-1D	-3.280	-2.889
SG-2S	-1.510	NR
SG-2D	-3.100	NR
SG-3S	-0.677	NR
SG-3D	-2.54	NR
SG-4S	-3.735	NR
SG-4D	-2.922	NR
SG-5S	-3.298	NR
SG-5D	-1.924	NR
SG-6S	-1.235	-1.187
SG-6D	-3.501	-3.223
SG-7S	-1.023	-0.890
SG-7D	-1.068	-0.992
SG-8S	-1.367	NR
SG-8D	-0.663	NR
SG-9S	-0.500	NR
SG-9D	-1.862	NR
SG-10S	-0.630	-0.552
SG-10D	-1.581	-1.412
Exterior Soil Gas Monitoring Points		
ESG-2S	NR	-0.275
ESG-2D	NR	-1.322
ESG-3S	-0.845	-0.739
ESG-3D	-0.184	-0.713
ESG-4S	-0.002	NR
ESG-4D	-1.033	NR
ESG-5S	-0.245	-0.317
ESG-5D	-1.074	-1.423
ESG-6S	NA	NR
ESG-6D	-1.097	NR
ESG-7S	NA	NR
ESG-7D	-0.714	NR
ESG-8S	-0.635	NR
ESG-8D	-0.374	-0.317

Well ID	Pressure (in.W.C.)	
	8/13/2013	9/12/2013
Soil Vapor Extraction Wells		
SVE-1S	-2.523	NR
SVE-1D	-14.400	NR
SVE-2S	-2.402	NR
SVE-2D	-14.400	NR
SVE-3S	-2.501	NR
SVE-3D	-12.000	NR
SVE-4S	-2.540	NR
SVE-4D	-15.000	NR
SVE-5S	-2.537	NR
SVE-5D	-14.770	NR
Air Sparge Wells		
AS-1	4.501	NR
AS-2	4.414	NR
AS-3	4.700	NR
AS-4	4.500	4.240
AS-5	5.564	NR

Well ID	Vacuum (in.W.C.)	DTW (ft)
	9/12/2013	
Groundwater Monitoring Wells		
MW-1	-0.305	25.06
MW-2	-0.515	24.30
MW-3	-0.501	23.32
MW-4	-0.895	23.59
MW-5	-0.718	23.00
MW-6	-2.000	25.32
MW-7	-0.518	27.38

Notes:
1. Each SVE well flow control/isolation valve open 100%
2. Each AS well flow control/isolation valve open 100%
3. Pressures recorded with a TSI 5815 DP-Calc Micromanometer.

Definitions:
AS - air sparge well
DTW - depth to water from measuring point
ESG - soil gas monitoring point
ft - feet
in.W.C. - inches of water column
MW - monitoring well
NR - not recorded
SG - soil gas monitoring point
SVE - soil vapor extraction well

Tables 11A, 11B, 11C
FORMER PLAZA CLEANERS SITE OU#1
NYSDEC SITE # 130108
966 PORT WASHINGTON BLVD. PORT WASHINGTON, NY

Table 11A. System Performance Calculations
Esitmated Mass Removal

Analyte	Influent (Pre-Dil.) Conc. ($\mu g/m^3$)[1]	Flow Rate (ft^3/min)	Est. Mass Per Day (g/day)	Est. Mass Per Day (kg/day)	Est. Mass Per Day (lb/day)	Est. Mass Removed March 2012 - September 2013 (lb)[2]
PCE	2,700	206	22.68	0.02	0.05	25.69

Conversions:
1 m^3 = 35.32 ft^3
1 g = 1,000,000 mg
1 kg = 1,000 g
1 kg = 2.2 lb

Note:
1. The estimated mass removal rate is based on a single sampling event performed on 9/12/2013.
2. The estimated mass removed for PCE and TCE are based on the est. system operational runtime provided by Russell Furia (Zytel Industries).

Table 11B. Estimated Carbon Treatment Efficiency

Sample ID	PCE Conc. (mg/m^3)	Percentage Adsorbed by Lead Carbon (%)	Percentage Adsorbed by 2nd Carbon (%)	Percentage Adsorbed by Both Carbons (%)
PRE-DILUTION	2,700	0	26	26
PRE-GAC	2,400			
MID-GAC	2,700			
POST-GAC	2,000			

Table 11C. Estimated Annual Impact Percentage of Annual DAR-1 Guidance Concentrations.

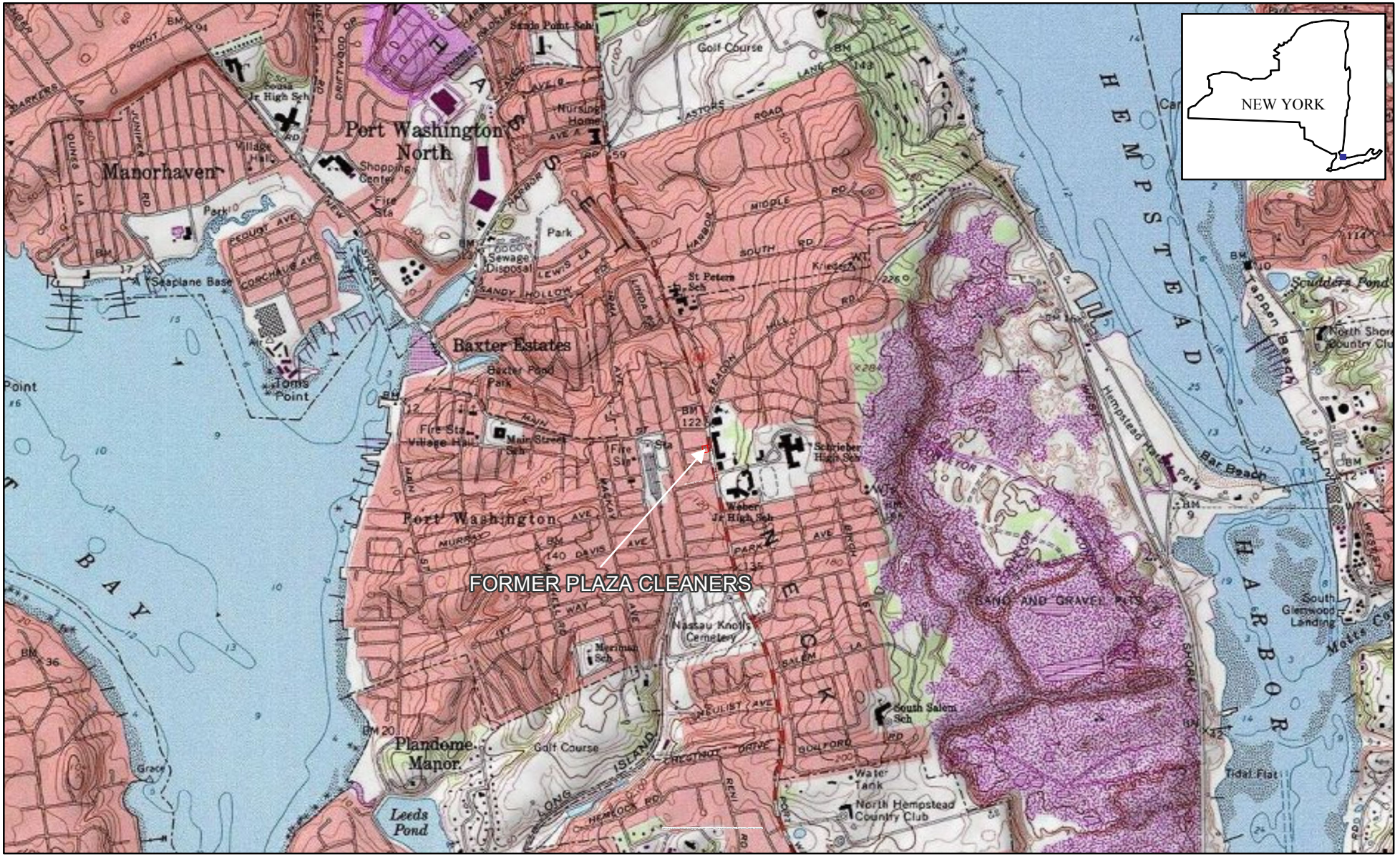
Analyte	AGC[(1)] ($\mu g/m^3$)	Maximum Effluent PCE Concentration ($\mu g/m^3$)[(2)]	Maximum Emission Rate (lb/day)[(3)]	Estimated Annual Impact ($\mu g/m^3$)[(4)]	Estimated Annual Impact Percentage of AGC (%)
PCE	1	2,700	4.99E-02	1.29E-01	12.91

Notes:
1. AGC values obtained from NYSDEC DAR-1 AGC/SGC Tables, dated 9/10/07.
2. The concentrations used were collected from a single sampling event after approximately 17 months of system operation.
3. Maximum emission rate calculated using the effluent flow rate (206 acfm) recorded 9/12/2013.
4. Actual annual impact calculated by following procedures described in NYSDEC DAR-1 Guidelines for the Control of Toxic Ambient Air Contaminants (NYSDEC 1991). Note effective stack height of 20 feet.

Definitions:
AGC - Annual Guideline Concentration
lb/day - pounds per day
$\mu g/m^3$ - micrograms per cubic meter

ARCADIS

Figures



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORMER PLAZA CLEANERS - NYSDEC SITE #130108

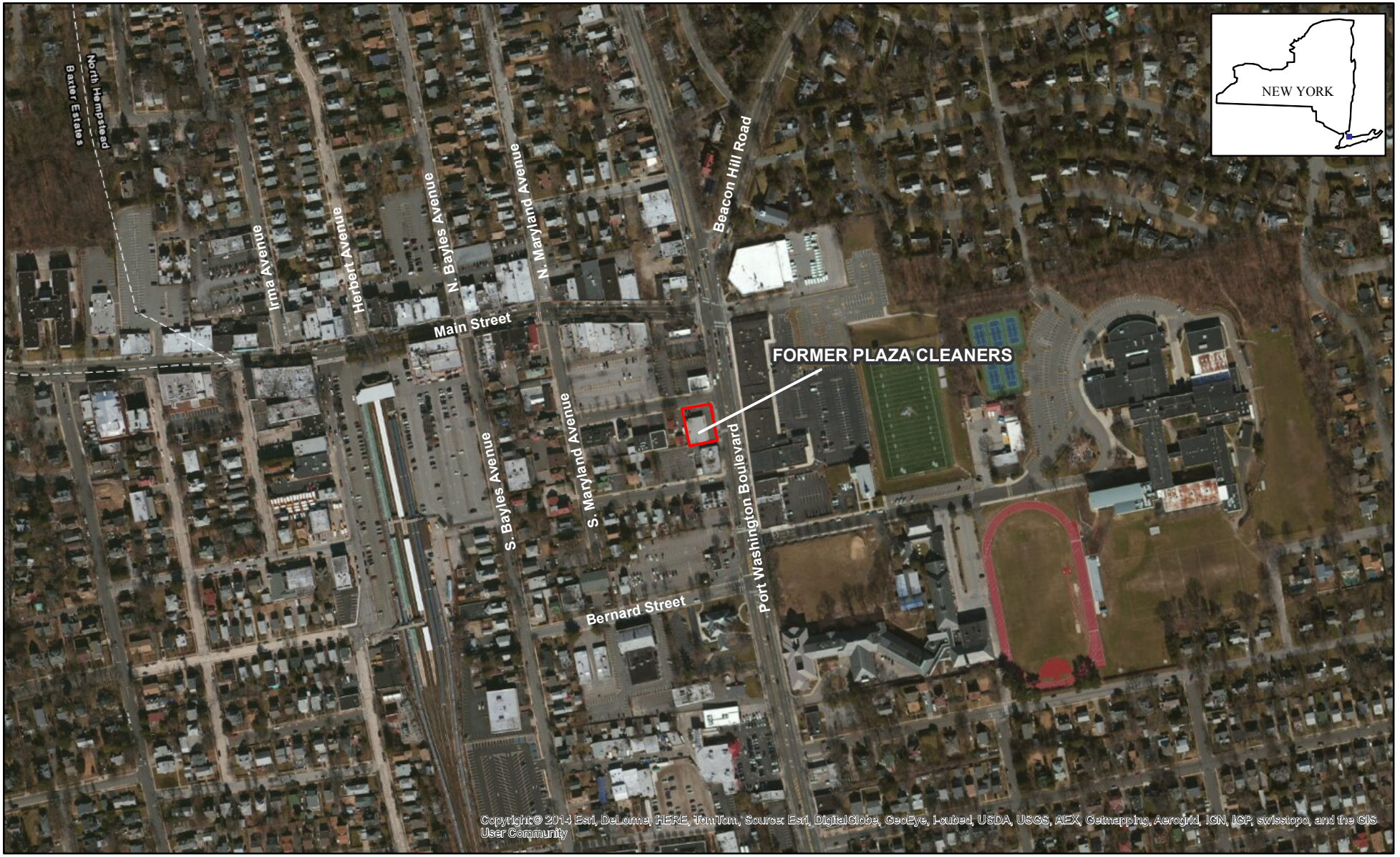
TOWN OF NORTH HEMPSTEAD, NEW YORK

SITE LOCATION

ARCADIS

FIGURE **1**

G:\GIS\MOD\00286408.0000\Topo.mxd
G:\PROJECT\00286408.0000\FILE\R1REPORT\Figure 1 - Site Location.pdf



0 240 480 960 1,440 1,920 Feet

N

Legend

Site Boundary

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORMER PLAZA CLEANERS - NYSDEC SITE #130108

TOWN OF NORTH HEMPSTEAD, NEW YORK

AERIAL PHOTOGRAPH

ARCADIS

FIGURE **2**

G:\GIS\MXD\00266408.0000\Aerial.mxd
G:\PROJECT\00266408.0000\FILE\RI REPORT\Figure 2 - Aerial.pdf



RESULT (µg/m³)	PRE-DIL-91214	PRE-GAC-91214	MID-GAC-91214	POST-GAC-91214
9/12/2013				
PCE	2,700	2,400	2,700	2,000
TCE	8.9	7.9	8	8.5
Cis 1,2 DCE	2.2	2	1.7	1.6

ESG-8D-91213	RESULT (µg/m³)
9/12/2013	
PCE	35.0
TCE	ND
Cis 1,2 DCE	ND

ESG-5D-91213	RESULT (µg/m³)
9/12/2013	
PCE	340
TCE	1.3
Cis 1,2 DCE	ND

ESG-3D-91213	RESULT (µg/m³)
9/12/2013	
PCE	220
TCE	0.96
Cis 1,2 DCE	ND

OA-1-91213	RESULT (µg/m³)
9/12/2013	
PCE	1.3
TCE	ND
Cis 1,2 DCE	ND

SG-1D-91213	RESULT (µg/m³)
9/12/2013	
PCE	230
TCE	6.9
Cis 1,2 DCE	ND

ESG-6S-91213	RESULT (µg/m³)
9/12/2013	
PCE	16,000
TCE	110
Cis 1,2 DCE	25

ESG-7S-91213	RESULT (µg/m³)
9/12/2013	
PCE	4,500
TCE	21
Cis 1,2 DCE	3.9

SG-7D-91213	RESULT (µg/m³)
9/12/2013	
PCE	130
TCE	7.1
Cis 1,2 DCE	2.9

SG-6D-91213	RESULT (µg/m³)
9/12/2013	
PCE	1,000
TCE	1.2
Cis 1,2 DCE	ND

SG-10D-91213	RESULT (µg/m³)
9/12/2013	
PCE	2,600
TCE	5.1
Cis 1,2 DCE	ND

LEGEND

- MONITORING WELL
- SOIL / GAS WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGING WELL
- S — SHALLOW WELL
- D — DEEP WELL
- APPROXIMATE LOCATION OF AS/SVE SYSTEM
- APPROXIMATE LOCATION OF TANK EXCAVATION
- APPROXIMATE LOCATION OF STORM DRAIN
- APPROXIMATE SITE BOUNDARY

10' 0 10' 20'
Approximate

ARCADIS Infrastructure · Water · Environment · Buildings

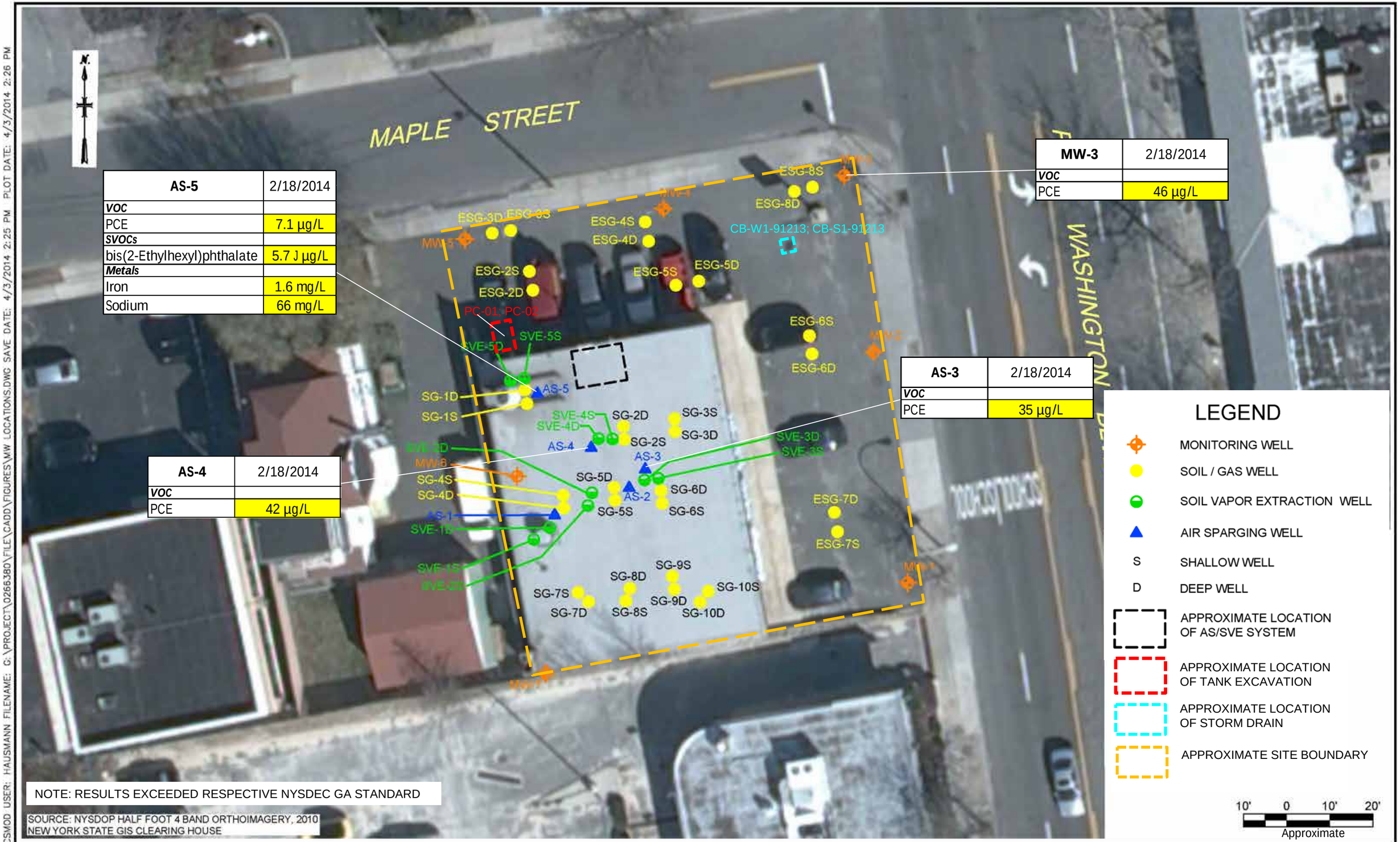
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORMER PLAZA CLEANERS – NYSDEC SITE # 130108
TOWN OF NORTH HEMPSTEAD, NEW YORK

SOIL GAS SAMPLING AND MONITORING WELL LOCATIONS
SUMMARY OF CONTAMINANTS OF CONCERN – September 12, 2013

FIGURE 3

G:\PROJECT\00266408.0000\FILE\RI REPORT\revFIGURE 3 Soil Vapor Hitbox Summary.ppt
SPEC: AUS–NCSMOD USER: HAUSMANN FILENAME: G:\PROJECT\0266380\FILE\CADD\FIGURES\MW LOCATIONS.DWG SAVE DATE: 4/3/2014 2:25 PM PLOT DATE: 4/3/2014 2:26 PM



AS-5	2/18/2014
VOC	
PCE	7.1 µg/L
SVOCs	
bis(2-Ethylhexyl)phthalate	5.7 J µg/L
Metals	
Iron	1.6 mg/L
Sodium	66 mg/L

AS-4	2/18/2014
VOC	
PCE	42 µg/L

MW-3	2/18/2014
VOC	
PCE	46 µg/L

AS-3	2/18/2014
VOC	
PCE	35 µg/L

LEGEND

- MONITORING WELL
- SOIL / GAS WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGING WELL
- S — SHALLOW WELL
- D — DEEP WELL
- APPROXIMATE LOCATION OF AS/SVE SYSTEM
- APPROXIMATE LOCATION OF TANK EXCAVATION
- APPROXIMATE LOCATION OF STORM DRAIN
- APPROXIMATE SITE BOUNDARY

10' 0 10' 20'
Approximate

NOTE: RESULTS EXCEEDED RESPECTIVE NYSDEC GA STANDARD

SOURCE: NYSDOP HALF FOOT 4 BAND ORTHOIMAGERY, 2010
NEW YORK STATE GIS CLEARING HOUSE

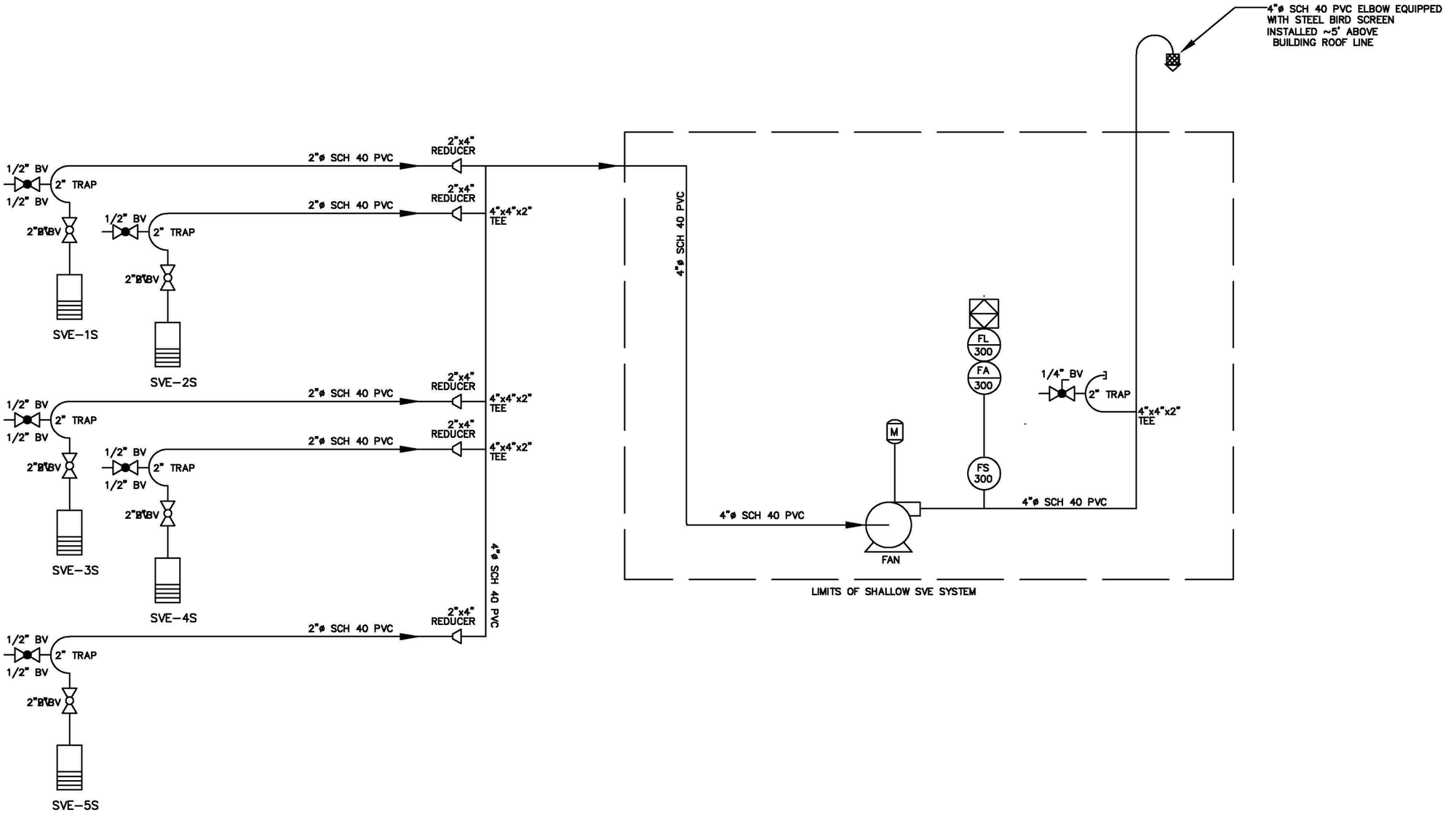
ARCADIS
Infrastructure · Water · Environment · Buildings

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORMER PLAZA CLEANERS – NYSDEC SITE # 130108
TOWN OF NORTH HEMPSTEAD, NEW YORK

GROUNDWATER SAMPLING LOCATIONS
SUMMARY OF EXCEEDANCES – February 18, 2014

FIGURE 4

G:\PROJECT\00266408.0000\FILE\RI REPORT\revFIGURE 3 Soil Vapor Hitbox Summary.ppt
SPEC: AUS-NCSMOD USER: HAUSMANN FILENAME: G:\PROJECT\0266380\FILE\CADD\FIGURES\MW LOCATIONS.DWG SAVE DATE: 4/3/2014 2:25 PM PLOT DATE: 4/3/2014 2:26 PM



USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266408.0000\FIGURES\SHALLOW SVE SCHEMATIC.DWG SAVE DATE: 11/22/2013 11:36 AM PLOT DATE: 11/22/2013 11:41 AM

ARCADIS
Infrastructure · Water · Environment · Buildings

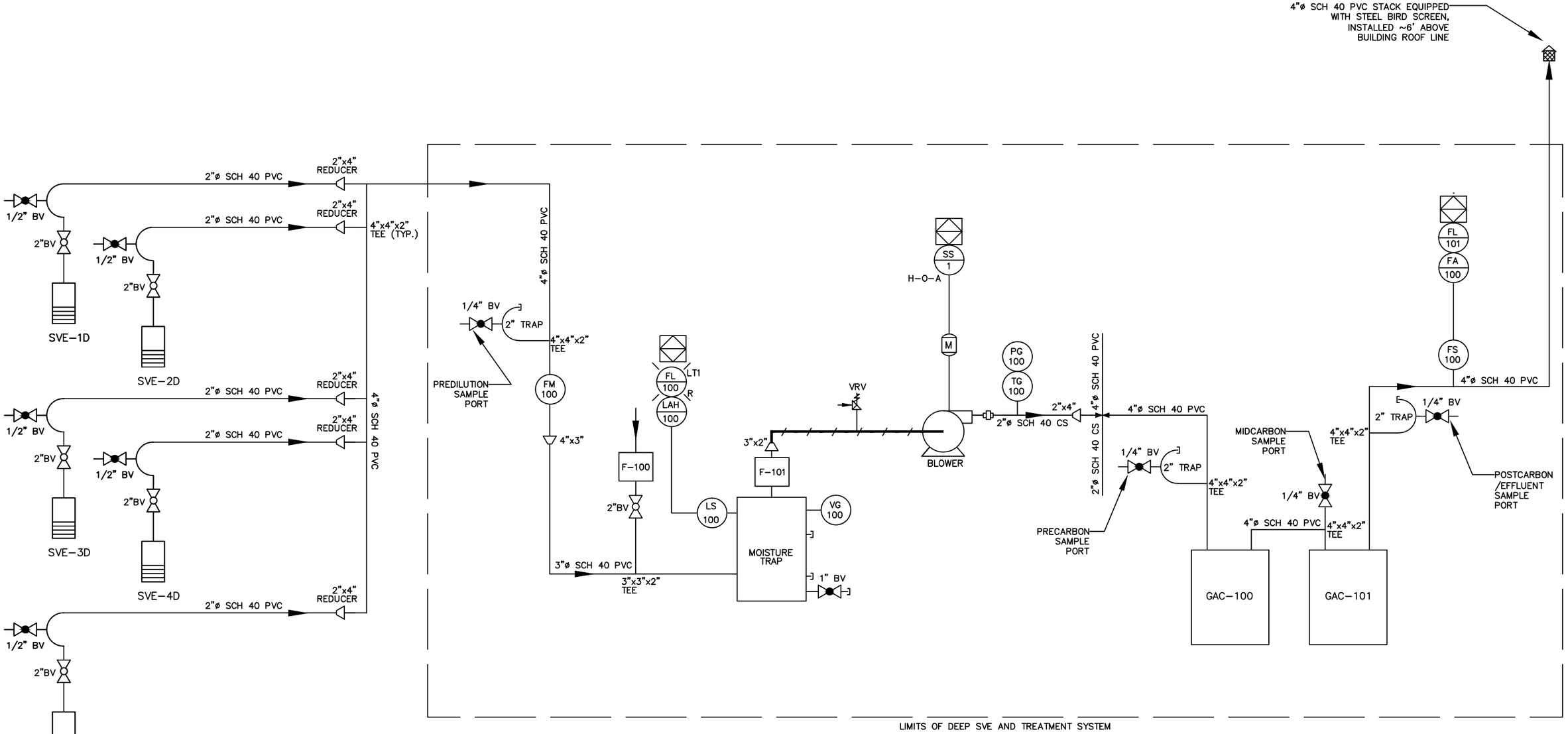
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORMER PLAZA CLEANERS - NYSDEC SITE # 130108
PORT WASHINGTON, NEW YORK

SHALLOW SOIL VAPOR EXTRACTION SYSTEM SCHEMATIC

NOT TO SCALE

FIGURE 5



ARCADIS
Infrastructure · Water · Environment · Buildings

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

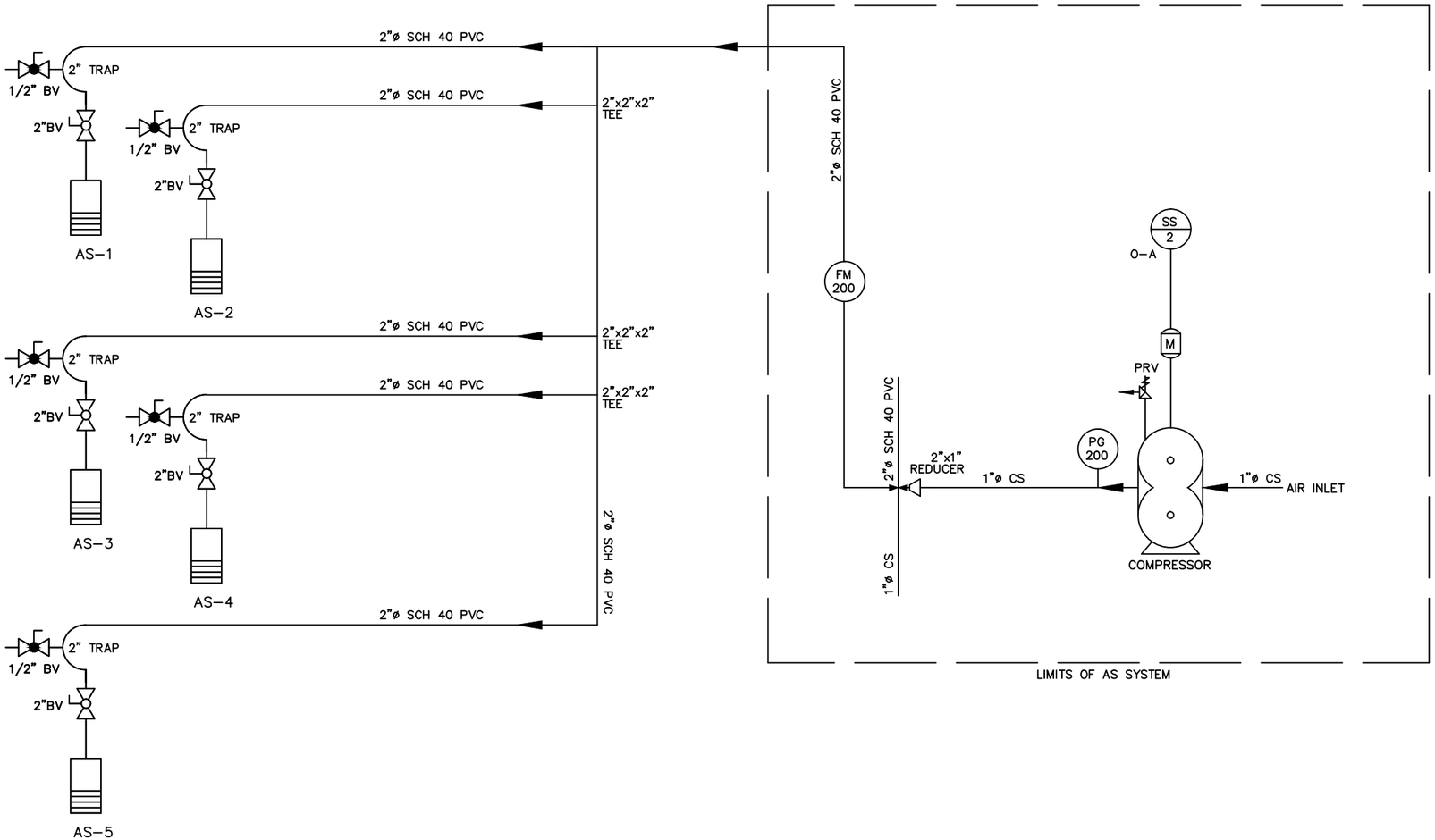
FORMER PLAZA CLEANERS - NYSDEC SITE # 130108
PORT WASHINGTON, NEW YORK

DEEP SOIL VAPOR EXTRACTION SYSTEM SCHEMATIC

NOT TO SCALE

FIGURE 6

USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266408.0000\FIGURES\DEEP SVE SHEMATIC.DWG SAVE DATE: 11/22/2013 11:35 AM PLOT DATE: 11/22/2013 11:39 AM



ARCADIS
Infrastructure · Water · Environment · Buildings

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORMER PLAZA CLEANERS - NYSDEC SITE # 130108
PORT WASHINGTON, NEW YORK

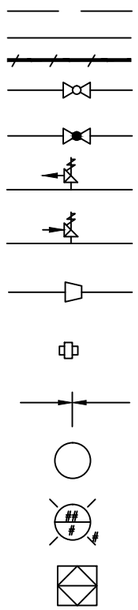
AIR SPARGE SYSTEM SCHEMATIC

NOT TO SCALE

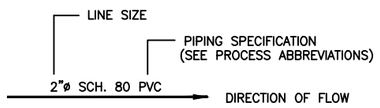
FIGURE 7

USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266408.0000\FIGURES\AIR SPARGE SCHEMATIC.DWG SAVE DATE: 11/22/2013 11:38 AM PLOT DATE: 11/22/2013 11:38 AM

LEGEND:



PIPE IDENTIFICATION



ABBREVIATIONS

BV	BALL VALVE
CS	CARBON STEEL
CFM	CUBIC FEET PER MINUTE
F	FILTER
°F	FAHRENHEIT
FA	FLOW ALARM
FM	FLOW METER
FL	FAULT INDICATOR LIGHT
HS	HAND SWITCH
H-O-A	HAND-OFF-AUTO
HP	HORSE POWER
in.W.C.	INCHES OF WATER COLUMN
LAH	LEVEL ALARM HIGH
LS	LEVEL SWITCH
M	MOTOR
PG	PRESSURE GAUGE
PVC	POLYVINYL CHLORIDE
PRV	PRESSURE RELIEF VALVE
PT	PRESSURE TRANSMITTER
SCH	SCHEDULE
SCFM	STANDARD CUBIC FEET PER MINUTE
SS	SELECTOR SWITCH
TG	TEMPERATURE GAUGE
V	VOLTS
VG	VACUUM GAUGE
VPGAC	VAPOR PHASE GRANULAR ACTIVATED CARBON
VRV	VACUUM RELIEF VALVE

GENERAL NOTES:

1. ALL PROCESS EQUIPMENT, VALVES, AND PIPING CONNECTED USING VARIOUS MECHANICAL CONNECTIONS INCLUDING FLANGED FITTINGS, RUBBER FLEXIBLE COUPLERS MANUFACTURED BY FERNCO, AND SOLVENT WELDING.

2. AIR SPARGE/SOIL VAPOR EXTRACTION SKID, AND CARBON TREATMENT UNITS PRE-MANUFACTURED BY CARBTROL, MODEL # SVX-R3.5 WITH XP MOTOR STARTER.

MAJOR PROCESS EQUIPMENT DESCRIPTIONS

DESIGNATION: BLOWER
TYPE: REGENERATIVE
RATING: 7.5 HP, 230/460V, 3P
MANUFACTURER: ROTRON
MODEL: EN80BA72MLX P/N 081229
PERFORMANCE SPECIFICATIONS: 90 CFM @ 90 in.W.C./ 330 CFM @ 10 in.W.C.

DESIGNATION: FAN
TYPE: INLINE RADON
RATING: UNKNOWN
MANUFACTURER: UNKNOWN
MODEL: UNKNOWN
PERFORMANCE SPECIFICATIONS: UNKNOWN

DESIGNATION: ROTARY PUMP
TYPE: ROTARY VANE LOW PRESSURE PUMP, KDT 3.60
RATING: 5.0 HP, 230 V, 3P
MANUFACTURER: BECKER
MODEL: D 2242443
PERFORMANCE SPECIFICATIONS: 28 SCFM @ 21 PSIG

DESIGNATION: VAPOR PHASE GRANULAR ACTIVATED CARBON, GAC-100, 101
MANUFACTURER: CARBTROL CORPORATION
MODEL: G-2
SPECIFICATIONS: 170 LBS, MAX. RATED FLOW 300 CFM
CARBON: 4X8 ACTIVATED CARBON

DESIGNATION: FLOW METER VACUUM, FM-100
MANUFACTURER: AMETEK
MODEL: MINIHELIC II
RANGE: 0-475 SCFM

DESIGNATION: FLOW METER AIR SPARGE, FM-200
MANUFACTURER: AMETEK
MODEL: MINIHELIC II
RANGE: 0-225 SCFM

DESIGNATION: FILTER, F-100, 101
MANUFACTURER: UNKNOWN
MODEL: UNKNOWN
RATING: UNKNOWN

DESIGNATION: FLOW SWITCH, FS-100, 300
MANUFACTURER: W.E. ANDERSON/FLOTEC
TYPE: VANE OPERATED FLOW SWITCH
MODEL: V8-MV-WP2

ARCADIS
Infrastructure · Water · Environment · Buildings

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORMER PLAZA CLEANERS - NYSDEC SITE # 130108
PORT WASHINGTON, NEW YORK

LEGEND, ABBREVIATIONS, NOTES AND DESCRIPTIONS

FIGURE 8

USER: HAUSMANN FILENAME: G:\ACAD\PROJ\00266408.0000\FIGURES\LEGEND.DWG SAVE DATE: 4/3/2014 1:00 PM PLOT DATE: 4/3/2014 1:01 PM

ARCADIS

Appendix A

Field Forms and Photo Logs

ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1

Site Location: PORT WASHINGTON Date 9/12/13

Sample No./ID: ESC-7S-91213 Replicate No. —

Weather ~85°F, HUMID Sampling Time: Begin 906 End 1005

Field Parameters

Measuring Point: ESC-7S

Tubing Diameter: ¼" OD TEFLON

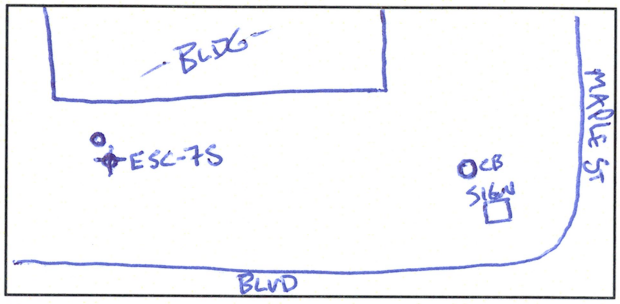
Canister ID: 1466

Regulator ID: 4261

Vol. Purged: ~1L

Vacuum at Start: -30" Hg

Vacuum at Finish: -2" Hg



Sample Location

Apparent Moisture Content: DRY

Sample Depth: ~8.5' - GAUGED USING WIRE, NO SPECS PROVIDED

Sample Method: SUMA CANISTER (6L) w/ 1HR REGULATOR

Sample Device: "

Remarks:
- PRE-SAMPLE He/TRACER TEST: 96% IN DOME, 0% IN TUBING
- PRE-SAMPLE PID = 0 ppm AMBIENT, 0.4 ppm IN BOAT.

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

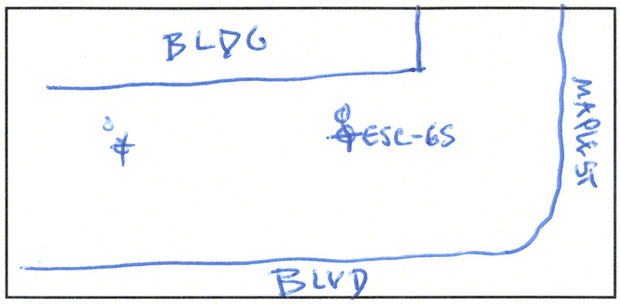
ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.8000 Page 1 of 1
Site Location: PORT WASHINGTON, NY Date 9/12/13
Sample No./ID: ESC-6S-9/12/13 Replicate No.
Weather ~85°F, HUMID Sampling Time: Begin 937 End 1030

Field Parameters

Measuring Point: ESC-6S
Tubing Diameter: ¼" OD TEFLON
Canister ID: 1337
Regulator ID: 4260
Vol. Purged: ~~1500 mL~~ >1L
Vacuum at Start: -30+ "Hg
Vacuum at Finish: -5 "Hg



Sample Location

Apparent Moisture Content: DRY

Sample Depth: ~10.5' (5' SCREEN?) - GAUGED W/WIRE, NO SPECS PROVIDED

Sample Method: SUMA CAN (6L) W/ 1 HR REG.

Sample Device: "

Remarks:
- PRE-SAMPLE He/TRACER TEST ⇒ 92% IN DOME, 0% IN TUBING
- " PID = 0 ppm AMBIENT, 0.4 ppm IN TUBING

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1

Site Location: PORT WASHINGTON, NY Date 9/12/13

Sample No./ID: ESC-SD-91213 Replicate No.

Weather ~85°F, HUMID Sampling Time: Begin 1040 End 1132

Field Parameters

Measuring Point: ESC-SD

Tubing Diameter: 1/4" OD TEFLON

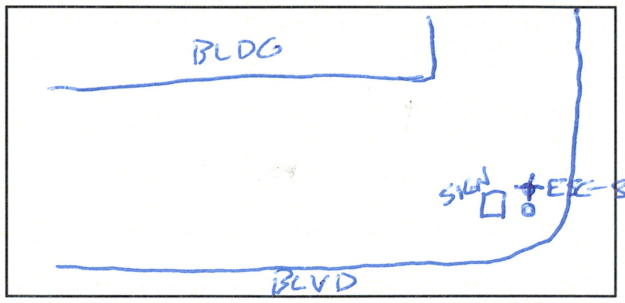
Canister ID: 1257

Regulator ID: 4161

Vol. Purged: ~~800~~ >1L

Vacuum at Start: -28" Hg

Vacuum at Finish: -4.5" Hg



Sample Location

Apparent Moisture Content: DRY

Sample Depth: UNKNOWN - SPECS NOT PROVIDED

Sample Method: SUMA CAN (6L) W/ 1HR REG.

Sample Device: "

Remarks:
- PRE-SAMPLE He/TRACER TEST ⇒ 97.5% IN DOME, 2.4% IN PORT
- " PID = 0 ppm AMBIENT, 26.4 ppm IN TUBING
- *REINFORCE SEAL W/ CLAY DUE TO He TEST RESULT ↑

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1

Site Location: PORT WASHINGTON, NY Date 9/12/13

Sample No./ID: ESC-5D-91213 Replicate No.

Weather ~85°F, HUMID Sampling Time: Begin 1137 End 1231

Field Parameters

Measuring Point: ESC-5D

Tubing Diameter: ¼" OD TEFLON

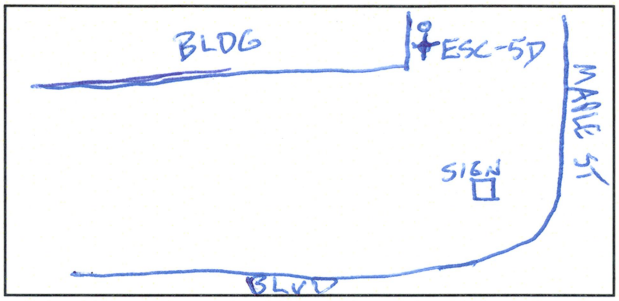
Canister ID: 1222

Regulator ID: 4160

Vol. Purged: >1L

Vacuum at Start: -27.5" Hg

Vacuum at Finish: -3" Hg



Sample Location

Apparent Moisture Content: DRY

Sample Depth: ~17.5' - GAUGED (TO RESISTANCE) W/ WIRE, NO SPECS PROVIDED

Sample Method: SUMA CAN (6L) W/ 1HR REG.

Sample Device: "

Remarks:
- PRE-SAMPLE He/TRACER TEST ⇒ 68.6%* IN DOME, 0% IN PORT/TUBING
  *POSSIBLE CALIBRATION ISSUE, TRIED 2 He CANISTERS — WILL CAL. BEFORE NEXT TEST.
- PID = 0 AMBIENT, 0 ppm IN TUBING/PORT

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1

Site Location: PORT WASHINGTON, NY Date 9/12/13

Sample No./ID: ESC-3D-91213 Replicate No.

Weather 385°F, HUMID Sampling Time: Begin 1226 End 1321

Field Parameters

Measuring Point: ESC-3D

Tubing Diameter: ¼" OD TEFLON

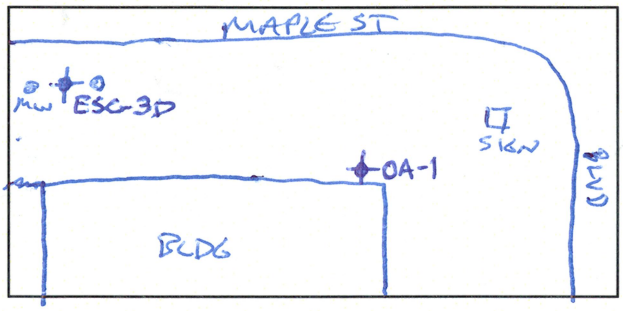
Canister ID: 1146

Regulator ID: 4259

Vol. Purged: >1L

Vacuum at Start: -30" Hg

Vacuum at Finish: -4" Hg



Sample Location

Apparent Moisture Content: DRY

Sample Depth: ~8.5' - GAUGED W/WIRE, SPECS NOT PROVIDED.

Sample Method: SUMA CAN (6L) W/ 1HR REG.

Sample Device:

Remarks:
- PRE-SAMPLE He/TRACER TEST ⇒ 96.8% IN DOME, 1% IN TUBING
- PRE-SAMPLE PID = 0 ppm AMBIENT, 0 ppm IN TUBING/PORT

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

AMBIENT AIR SAMPLE = OA-1-91213
- INITIAL PRESS. = -30" @ 1320
  -4.5" @ 1320

ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266405.0000 Page 1 of 1

Site Location: PORT WASHINGTON, NY Date 9/12/13

Sample No./ID: SG-1D-91213 Replicate No.

Weather INSIDE=90°F, HUMID. Sampling Time: Begin 1405 End 1500

Field Parameters

Measuring Point: SG-1D - INSIDE

Tubing Diameter: 1/4" OD TEFLON

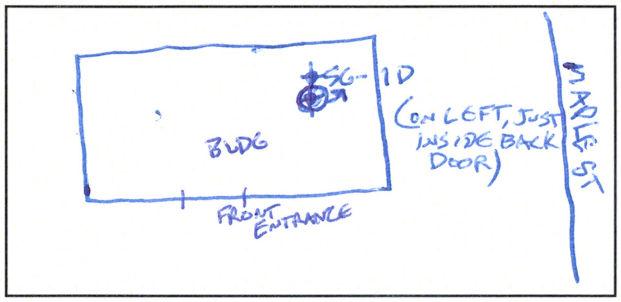
Canister ID: 1161

Regulator ID: 4234

Vol. Purged: >1L

Vacuum at Start: -30" Hg

Vacuum at Finish: -4.5" Hg



Sample Location

Apparent Moisture Content: DRY, MOIST @ BOTTOM

Sample Depth: ≈17' - GAUGED W/ WIRE, SPECS NOT PROVIDED

Sample Method: SUMA CAN (6L) W/ 1 HR REG.

Sample Device: "

Remarks: • PRE-SAMPLE He/TRACER ⇒ 95.3% DOME, 0% IN PORT
• PRE-SAMPLE PID = Ø AMBIENT, 0.3 ppm IN PORT

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

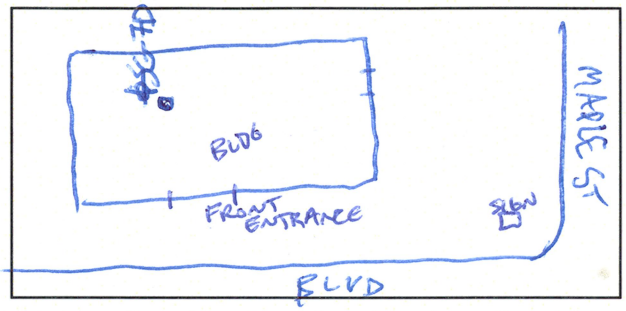
ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1
Site Location: PORT WASHINGTON, NY Date 9/12/13
Sample No./ID: SG-7D 9/12/13 Replicate No.
Weather ≈85°F, HUMID Sampling Time: Begin 1429 End 1525
- INSIDE = ≈90°, HUMID

Field Parameters

Measuring Point: SG-7D
Tubing Diameter: 1/4" OD TEFLON
Canister ID: 1218
Regulator ID: 4235
Vol. Purged: >1L
Vacuum at Start: -30"
Vacuum at Finish: -3"



Sample Location

Apparent Moisture Content: DRY

Sample Depth: ≈16' - MEASURED W/ STEEL CABLE, NO SPECS PROVIDED.

Sample Method: SUMA CAN (6L) W/ 1 HR REG.

Sample Device: "

Remarks:
- PRE-SAMPLE He/TRACER ⇒ 99% IN DOME, 0% IN PORT
- " PID = 0ppm AMBIENT, 0ppm IN PORT

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1

Site Location: PORT WASHINGTON, NY Date 9/12/13

Sample No./ID: SG-6D-91213 Replicate No.

Weather ~85°F HUMID Sampling Time: Begin 1510 End 1404

Field Parameters

Measuring Point: SG-6D - INSIDE BLDG

Tubing Diameter: 1/4" OD TEFLON

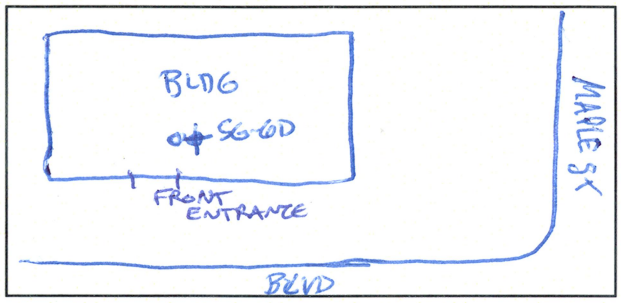
Canister ID: 1853

Regulator ID: 4061

Vol. Purged: >1L

Vacuum at Start: -30"

Vacuum at Finish: -5"



Sample Location

Apparent Moisture Content: DRY

Sample Depth:

Sample Method: SUMA CAN (6L) w/ 1HR REG.

Sample Device:

Remarks:
- PRE-SAMPLE He/TRACER ⇒ 98% IN DOME, 0% IN PORT
- PRE-SAMPLE PID ⇒ AMBIENT = 0.6ppm, PORT = 1.3ppm

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

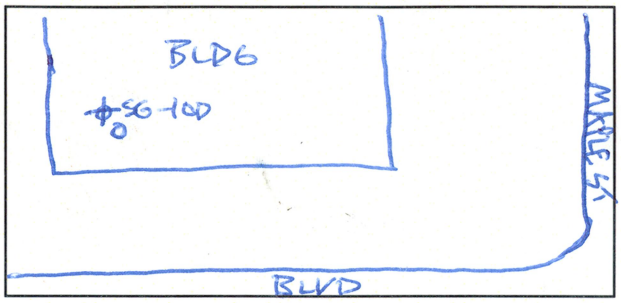
ARCADIS

Soil Gas Sampling Log

Project Name: PLAZA CLEANERS Project No.: 00266408.0000 Page 1 of 1
Site Location: PORT WASHINGTON, NY Date 9/12/13
Sample No./ID: SG-10D-91213 Replicate No. FD091213
Weather ~85°F, HUMID Sampling Time: Begin 1403 End 1658

Field Parameters

Measuring Point: SG-10D-91213
Tubing Diameter: 1/4" OD TEFLON
Canister ID: 1735
Regulator ID: 4257
Vol. Purged: >1L
Vacuum at Start: -30"
Vacuum at Finish: -4"
Apparent Moisture Content: DRY



Sample Location

Sample Depth: ~17' - MEASURED USING STEEL CABLE - POSSIBLY TOP OF SCREEN? - SPECS NOT PROVIDED.
Sample Method: SUMA CANISTER (6L) W/ 1HR REGULATOR
Sample Device: "

Remarks:
- PRE-SAMPLE He/TRACER = 99% DOME, 0 ppm/% IN PORT
- " PID = 0.0 - 3.5 ppm IN PORT
DUPLICATE → FD091213 - CAN ID = 1747, REG. ID = 4257
- INITIAL PRESS. = -30 POST PRESS. = -4"

Constituents Sampled: TO-15 Sampling Personnel: CW, TC

gpm	*Gallons per minute*
mg/L	*Miligrams per liter*
N/A	*Not Applicable*
COC	*Chain of Custody*

Approximating Sampling Train Volume (for purging):

When using 1¼-inch "Dummy Point" and a 6-inch sampling interval, the sampling space will have a volume of approximately 150 mL. Each foot of ¼-inch tubing will have a volume of approximately 10 mL.

SYSTEM GRABS

PORT	SAMPLE ID	CAN ID	REG. ID	START	STOP	PRE PRESS.	POST
PRE-DILUTION	~~FD-1~~ PRE DIL-91213	1469	4263	1643	1740	-30	-4.5
PRE-GAC	PRE-GAC-91213	1653	4262	1654	1744	-30	-4.0
MID-GAC	MID-GAC-91213	1617	4240	1658	1746	-27	-4.3
POST-GAC	POST-GAC-91213	1674	4241	1701	1745	-28	-4.0

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation

FORMER PLAZA CLEANERS
NYSDEC Site # 1-30-081

Work Assignment #
PORT WASHINGTON, NY

Day: THURSDAY **Date:** 9/12/13

Temperature: (F) ≈85°F (am) ≈85° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) PARTLY CLOUDY, HUMID
(pm) RAIN, THUNDER STORMS

Arrive at site (am) 7:50

Leave site: (pm) 19:10

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (✓)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes (✓)	n/a ( )	* No ( )
Waters	Yes (✓)	n/a ( )	* No ( )
Air	Yes (✓)	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes (✓) No ( ) - SEE SOIL GAS SAMPLING LOGS
Photos Taken: Yes (✓) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

- COLLECT SOIL VAPOR SAMPLES FROM 9 LOCATIONS (PERMANENT SOIL GAS MONITORING POINTS INSTALLED BY PRP'S CONSULTANT). ⇒ 6L SUMA CANS W/ 1 HR. REGULATORS.
  - INCLUDED He/TRACER GAS SEAL TESTS @ EACH LOCATION (SEE LOG SHEETS)
- COLLECT 1 AMBIENT (OUTDOOR) AIR SAMPLE
- ASSESS SVE SYSTEM (FLOW & RADIUS OF INFLUENCE) - MEASURE SUBSURFACE PRESSURE @ EACH ACCESSIBLE SOIL VAPOR POINTS, MEASURE SYSTEM AIR FLOW, COLLECT AIR SAMPLES (4).
- COLLECT SOIL/SEDIMENT & WATER SAMPLES FROM THE 1 CATCH BASIN NE OF THE BUILDING.
  - DTW = 5.95'
  - DTB (TOP OF SEDIMENT/SOIL) = 8.50'
  - WATER SAMPLE COLLECTED W/ BAILER
    - CB-W1-91213 (DUPLICATE = CB-W2-91213) @ 1705
  - SOIL/SEDIMENT SAMPLE COLLECTED USING BUCKET AUGER & RODS
    - CB-S1-91213 (DUPLICATE = CB-S2-91213) @ 1720

PROJECT TOTALS:
- 2 SOIL (1 SAMPLE, 1 DUP') > SEE ABOVE ↑
- 2 WATER (")
- 15 AIR SAMPLES (INC. 1 DUPLICATE)

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
ESC-7S-91213		
ESC-6S-91213		
ESC-8D-91213		
ESC-5D-91213		
ESC-3D-91213		
SG-1D-91213		
SG-7D-91213		
SG-6D-91213		
SG-10D-91213		
FD091213		
PRE-DIL-91213		
PRE-GAC-91213		
MID-GAC-91213		
POST-GAC-91213		
OA-1-91213		

SEE SOIL GAS SAMPLE LOGS FOR DETAILS.

DAILY OBSERVATION REPORT

Day: THURSDAY Date: 9/12/13

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor/~~Malcolm Pirnie~~ ARCADIS) personnel: CURT WHIPPLE, TODD CARIGNAN

(Name of Subcontractor) personnel: N/A

(Name of contractor) equipment:
- PID (miniRAE) - 10.6 eV
- HELIUM DETECTOR/PROBE, & CANISTERS
- PRESSURE GAUGES
- ANEMOMETER (FOR SYSTEM FLOW MEASUREMENTS)

*(*Indicates active equipment)*

Other Subcontractors:

Agency personnel: MELISSA (NYSDEC)

VISITORS TO SITE:

1. RUSSEL (PRP's CONSULTANT)

PROJECT SCHEDULE ISSUES:

- PACE WAS SLOWED DUE TO LACK OF WELL/SAMPLE POINT SPECS, NOT PROVIDED BY PRP/RUSSEL, WE HAD TO ATTEMPT TO GAUGE/CONFIRM DEPTHS USING WIRE, ETC.
- TIME WAS ALSO LOST RE-MAPPING LOCATIONS (MAP PROVIDED WAS FOUND INCORRECT/INACCURATE).

PROJECT BUDGET ISSUES:

- SEE ABOVE

ITEMS OF CONCERN:

- NEED SOIL GAS MONITORING POINT LOGS, NOTES, SPECS, ETC. (SEE ABOVE)

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:
- SOIL GAS SAMPLE LOGS
- SAMPLE CHAINS OF CUSTODY

SITE REPRESENTATIVE:

Name: (*signature*)

cc:

DAILY PHOTOLOG

Former Plaza Sampling Event Photos – 12 September 2013

NYSDEC Former Plaza Cleaners OU-1
Port Washington, NY



Photo 1 – ESG-5D sampling location



Photo 2 – Helium testing

ARCADIS

Former Plaza Sampling Event Photos – 12 September 2013

NYSDEC Former Plaza Cleaners OU-1
Port Washington, NY



Photo 3 – SG-10D and duplicate sampling



Photo 4 – Pressure testing for system influence



Photo 5 – System sampling



Photo 6 – System sampling

ARCADIS
Infrastructure · Water · Environment · Buildings

Monitoring Well Purge Log

PROJECT: PLAZA CLEANERS - P. WASH, NY
DATE: 2/18/14
STAFF: CW
WELL ID: MW-3

Equipment Serial #: WQ Meter = HORIBA U-52 021376 (PINE) WLM = AVS#1
Turbidity Meter = LAMOTTE 2020WE - 16611 (PINE)

Purge Method: PERI. PUMP w/ 1/4" OD POLY TUBING **Depth to Bottom/DTB (ft):** 34.30'

Well ID	DTW	Rate	pH	Cond	Turb	Temp	DO	ORP	Time	
MW-3	(feet)	(mL/min)	(SU)	(mS/cm)	(NTU)	(C)	(mg/L)	(mV)		
Initial/Static DTW -	24.11'	~							≈10:15	
Start Purge -	"	≈120							10:22	START
Begin Readings -	24.12'	"							10:45	
	24.12'	"	7.32	0.607	2.60	4.42	5.29	105	10:50	
	"	"	7.06	0.582	1.89	5.17	4.50	111	10:55	
	"	"	6.90	0.564	2.22	5.72	4.07	115	11:00	
	"	"	6.71	0.544	1.75	6.10	3.66	118	11:05	
	"	"	6.54	0.528	0.68	6.87	3.23	121	11:10	
	"	"	6.44	0.531	1.59	7.18	2.93	123	11:15	
	"	"	6.41	0.529	2.10	7.22	2.98	124	11:20	
	"	"	6.38	0.524	2.73	7.33	2.88	125	11:25	SAMPLE

Stability Criteria:

USEPA/CTDEP*	max. 0.3' drawdown	0.1 SU	3%	10% (if >1)	3%	10%	10 mV	5 mins

**considered stable and ready for sampling after 3 consecutive readings every 5 minutes, based on the "Low-Flow" Sampling Procedure*

Sample Time: 11:25

Analytes/Containers: VOCs (3 VIALS)

NOTES (*Observations, Well Condition, Problems, etc*):
- AMBIENT TEMP ≈ 25°F, HORIBA CELL @ SURFACE

Log form created by Curt Whipple; Malcolm Pirnie - HAR, updated March 2012

ARCADIS
Infrastructure · Water · Environment · Buildings

Monitoring Well Purge Log

PROJECT: PLAZA CLEANERS - P. WASH., NY
DATE: 2/18/14
STAFF: CW
WELL ID: AS-3

Equipment Serial #: WQ Meter = HORIBA U-52 021378-PINE WLM = AWS #1
Turbidity Meter = LAMOTTE 2020WE-18611

Purge Method: PERI. Pump w/ 1/4" OD POLY TUBING **Depth to Bottom/DTB (ft):** 34.65'

Well ID	DTW	Rate	pH	Cond	Turb	Temp	DO	ORP	Time	
AS-3	(feet)	(mL/min)	(SU)	(mS/cm)	(NTU)	(C)	(mg/L)	(mV)		
Initial/Static DTW -	27.60'	—	TOC ≈	0.90'	ABOVE	SLAB (CUT)				
Start Purge -	"	≈120							11:55	START
Begin Readings -	27.64'	≈120	6.15	0.550	5.43	12.35	11.79	142	12:15	
	"	"	6.17	0.563	5.49	12.78	11.53	144	12:20	
	"	"	6.19	0.562	5.78	13.37	10.67	145	12:25	
	"	"	6.19	0.567	4.32	13.94	10.33	146	12:30	
	"	"	6.20	0.569	3.36	13.92	10.13	147	12:35	
	"	"	6.20	0.574	3.10	14.25	9.86	147	12:40	
			6.20	0.575	2.92	14.28	9.77	148	12:45	SAMPLE

Stability Criteria:								
USEPA/CTDEP*	max. 0.3' drawdown	0.1 SU	3%	10% (if >1)	3%	10%	10 mV	5 mins

**considered stable and ready for sampling after 3 consecutive readings every 5 minutes, based on the "Low-Flow" Sampling Procedure*

Sample Time: 12:45

Analytes/Containers: VOCs (3 VIALS)
+DUPLICATE ⇒ FD-021814

NOTES (*Observations, Well Condition, Problems, etc*):

PID = 1605 ppb (WELL HEADSPACE)
2517 ppb (AMBIENT)

ARCADIS
Infrastructure · Water · Environment · Buildings

Monitoring Well Purge Log

PROJECT: PLAZA – PORT WASH., NY
DATE: 2/18/14
STAFF: EW
WELL ID: AS-4

Equipment Serial #: WQ Meter = HORIBA U-52 021378 WLM = AVS#1
Turbidity Meter = LAMOTTE-018611

Purge Method: PERI. PUMP W/ 1/4" OD POLY TUBING **Depth to Bottom/DTB (ft):** 34.48'

Well ID	DTW (feet)	Rate (mL/min)	pH (SU)	Cond (mS/cm)	Turb (NTU)	Temp (C)	DO (mg/L)	ORP (mV)	Time
Initial/Static DTW -	26.80'	—	FROM SLAB/GRADE						≃1340
Start Purge -	"	≃140							≃1348 – START
Begin Readings -	"	≃120	6.37	0.497		15.65	8.93	121	1358
STABLES	"	"	6.26	0.494		15.79	5.69	135	1405
	"	"	6.24	0.494	4.85	15.83	5.25	139	1410
	"	≃140	6.23	0.493	4.23	15.87	4.95	141	1415
	"	≃120	6.23	0.495	5.22	15.91	9.34	141	1420
	"	"	6.23	0.495	3.66	15.92	9.28	142	1425
	"	"	6.23	0.495	4.14	15.98	9.09	142	1430 – SAMPLE

Stability Criteria:								
USEPA/CTDEP*	max. 0.3' drawdown	0.1 SU	3%	10% (if >1)	3%	10%	10 mV	5 mins

**considered stable and ready for sampling after 3 consecutive readings every 5 minutes, based on the "Low-Flow" Sampling Procedure*

Sample Time: 1430

Analytes/Containers: VOCs (9 VIALS) Σ +2 VOLUMES FOR MS/MSD

NOTES (*Observations, Well Condition, Problems, etc*):
PID = ≃2500 ppb – AMBIENT
≃1450 ppb – WELL HEADSPACE

Log form created by Curt Whipple; Malcolm Pirnie - HAR, updated March 2012

ARCADIS
Infrastructure · Water · Environment · Buildings

Monitoring Well Purge Log

PROJECT: PLAZA CLEANERS - P. WASH, NY
DATE: 2/18/14
STAFF: CW

WELL ID: AS-5

Equipment Serial #: WQ Meter = HORIBA U-52 021378 WLM = AVS #1

Turbidity Meter = LAMOTTE - 018611

Purge Method: PERI. PUMP w/ 1/4" OD POLY TUBING **Depth to Bottom/DTB (ft):** 34.60' FROM SLAB

Well ID AS-5	DTW (feet)	Rate (mL/min)	pH (SU)	Cond (mS/cm)	Turb (NTU)	Temp (C)	DO (mg/L)	ORP (mV)	Time	
Initial/Static DTW -	26.85'	—	FROM	SLAB/GRADE					14:55	
Start Purge -	"	≈140							15:15	- START
Begin Readings -	26.87'	"	6.32	0.541	17.3	15.03	4.69	142	15:35	
	"	≈120	6.30	0.541		15.05	5.88	146	15:40	
	STABLE	"	6.28	0.543	14.0	15.03	8.28	150	15:45	
		"	6.27	0.543	8.4	14.95	8.25	151	15:50	
		"	6.28	0.543	5.62	14.98	8.26	151	15:55	
		"	6.28	0.541	6.56	15.00	8.20	153	16:00	- SAMPLE

Stability Criteria:

USEPA/CTDEP*	max. 0.3' drawdown	0.1 SU	3%	10% (if >1)	3%	10%	10 mV	5 mins

**considered stable and ready for sampling after 3 consecutive readings every 5 minutes, based on the "Low-Flow" Sampling Procedure*

Sample Time: 16:00

Analytes/Containers: VOCs, TAL/TCL METALS (1N), PEST, PCBs, CYANIDE, SVOCs
(PEST, PCBs: 4 AMBERS; CYANIDE: 1 SODIUM HYDROX.; SVOCs: 2 AMBERS)

NOTES (*Observations, Well Condition, Problems, etc*):

Log form created by Curt Whipple; Malcolm Pirnie - HAR, updated March 2012

6-8:30
MS WS

ARCADIS

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation

PLAZA CLEANERS
NYSDEC Site # 1-30-081

Work Assignment # D-004439-18

North Hempstead, New York

Day: TUESDAY **Date:** 2/18/14

Temperature: (F) ≈25 (am) ≈34 (pm)

Wind Direction: (am) (pm)

Weather: (am) SNOW/RAIN MIX
(pm) " STOPPED AFTER ≈ 13:00

Arrive at site (am) 9:00

Leave site: (pm) 6:15 (18:15)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (X)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes (X)	n/a ( )	* No ( )
Waters	Yes (X)	n/a ( )	* No ( )
Air	Yes ( )	n/a ( )	* No (X) PID = ≈2,500 ppb IN INDOOR AIR.

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (X)
Photos Taken: Yes (X) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

- COLLECT GW SAMPLES (VIA LOW-FLOW) @ MW-3, AS-3, AS-4, AS-4
- CUT & GAUGE ALL AS, & SVE WELLS ATTACHED TO ACTIVE AIR SPARGE & SVE SYSTEM
- SCREEN INFLUENT IN ALL DEEP SVE WELLS (VIA SAMPLE PORTS) USING PPb RAE,
- COLLECT 1 INFLUENT AIR/SOIL VAPOR SAMPLE FROM SVE WELL W/ HIGHEST SCREENING DETECTION/PID READING

PROJECT TOTALS:

SAMPLING (Soil/Water/Air) Contractor Sample ID:	DEC Sample ID:	Description:
MW-3-021814		GW SAMPLE FROM MW-3 FOR VOCs
AS-3-021814		" FROM AS-3 FOR VOCs
FD-021814		" DUPLICATE FROM AS-3 FOR VOCs
AS-4-021814		" FROM AS-4 FOR VOCs (+6 VIALS FOR MS/MSD)
AS-5-021814		" FROM AS-5 FOR FULL TCL/TAL LIST + PEST., PCBs.
SVE-3D-021814		AIR SAMPLE (SUMMA) FROM SVE-3D FOR TO-15

DAILY OBSERVATION REPORT

Day: TUESDAY Date: 2/18/14

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor/ARCADIS) personnel: CURT WHIPPLE, TODD CARIGNAN

(Name of Subcontractor) personnel: N/A

(Name of contractor) equipment: ppbRAE, ~~PE~~GILAIR PUMP, TEDLAR BAGS, PERISTALTIC PUMP, HORIBA U-52, SOLINST WATER LEVEL INDICATOR.

(*Indicates active equipment)

Other Subcontractors:

Agency personnel: MELISSA SWEET

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:
- DELAY IN AM DUE TO TRAFFIC, & SNOW BANK ATOP MW-3
- DELAY IN AFTERNOON DUE TO LOCKED/LACK OF ACCESS TO SVE SYSTEM, RP's/SITE CONSULTANT LATE RETURNING TO SITE AFTER LUNCH

PROJECT BUDGET ISSUES:

—

ITEMS OF CONCERN:

—

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:
- GW MONITORING WELL PURGE LOGS
- SVE SYSTEM FIELD NOTES – GAUGING, SCREENING, etc.

SITE REPRESENTATIVE:

Name: (signature) 2/18/14

cc:

DAILY PHOTOLOG

ARCADIS

Tank Removal Photos – 21 June 2013

NYSDEC Former Plaza Cleaners OU-1
Port Washington, NY



Photo 1 – Pre-excavation



Photo 2 – Side wall of tank

ARCADIS

Tank Removal Photos – 21 June 2013

NYSDEC Former Plaza Cleaners OU-1
Port Washington, NY



Photo 3 – Tank in situ



Photo 4 – Tank ex situ

ARCADIS

Tank Removal Photos – 21 June 2013

NYSDEC Former Plaza Cleaners OU-1
Port Washington, NY



Photo 5 – Tank ex situ



Photo 6 – Staged tank and soils

Appendix B

Data Usability Summary Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

November 12, 2013

Breanna Quaglieri
ARCADIS US, Inc
855 Rt 146 Suite 204
Clifton Park, NY 12065

RE: **D**ata **U**sability **S**ummary **R**eport for the NYSDEC Plaza Cleaners Analytical Data
Con-test SDG No. 13I0513

Dear Ms. Quaglieri:

Review has been completed for the data package generated by Con-test that pertains to the analysis of samples collected 09/12/13 at the NYSDEC Plaza Cleaners site. Fourteen 6 L summa canister air samples and a field duplicate were analyzed for volatiles by USEPA method TO-15.

The data packages submitted contain full deliverables for validation, but this usability report is generated from review of the summary form information, with 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 SOP HW-31, the specific laboratory methodology, and professional judgment, as affect the usability of the data. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Method and Canister Blanks
* Duplicate Correlations
* Field Duplicate Correlations
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Instrument Performance
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data package.

In summary, sample reported results are usable either as reported or with minor qualification/ edit. No data are rejected. Precision determinations show good recoveries and correlations.

Copies of the laboratory case narratives are attached to this text, and should be reviewed in conjunction with this report. Also attached are client results tables with recommended qualifiers and edits applied in red.

Sample Receipt

The required sample login form provided in the data package has no entries.

Volatiles by EPA TO-15

Many identifications of the detected results in the samples do not meet the protocol mass spectral identification criteria. Each mass spectrum has been reviewed, and those not showing reliable identification have either been qualified as tentative in identification and estimated in value, or have been edited to non-detection at elevated reporting limits on the attached client tables. In most cases, the poor spectral quality is due to non-subtractive interferences.

Due to presence in the associated method blanks, the detections of methylene chloride in the samples are considered external contamination and edited to reflect non-detection. The sample detections of that compound should have been flagged as "B" by the laboratory.

Results for analytes showing initial response above the linear range of the instrument have been derived from dilution analyses.

Continuing calibration standards show responses within required limits.

The field duplicate evaluation of SG-10D-91213 and the laboratory duplicate evaluation of ESC-8D-91213 show good correlations.

Air samples reported in ppbv were validated, as required of the protocol and processed by the laboratory. The conversion to results reported in ug/M^3 was randomly checked and no errors were noted.

Some of the samples were processed only at dilution due to target analyte concentrations. This results in elevated reporting limits for analytes not detected in the samples.

Please do not hesitate to contact me if questions or comments arise during your review of 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 and LABORATORY CASE NARRATIVE

con-test®
ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Elias Moskal

REPORT DATE: 9/24/2013

PURCHASE ORDER NUMBER: 00266408.0000

PROJECT NUMBER: 00266408.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13I0513

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Plaza Cleaners

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
ESC-7S-91213	13I0513-01	Soil Gas		EPA TO-15	
ESC-6S-91213	13I0513-02	Soil Gas		EPA TO-15	
ESC-8D-91213	13I0513-03	Soil Gas		EPA TO-15	
ESC-5D-91213	13I0513-04	Soil Gas		EPA TO-15	
ESC-3D-91213	13I0513-05	Soil Gas		EPA TO-15	
ESC-1D-91213	13I0513-06	Soil Gas		EPA TO-15	
ESC-7D-91213	13I0513-07	Soil Gas		EPA TO-15	
ESC-6D-91213	13I0513-08	Soil Gas		EPA TO-15	
SG-10D-91213	13I0513-09	Soil Gas		EPA TO-15	
FD091213	13I0513-10	Soil Gas		EPA TO-15	
OA-1-91213	13I0513-11	Ambient Air		EPA TO-15	
PRE-DIL-91213	13I0513-12	Soil Gas		EPA TO-15	
PRE-GAC-91213	13I0513-13	Soil Gas		EPA TO-15	
MID-GAC-91213	13I0513-14	Soil Gas		EPA TO-15	
POST-GAC-91213	13I0513-15	Soil Gas		EPA TO-15	

con-test®
ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

Elevated reporting limit due to high concentration of target compounds. Requested reporting limit not met.

Analyte & Samples(s) Qualified:

13I0513-02[ESC-6S-91213]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

ARCADIS

Appendix C

Data Summary Package

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

November 21, 2013

Elias Moskal
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Plaza Cleaners
Client Job Number:
Project Number: 00266408.0000
Laboratory Work Order Number: 13I0513

Enclosed are results of analyses for samples received by the laboratory on September 13, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Aaron L. Benoit
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Elias Moskal

REPORT DATE: 11/21/2013

PURCHASE ORDER NUMBER: 00266408.0000

PROJECT NUMBER: 00266408.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13I0513

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Plaza Cleaners

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
ESG-7S-91213	13I0513-01	Soil Gas		EPA TO-15	
ESG-6S-91213	13I0513-02	Soil Gas		EPA TO-15	
ESG-8D-91213	13I0513-03	Soil Gas		EPA TO-15	
ESG-5D-91213	13I0513-04	Soil Gas		EPA TO-15	
ESG-3D-91213	13I0513-05	Soil Gas		EPA TO-15	
SG-1D-91213	13I0513-06	Soil Gas		EPA TO-15	
SG-7D-91213	13I0513-07	Soil Gas		EPA TO-15	
SG-6D-91213	13I0513-08	Soil Gas		EPA TO-15	
SG-10D-91213	13I0513-09	Soil Gas		EPA TO-15	
FD091213	13I0513-10	Soil Gas		EPA TO-15	
OA-1-91213	13I0513-11	Ambient Air		EPA TO-15	
PRE-DIL-91213	13I0513-12	Soil Gas		EPA TO-15	
PRE-GAC-91213	13I0513-13	Soil Gas		EPA TO-15	
MID-GAC-91213	13I0513-14	Soil Gas		EPA TO-15	
POST-GAC-91213	13I0513-15	Soil Gas		EPA TO-15	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED REPORT 11/21/2013: Report revised to change sample IDs that were incorrectly listed on the COC. Sample IDs were changed from "ESC-" to "ESG-" for sample IDs 13I0513-01 through 13I0513-05.

REVISED REPORT 11/19/13 15:27: Report revised due to incorrect sample IDs listed for 13I0513-06 13I0513-07 and 13I0513-08. Sample IDs were changed to SG-1D-91213 for 13I0513-06, SG-7D-91213 for 13I0513-07, and SG-6D-91213 for 13I0513-08 as per COC.

EPA TO-15

Qualifications:

Elevated reporting limit due to high concentration of target compounds. Requested reporting limit not met.

Analyte & Samples(s) Qualified:

13I0513-02[ESG-6S-91213]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Aaron L. Benoit
Project Chemist

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-7S-91213
Sample ID: 13I0513-01
Sample Matrix: Soil Gas
Sampled: 9/12/2013 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 1466
Canister Size: 6 liter
Flow Controller ID: 4261
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -2
Receipt Vacuum(in Hg): -3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	13	4.0		32	9.5	2	9/19/13 11:11	WSD
Benzene	1.3	0.10		4.2	0.32	2	9/19/13 11:11	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/19/13 11:11	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/19/13 11:11	WSD
Bromoform	ND	0.10		ND	1.0	2	9/19/13 11:11	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/19/13 11:11	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/19/13 11:11	WSD
2-Butanone (MEK)	2.6	4.0	J	7.7	12	2	9/19/13 11:11	WSD
Carbon Disulfide	0.11	1.0	J	0.35	3.1	2	9/19/13 11:11	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/19/13 11:11	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/19/13 11:11	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/19/13 11:11	WSD
Chloroform	ND	0.10		ND	0.49	2	9/19/13 11:11	WSD
Chloromethane	0.21	0.20		0.44	0.41	2	9/19/13 11:11	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/19/13 11:11	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/19/13 11:11	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/19/13 11:11	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/19/13 11:11	WSD
1,3-Dichlorobenzene	0.15	0.10		0.91	0.60	2	9/19/13 11:11	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/19/13 11:11	WSD
Dichlorodifluoromethane (Freon 12)	0.51	0.10		2.5	0.49	2	9/19/13 11:11	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/19/13 11:11	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/19/13 11:11	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/19/13 11:11	WSD
cis-1,2-Dichloroethylene	0.97	0.10		3.9	0.40	2	9/19/13 11:11	WSD
trans-1,2-Dichloroethylene	0.16	0.10		0.65	0.40	2	9/19/13 11:11	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/19/13 11:11	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/19/13 11:11	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/19/13 11:11	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/19/13 11:11	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/19/13 11:11	WSD
Ethanol	6.3	4.0		12	7.5	2	9/19/13 11:11	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/19/13 11:11	WSD
Ethylbenzene	0.29	0.10		1.3	0.43	2	9/19/13 11:11	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/19/13 11:11	WSD
Heptane	0.15	0.10		0.60	0.41	2	9/19/13 11:11	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/19/13 11:11	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-7S-91213
Sample ID: 13I0513-01
Sample Matrix: Soil Gas
Sampled: 9/12/2013 10:05

Sample Description/Location:
Sub Description/Location:
Canister ID: 1466
Canister Size: 6 liter
Flow Controller ID: 4261
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -2
Receipt Vacuum(in Hg): -3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Hexane	0.53	4.0	J	1.9	14	2	9/19/13 11:11	WSD
2-Hexanone (MBK)	0.22	0.10		0.91	0.41	2	9/19/13 11:11	WSD
Isopropanol	0.74	4.0	J	1.8	9.8	2	9/19/13 11:11	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/19/13 11:11	WSD
Methylene Chloride	0.42	1.0	J	1.5	3.5	2	9/19/13 11:11	WSD
4-Methyl-2-pentanone (MIBK)	0.16	0.10		0.65	0.41	2	9/19/13 11:11	WSD
Naphthalene	0.11	0.10		0.59	0.52	2	9/19/13 11:11	WSD
Propene	3.5	4.0	J	6.1	6.9	2	9/19/13 11:11	WSD
Styrene	ND	0.10		ND	0.43	2	9/19/13 11:11	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/19/13 11:11	WSD
Tetrachloroethylene	660	1.0		4500	6.8	20	9/17/13 19:11	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/19/13 11:11	WSD
Toluene	1.4	0.10		5.5	0.38	2	9/19/13 11:11	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/19/13 11:11	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/19/13 11:11	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/19/13 11:11	WSD
Trichloroethylene	3.8	0.10		21	0.54	2	9/19/13 11:11	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.10		1.3	0.56	2	9/19/13 11:11	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/19/13 11:11	WSD
1,2,4-Trimethylbenzene	0.27	0.10		1.3	0.49	2	9/19/13 11:11	WSD
1,3,5-Trimethylbenzene	0.12	0.10		0.61	0.49	2	9/19/13 11:11	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/19/13 11:11	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/19/13 11:11	WSD
m&p-Xylene	0.64	0.20		2.8	0.87	2	9/19/13 11:11	WSD
o-Xylene	0.26	0.10		1.1	0.43	2	9/19/13 11:11	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	9/17/13 19:11
4-Bromofluorobenzene (1)	104	70-130	9/19/13 11:11

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-6S-91213
Sample ID: 13I0513-02
Sample Matrix: Soil Gas
Sampled: 9/12/2013 10:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 1337
Canister Size: 6 liter
Flow Controller ID: 4260
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Sample Flags: RL-01

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	16	40	J	37	95	20	9/17/13 19:56	WSD
Benzene	ND	1.0		ND	3.2	20	9/17/13 19:56	WSD
Benzyl chloride	ND	1.0		ND	5.2	20	9/17/13 19:56	WSD
Bromodichloromethane	ND	1.0		ND	6.7	20	9/17/13 19:56	WSD
Bromoform	ND	1.0		ND	10	20	9/17/13 19:56	WSD
Bromomethane	ND	1.0		ND	3.9	20	9/17/13 19:56	WSD
1,3-Butadiene	ND	1.0		ND	2.2	20	9/17/13 19:56	WSD
2-Butanone (MEK)	1.7	40	J	5.1	120	20	9/17/13 19:56	WSD
Carbon Disulfide	ND	10		ND	31	20	9/17/13 19:56	WSD
Carbon Tetrachloride	ND	1.0		ND	6.3	20	9/17/13 19:56	WSD
Chlorobenzene	ND	1.0		ND	4.6	20	9/17/13 19:56	WSD
Chloroethane	ND	1.0		ND	2.6	20	9/17/13 19:56	WSD
Chloroform	3.1	1.0		15	4.9	20	9/17/13 19:56	WSD
Chloromethane	ND	2.0		ND	4.1	20	9/17/13 19:56	WSD
Cyclohexane	ND	1.0		ND	3.4	20	9/17/13 19:56	WSD
Dibromochloromethane	ND	1.0		ND	8.5	20	9/17/13 19:56	WSD
1,2-Dibromoethane (EDB)	ND	1.0		ND	7.7	20	9/17/13 19:56	WSD
1,2-Dichlorobenzene	ND	1.0		ND	6.0	20	9/17/13 19:56	WSD
1,3-Dichlorobenzene	ND	1.0		ND	6.0	20	9/17/13 19:56	WSD
1,4-Dichlorobenzene	ND	1.0		ND	6.0	20	9/17/13 19:56	WSD
Dichlorodifluoromethane (Freon 12)	ND	1.0		ND	4.9	20	9/17/13 19:56	WSD
1,1-Dichloroethane	ND	1.0		ND	4.0	20	9/17/13 19:56	WSD
1,2-Dichloroethane	ND	1.0		ND	4.0	20	9/17/13 19:56	WSD
1,1-Dichloroethylene	ND	1.0		ND	4.0	20	9/17/13 19:56	WSD
cis-1,2-Dichloroethylene	6.3	1.0		25	4.0	20	9/17/13 19:56	WSD
trans-1,2-Dichloroethylene	ND	1.0		ND	4.0	20	9/17/13 19:56	WSD
1,2-Dichloropropane	ND	1.0		ND	4.6	20	9/17/13 19:56	WSD
cis-1,3-Dichloropropene	ND	1.0		ND	4.5	20	9/17/13 19:56	WSD
trans-1,3-Dichloropropene	ND	1.0		ND	4.5	20	9/17/13 19:56	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	1.0		ND	7.0	20	9/17/13 19:56	WSD
1,4-Dioxane	ND	10		ND	36	20	9/17/13 19:56	WSD
Ethanol	ND	40		ND	75	20	9/17/13 19:56	WSD
Ethyl Acetate	ND	1.0		ND	3.6	20	9/17/13 19:56	WSD
Ethylbenzene	ND	1.0		ND	4.3	20	9/17/13 19:56	WSD
4-Ethyltoluene	ND	1.0		ND	4.9	20	9/17/13 19:56	WSD
Heptane	ND	1.0		ND	4.1	20	9/17/13 19:56	WSD
Hexachlorobutadiene	ND	1.0		ND	11	20	9/17/13 19:56	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-6S-91213
Sample ID: 13I0513-02
Sample Matrix: Soil Gas
Sampled: 9/12/2013 10:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 1337
Canister Size: 6 liter
Flow Controller ID: 4260
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -5.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Sample Flags: RL-01

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	ND	40		ND	140	20	9/17/13 19:56	WSD
2-Hexanone (MBK)	ND	1.0		ND	4.1	20	9/17/13 19:56	WSD
Isopropanol	ND	40		ND	98	20	9/17/13 19:56	WSD
Methyl tert-Butyl Ether (MTBE)	ND	1.0		ND	3.6	20	9/17/13 19:56	WSD
Methylene Chloride	1.9	10	J	6.6	35	20	9/17/13 19:56	WSD
4-Methyl-2-pentanone (MIBK)	ND	1.0		ND	4.1	20	9/17/13 19:56	WSD
Naphthalene	ND	1.0		ND	5.2	20	9/17/13 19:56	WSD
Propene	ND	40		ND	69	20	9/17/13 19:56	WSD
Styrene	ND	1.0		ND	4.3	20	9/17/13 19:56	WSD
1,1,2,2-Tetrachloroethane	ND	1.0		ND	6.9	20	9/17/13 19:56	WSD
Tetrachloroethylene	2400	4.0		16000	27	80	9/19/13 11:50	WSD
Tetrahydrofuran	ND	1.0		ND	2.9	20	9/17/13 19:56	WSD
Toluene	ND	1.0		ND	3.8	20	9/17/13 19:56	WSD
1,2,4-Trichlorobenzene	ND	1.0		ND	7.4	20	9/17/13 19:56	WSD
1,1,1-Trichloroethane	ND	1.0		ND	5.5	20	9/17/13 19:56	WSD
1,1,2-Trichloroethane	ND	1.0		ND	5.5	20	9/17/13 19:56	WSD
Trichloroethylene	21	1.0		110	5.4	20	9/17/13 19:56	WSD
Trichlorofluoromethane (Freon 11)	ND	1.0		ND	5.6	20	9/17/13 19:56	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0		ND	7.7	20	9/17/13 19:56	WSD
1,2,4-Trimethylbenzene	ND	1.0		ND	4.9	20	9/17/13 19:56	WSD
1,3,5-Trimethylbenzene	ND	1.0		ND	4.9	20	9/17/13 19:56	WSD
Vinyl Acetate	ND	20		ND	70	20	9/17/13 19:56	WSD
Vinyl Chloride	ND	1.0		ND	2.6	20	9/17/13 19:56	WSD
m&p-Xylene	ND	2.0		ND	8.7	20	9/17/13 19:56	WSD
o-Xylene	ND	1.0		ND	4.3	20	9/17/13 19:56	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.6	70-130	9/19/13 11:50
4-Bromofluorobenzene (1)	105	70-130	9/17/13 19:56

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-8D-91213
Sample ID: 13I0513-03
Sample Matrix: Soil Gas
Sampled: 9/12/2013 11:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 1257
Canister Size: 6 liter
Flow Controller ID: 4161
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	6.3	4.0		15	9.5	2	9/18/13 8:27	WSD
Benzene	ND	0.10		ND	0.32	2	9/18/13 8:27	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 8:27	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 8:27	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 8:27	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 8:27	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 8:27	WSD
2-Butanone (MEK)	0.78	4.0	J	2.3	12	2	9/18/13 8:27	WSD
Carbon Disulfide	0.17	1.0	J	0.54	3.1	2	9/18/13 8:27	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 8:27	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 8:27	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 8:27	WSD
Chloroform	ND	0.10		ND	0.49	2	9/18/13 8:27	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 8:27	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 8:27	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 8:27	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 8:27	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 8:27	WSD
1,3-Dichlorobenzene	0.31	0.10		1.9	0.60	2	9/18/13 8:27	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 8:27	WSD
Dichlorodifluoromethane (Freon 12)	0.52	0.10		2.6	0.49	2	9/18/13 8:27	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 8:27	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 8:27	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 8:27	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 8:27	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 8:27	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 8:27	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 8:27	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 8:27	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 8:27	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 8:27	WSD
Ethanol	5.8	4.0		11	7.5	2	9/18/13 8:27	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 8:27	WSD
Ethylbenzene	ND	0.10		ND	0.43	2	9/18/13 8:27	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 8:27	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 8:27	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 8:27	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-8D-91213
Sample ID: 13I0513-03
Sample Matrix: Soil Gas
Sampled: 9/12/2013 11:32

Sample Description/Location:
Sub Description/Location:
Canister ID: 1257
Canister Size: 6 liter
Flow Controller ID: 4161
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.8
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	ND	4.0		ND	14	2	9/18/13 8:27	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 8:27	WSD
Isopropanol	0.55	4.0	J	1.3	9.8	2	9/18/13 8:27	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 8:27	WSD
Methylene Chloride	0.43	1.0	J	1.5	3.5	2	9/18/13 8:27	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 8:27	WSD
Naphthalene	0.13	0.10		0.70	0.52	2	9/18/13 8:27	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 8:27	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 8:27	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 8:27	WSD
Tetrachloroethylene	5.2	0.10		35	0.68	2	9/18/13 8:27	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 8:27	WSD
Toluene	0.15	0.10		0.56	0.38	2	9/18/13 8:27	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 8:27	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 8:27	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 8:27	WSD
Trichloroethylene	ND	0.10		ND	0.54	2	9/18/13 8:27	WSD
Trichlorofluoromethane (Freon 11)	0.24	0.10		1.4	0.56	2	9/18/13 8:27	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 8:27	WSD
1,2,4-Trimethylbenzene	0.25	0.10		1.2	0.49	2	9/18/13 8:27	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 8:27	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 8:27	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 8:27	WSD
m&p-Xylene	0.28	0.20		1.2	0.87	2	9/18/13 8:27	WSD
o-Xylene	0.13	0.10		0.56	0.43	2	9/18/13 8:27	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	9/18/13 8:27

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-5D-91213
Sample ID: 13I0513-04
Sample Matrix: Soil Gas
Sampled: 9/12/2013 12:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 1222
Canister Size: 6 liter
Flow Controller ID: 4160
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -27
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	9.4	4.0		22	9.5	2	9/18/13 9:47	WSD
Benzene	0.19	0.10		0.59	0.32	2	9/18/13 9:47	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 9:47	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 9:47	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 9:47	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 9:47	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 9:47	WSD
2-Butanone (MEK)	1.2	4.0	J	3.5	12	2	9/18/13 9:47	WSD
Carbon Disulfide	ND	1.0		ND	3.1	2	9/18/13 9:47	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 9:47	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 9:47	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 9:47	WSD
Chloroform	0.30	0.10		1.5	0.49	2	9/18/13 9:47	WSD
Chloromethane	0.14	0.20	J	0.28	0.41	2	9/18/13 9:47	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 9:47	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 9:47	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 9:47	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 9:47	WSD
1,3-Dichlorobenzene	0.30	0.10		1.8	0.60	2	9/18/13 9:47	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 9:47	WSD
Dichlorodifluoromethane (Freon 12)	0.54	0.10		2.7	0.49	2	9/18/13 9:47	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 9:47	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 9:47	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 9:47	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 9:47	WSD
trans-1,2-Dichloroethylene	0.10	0.10		0.41	0.40	2	9/18/13 9:47	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 9:47	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 9:47	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 9:47	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 9:47	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 9:47	WSD
Ethanol	8.5	4.0		16	7.5	2	9/18/13 9:47	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 9:47	WSD
Ethylbenzene	ND	0.10		ND	0.43	2	9/18/13 9:47	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 9:47	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 9:47	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 9:47	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-5D-91213
Sample ID: 13I0513-04
Sample Matrix: Soil Gas
Sampled: 9/12/2013 12:31

Sample Description/Location:
Sub Description/Location:
Canister ID: 1222
Canister Size: 6 liter
Flow Controller ID: 4160
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -27
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.26	4.0	J	0.92	14	2	9/18/13 9:47	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 9:47	WSD
Isopropanol	0.56	4.0	J	1.4	9.8	2	9/18/13 9:47	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 9:47	WSD
Methylene Chloride	0.44	1.0	J	1.5	3.5	2	9/18/13 9:47	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 9:47	WSD
Naphthalene	ND	0.10		ND	0.52	2	9/18/13 9:47	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 9:47	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 9:47	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 9:47	WSD
Tetrachloroethylene	50	0.10		340	0.68	2	9/18/13 9:47	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 9:47	WSD
Toluene	0.25	0.10		0.94	0.38	2	9/18/13 9:47	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 9:47	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 9:47	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 9:47	WSD
Trichloroethylene	0.24	0.10		1.3	0.54	2	9/18/13 9:47	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.10		1.3	0.56	2	9/18/13 9:47	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 9:47	WSD
1,2,4-Trimethylbenzene	0.17	0.10		0.84	0.49	2	9/18/13 9:47	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 9:47	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 9:47	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 9:47	WSD
m&p-Xylene	0.22	0.20		0.97	0.87	2	9/18/13 9:47	WSD
o-Xylene	ND	0.10		ND	0.43	2	9/18/13 9:47	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	9/18/13 9:47

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-3D-91213
Sample ID: 13I0513-05
Sample Matrix: Soil Gas
Sampled: 9/12/2013 13:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 1146
Canister Size: 6 liter
Flow Controller ID: 4259
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	6.5	4.0		15	9.5	2	9/18/13 10:27	WSD
Benzene	ND	0.10		ND	0.32	2	9/18/13 10:27	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 10:27	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 10:27	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 10:27	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 10:27	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 10:27	WSD
2-Butanone (MEK)	0.71	4.0	J	2.1	12	2	9/18/13 10:27	WSD
Carbon Disulfide	0.14	1.0	J	0.43	3.1	2	9/18/13 10:27	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 10:27	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 10:27	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 10:27	WSD
Chloroform	ND	0.10		ND	0.49	2	9/18/13 10:27	WSD
Chloromethane	0.24	0.20		0.50	0.41	2	9/18/13 10:27	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 10:27	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 10:27	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 10:27	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 10:27	WSD
1,3-Dichlorobenzene	0.64	0.10		3.8	0.60	2	9/18/13 10:27	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 10:27	WSD
Dichlorodifluoromethane (Freon 12)	0.50	0.10		2.5	0.49	2	9/18/13 10:27	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 10:27	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 10:27	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 10:27	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 10:27	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 10:27	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 10:27	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 10:27	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 10:27	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 10:27	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 10:27	WSD
Ethanol	7.7	4.0		14	7.5	2	9/18/13 10:27	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 10:27	WSD
Ethylbenzene	ND	0.10		ND	0.43	2	9/18/13 10:27	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 10:27	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 10:27	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 10:27	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: ESG-3D-91213
Sample ID: 13I0513-05
Sample Matrix: Soil Gas
Sampled: 9/12/2013 13:21

Sample Description/Location:
Sub Description/Location:
Canister ID: 1146
Canister Size: 6 liter
Flow Controller ID: 4259
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.20	4.0	J	0.70	14	2	9/18/13 10:27	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 10:27	WSD
Isopropanol	0.41	4.0	J	1.00	9.8	2	9/18/13 10:27	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 10:27	WSD
Methylene Chloride	0.48	1.0	J	1.7	3.5	2	9/18/13 10:27	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 10:27	WSD
Naphthalene	0.12	0.10		0.63	0.52	2	9/18/13 10:27	WSD
Propene	0.97	4.0	J	1.7	6.9	2	9/18/13 10:27	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 10:27	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 10:27	WSD
Tetrachloroethylene	33	0.10		220	0.68	2	9/18/13 10:27	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 10:27	WSD
Toluene	0.13	0.10		0.47	0.38	2	9/18/13 10:27	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 10:27	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 10:27	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 10:27	WSD
Trichloroethylene	0.18	0.10		0.96	0.54	2	9/18/13 10:27	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.10		1.2	0.56	2	9/18/13 10:27	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 10:27	WSD
1,2,4-Trimethylbenzene	0.18	0.10		0.88	0.49	2	9/18/13 10:27	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 10:27	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 10:27	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 10:27	WSD
m&p-Xylene	0.15	0.20	J	0.66	0.87	2	9/18/13 10:27	WSD
o-Xylene	ND	0.10		ND	0.43	2	9/18/13 10:27	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 10:27

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-1D-91213
Sample ID: 13I0513-06
Sample Matrix: Soil Gas
Sampled: 9/12/2013 15:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1161
Canister Size: 6 liter
Flow Controller ID: 4234
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	8.5	4.0		20	9.5	2	9/18/13 11:08	WSD
Benzene	0.11	0.10		0.34	0.32	2	9/18/13 11:08	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 11:08	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 11:08	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 11:08	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 11:08	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 11:08	WSD
2-Butanone (MEK)	1.1	4.0	J	3.3	12	2	9/18/13 11:08	WSD
Carbon Disulfide	0.32	1.0	J	1.0	3.1	2	9/18/13 11:08	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 11:08	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 11:08	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 11:08	WSD
Chloroform	0.29	0.10		1.4	0.49	2	9/18/13 11:08	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 11:08	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 11:08	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 11:08	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 11:08	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 11:08	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 11:08	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 11:08	WSD
Dichlorodifluoromethane (Freon 12)	0.69	0.10		3.4	0.49	2	9/18/13 11:08	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 11:08	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 11:08	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 11:08	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 11:08	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 11:08	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 11:08	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 11:08	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 11:08	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 11:08	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 11:08	WSD
Ethanol	9.2	4.0		17	7.5	2	9/18/13 11:08	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 11:08	WSD
Ethylbenzene	ND	0.10		ND	0.43	2	9/18/13 11:08	WSD
4-Ethyltoluene	0.15	0.10		0.76	0.49	2	9/18/13 11:08	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 11:08	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 11:08	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-1D-91213
Sample ID: 13I0513-06
Sample Matrix: Soil Gas
Sampled: 9/12/2013 15:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1161
Canister Size: 6 liter
Flow Controller ID: 4234
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Hexane	0.19	4.0	J	0.66	14	2	9/18/13 11:08	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 11:08	WSD
Isopropanol	0.65	4.0	J	1.6	9.8	2	9/18/13 11:08	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 11:08	WSD
Methylene Chloride	0.43	1.0	J	1.5	3.5	2	9/18/13 11:08	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 11:08	WSD
Naphthalene	0.14	0.10		0.74	0.52	2	9/18/13 11:08	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 11:08	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 11:08	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 11:08	WSD
Tetrachloroethylene	34	0.10		230	0.68	2	9/18/13 11:08	WSD
Tetrahydrofuran	0.17	0.10		0.51	0.29	2	9/18/13 11:08	WSD
Toluene	0.37	0.10		1.4	0.38	2	9/18/13 11:08	WSD
1,2,4-Trichlorobenzene	0.12	0.10		0.92	0.74	2	9/18/13 11:08	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 11:08	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 11:08	WSD
Trichloroethylene	1.3	0.10		6.9	0.54	2	9/18/13 11:08	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.10		1.3	0.56	2	9/18/13 11:08	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 11:08	WSD
1,2,4-Trimethylbenzene	0.99	0.10		4.9	0.49	2	9/18/13 11:08	WSD
1,3,5-Trimethylbenzene	0.21	0.10		1.0	0.49	2	9/18/13 11:08	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 11:08	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 11:08	WSD
m&p-Xylene	0.24	0.20		1.0	0.87	2	9/18/13 11:08	WSD
o-Xylene	0.14	0.10		0.59	0.43	2	9/18/13 11:08	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 11:08

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-7D-91213
Sample ID: 13I0513-07
Sample Matrix: Soil Gas
Sampled: 9/12/2013 15:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 1218
Canister Size: 6 liter
Flow Controller ID: 4235
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -3.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	9.0	4.0		21	9.5	2	9/18/13 11:48	WSD
Benzene	0.15	0.10		0.49	0.32	2	9/18/13 11:48	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 11:48	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 11:48	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 11:48	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 11:48	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 11:48	WSD
2-Butanone (MEK)	1.0	4.0	J	3.1	12	2	9/18/13 11:48	WSD
Carbon Disulfide	ND	1.0		ND	3.1	2	9/18/13 11:48	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 11:48	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 11:48	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 11:48	WSD
Chloroform	0.12	0.10		0.57	0.49	2	9/18/13 11:48	WSD
Chloromethane	0.14	0.20	J	0.28	0.41	2	9/18/13 11:48	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 11:48	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 11:48	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 11:48	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 11:48	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 11:48	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 11:48	WSD
Dichlorodifluoromethane (Freon 12)	0.49	0.10		2.4	0.49	2	9/18/13 11:48	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 11:48	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 11:48	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 11:48	WSD
cis-1,2-Dichloroethylene	0.74	0.10		2.9	0.40	2	9/18/13 11:48	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 11:48	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 11:48	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 11:48	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 11:48	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 11:48	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 11:48	WSD
Ethanol	9.6	4.0		18	7.5	2	9/18/13 11:48	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 11:48	WSD
Ethylbenzene	0.16	0.10		0.71	0.43	2	9/18/13 11:48	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 11:48	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 11:48	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 11:48	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-7D-91213
Sample ID: 13I0513-07
Sample Matrix: Soil Gas
Sampled: 9/12/2013 15:25

Sample Description/Location:
Sub Description/Location:
Canister ID: 1218
Canister Size: 6 liter
Flow Controller ID: 4235
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -3
Receipt Vacuum(in Hg): -3.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	ND	4.0		ND	14	2	9/18/13 11:48	WSD
2-Hexanone (MBK)	0.12	0.10		0.48	0.41	2	9/18/13 11:48	WSD
Isopropanol	0.83	4.0	J	2.0	9.8	2	9/18/13 11:48	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 11:48	WSD
Methylene Chloride	0.49	1.0	J	1.7	3.5	2	9/18/13 11:48	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 11:48	WSD
Naphthalene	0.16	0.10		0.83	0.52	2	9/18/13 11:48	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 11:48	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 11:48	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 11:48	WSD
Tetrachloroethylene	19	0.10		130	0.68	2	9/18/13 11:48	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 11:48	WSD
Toluene	0.49	0.10		1.9	0.38	2	9/18/13 11:48	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 11:48	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 11:48	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 11:48	WSD
Trichloroethylene	1.3	0.10		7.1	0.54	2	9/18/13 11:48	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.10		1.3	0.56	2	9/18/13 11:48	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 11:48	WSD
1,2,4-Trimethylbenzene	0.45	0.10		2.2	0.49	2	9/18/13 11:48	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 11:48	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 11:48	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 11:48	WSD
m&p-Xylene	0.60	0.20		2.6	0.87	2	9/18/13 11:48	WSD
o-Xylene	0.22	0.10		0.95	0.43	2	9/18/13 11:48	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	9/18/13 11:48

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-6D-91213
Sample ID: 13I0513-08
Sample Matrix: Soil Gas
Sampled: 9/12/2013 15:10

Sample Description/Location:
Sub Description/Location:
Canister ID: 1852
Canister Size: 6 liter
Flow Controller ID: 4061
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	6.0	4.0		14	9.5	2	9/18/13 12:28	WSD
Benzene	0.15	0.10		0.49	0.32	2	9/18/13 12:28	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 12:28	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 12:28	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 12:28	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 12:28	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 12:28	WSD
2-Butanone (MEK)	0.82	4.0	J	2.4	12	2	9/18/13 12:28	WSD
Carbon Disulfide	ND	1.0		ND	3.1	2	9/18/13 12:28	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 12:28	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 12:28	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 12:28	WSD
Chloroform	0.27	0.10		1.3	0.49	2	9/18/13 12:28	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 12:28	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 12:28	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 12:28	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 12:28	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 12:28	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 12:28	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 12:28	WSD
Dichlorodifluoromethane (Freon 12)	0.51	0.10		2.5	0.49	2	9/18/13 12:28	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 12:28	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 12:28	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 12:28	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 12:28	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 12:28	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 12:28	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 12:28	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 12:28	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 12:28	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 12:28	WSD
Ethanol	9.5	4.0		18	7.5	2	9/18/13 12:28	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 12:28	WSD
Ethylbenzene	0.14	0.10		0.63	0.43	2	9/18/13 12:28	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 12:28	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 12:28	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 12:28	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-6D-91213
Sample ID: 13I0513-08
Sample Matrix: Soil Gas
Sampled: 9/12/2013 15:10

Sample Description/Location:
Sub Description/Location:
Canister ID: 1852
Canister Size: 6 liter
Flow Controller ID: 4061
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	ND	4.0		ND	14	2	9/18/13 12:28	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 12:28	WSD
Isopropanol	2.8	4.0	J	6.8	9.8	2	9/18/13 12:28	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 12:28	WSD
Methylene Chloride	0.32	1.0	J	1.1	3.5	2	9/18/13 12:28	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 12:28	WSD
Naphthalene	0.14	0.10		0.75	0.52	2	9/18/13 12:28	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 12:28	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 12:28	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 12:28	WSD
Tetrachloroethylene	150	1.0		1000	6.8	20	9/18/13 0:05	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 12:28	WSD
Toluene	0.41	0.10		1.5	0.38	2	9/18/13 12:28	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 12:28	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 12:28	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 12:28	WSD
Trichloroethylene	0.22	0.10		1.2	0.54	2	9/18/13 12:28	WSD
Trichlorofluoromethane (Freon 11)	0.24	0.10		1.4	0.56	2	9/18/13 12:28	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 12:28	WSD
1,2,4-Trimethylbenzene	0.42	0.10		2.1	0.49	2	9/18/13 12:28	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 12:28	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 12:28	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 12:28	WSD
m&p-Xylene	0.52	0.20		2.3	0.87	2	9/18/13 12:28	WSD
o-Xylene	0.19	0.10		0.84	0.43	2	9/18/13 12:28	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 12:28
4-Bromofluorobenzene (1)	106	70-130	9/18/13 0:05

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-10D-91213
Sample ID: 13I0513-09
Sample Matrix: Soil Gas
Sampled: 9/12/2013 16:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 1735
Canister Size: 6 liter
Flow Controller ID: 4257
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	10	4.0		25	9.5	2	9/18/13 13:08	WSD
Benzene	0.14	0.10		0.46	0.32	2	9/18/13 13:08	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 13:08	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 13:08	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 13:08	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 13:08	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 13:08	WSD
2-Butanone (MEK)	1.4	4.0	J	4.1	12	2	9/18/13 13:08	WSD
Carbon Disulfide	0.34	1.0	J	1.0	3.1	2	9/18/13 13:08	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 13:08	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 13:08	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 13:08	WSD
Chloroform	0.20	0.10		1.00	0.49	2	9/18/13 13:08	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 13:08	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 13:08	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 13:08	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 13:08	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 13:08	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 13:08	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 13:08	WSD
Dichlorodifluoromethane (Freon 12)	0.50	0.10		2.5	0.49	2	9/18/13 13:08	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 13:08	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 13:08	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 13:08	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 13:08	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 13:08	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 13:08	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 13:08	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 13:08	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 13:08	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 13:08	WSD
Ethanol	7.4	4.0		14	7.5	2	9/18/13 13:08	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 13:08	WSD
Ethylbenzene	ND	0.10		ND	0.43	2	9/18/13 13:08	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 13:08	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 13:08	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 13:08	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: SG-10D-91213
Sample ID: 13I0513-09
Sample Matrix: Soil Gas
Sampled: 9/12/2013 16:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 1735
Canister Size: 6 liter
Flow Controller ID: 4257
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.31	4.0	J	1.1	14	2	9/18/13 13:08	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 13:08	WSD
Isopropanol	0.78	4.0	J	1.9	9.8	2	9/18/13 13:08	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 13:08	WSD
Methylene Chloride	0.67	1.0	J	2.3	3.5	2	9/18/13 13:08	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 13:08	WSD
Naphthalene	ND	0.10		ND	0.52	2	9/18/13 13:08	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 13:08	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 13:08	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 13:08	WSD
Tetrachloroethylene	390	1.0		2600	6.8	20	9/18/13 0:50	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 13:08	WSD
Toluene	0.21	0.10		0.78	0.38	2	9/18/13 13:08	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 13:08	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 13:08	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 13:08	WSD
Trichloroethylene	0.94	0.10		5.1	0.54	2	9/18/13 13:08	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.10		1.3	0.56	2	9/18/13 13:08	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 13:08	WSD
1,2,4-Trimethylbenzene	0.18	0.10		0.88	0.49	2	9/18/13 13:08	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 13:08	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 13:08	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 13:08	WSD
m&p-Xylene	0.24	0.20		1.1	0.87	2	9/18/13 13:08	WSD
o-Xylene	0.10	0.10		0.43	0.43	2	9/18/13 13:08	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	9/18/13 0:50
4-Bromofluorobenzene (1)	103	70-130	9/18/13 13:08

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: FD091213
Sample ID: 13I0513-10
Sample Matrix: Soil Gas
Sampled: 9/12/2013 16:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 1747
Canister Size: 6 liter
Flow Controller ID: 4256
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	8.0	4.0		19	9.5	2	9/18/13 13:48	WSD
Benzene	0.24	0.10		0.77	0.32	2	9/18/13 13:48	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 13:48	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 13:48	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 13:48	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 13:48	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 13:48	WSD
2-Butanone (MEK)	0.86	4.0	J	2.5	12	2	9/18/13 13:48	WSD
Carbon Disulfide	0.11	1.0	J	0.33	3.1	2	9/18/13 13:48	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 13:48	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 13:48	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 13:48	WSD
Chloroform	0.20	0.10		0.97	0.49	2	9/18/13 13:48	WSD
Chloromethane	0.13	0.20	J	0.27	0.41	2	9/18/13 13:48	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 13:48	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 13:48	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 13:48	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 13:48	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 13:48	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 13:48	WSD
Dichlorodifluoromethane (Freon 12)	0.51	0.10		2.5	0.49	2	9/18/13 13:48	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 13:48	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 13:48	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 13:48	WSD
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 13:48	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 13:48	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 13:48	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 13:48	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 13:48	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 13:48	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 13:48	WSD
Ethanol	7.8	4.0		15	7.5	2	9/18/13 13:48	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 13:48	WSD
Ethylbenzene	ND	0.10		ND	0.43	2	9/18/13 13:48	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 13:48	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 13:48	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 13:48	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: FD091213
Sample ID: 13I0513-10
Sample Matrix: Soil Gas
Sampled: 9/12/2013 16:58

Sample Description/Location:
Sub Description/Location:
Canister ID: 1747
Canister Size: 6 liter
Flow Controller ID: 4256
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.19	4.0	J	0.68	14	2	9/18/13 13:48	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 13:48	WSD
Isopropanol	0.68	4.0	J	1.7	9.8	2	9/18/13 13:48	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 13:48	WSD
Methylene Chloride	0.39	1.0	J	1.4	3.5	2	9/18/13 13:48	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 13:48	WSD
Naphthalene	ND	0.10		ND	0.52	2	9/18/13 13:48	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 13:48	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 13:48	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 13:48	WSD
Tetrachloroethylene	390	1.0		2700	6.8	20	9/18/13 1:32	WSD
Tetrahydrofuran	ND	0.10		ND	0.29	2	9/18/13 13:48	WSD
Toluene	0.21	0.10		0.80	0.38	2	9/18/13 13:48	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 13:48	WSD
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 13:48	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 13:48	WSD
Trichloroethylene	0.96	0.10		5.1	0.54	2	9/18/13 13:48	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.10		1.3	0.56	2	9/18/13 13:48	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 13:48	WSD
1,2,4-Trimethylbenzene	0.25	0.10		1.2	0.49	2	9/18/13 13:48	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 13:48	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 13:48	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 13:48	WSD
m&p-Xylene	0.27	0.20		1.2	0.87	2	9/18/13 13:48	WSD
o-Xylene	0.11	0.10		0.47	0.43	2	9/18/13 13:48	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 1:32
4-Bromofluorobenzene (1)	103	70-130	9/18/13 13:48

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: OA-1-91213
Sample ID: 13I0513-11
Sample Matrix: Ambient Air
Sampled: 9/12/2013 14:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 1076
Canister Size: 6 liter
Flow Controller ID: 4258
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	9.5	1.4		23	3.3	0.702	9/17/13 18:27	WSD
Benzene	0.28	0.035		0.91	0.11	0.702	9/17/13 18:27	WSD
Benzyl chloride	ND	0.035		ND	0.18	0.702	9/17/13 18:27	WSD
Bromodichloromethane	ND	0.035		ND	0.24	0.702	9/17/13 18:27	WSD
Bromoform	ND	0.035		ND	0.36	0.702	9/17/13 18:27	WSD
Bromomethane	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
1,3-Butadiene	ND	0.035		ND	0.078	0.702	9/17/13 18:27	WSD
2-Butanone (MEK)	0.67	1.4	J	2.0	4.1	0.702	9/17/13 18:27	WSD
Carbon Disulfide	ND	0.35		ND	1.1	0.702	9/17/13 18:27	WSD
Carbon Tetrachloride	0.070	0.035		0.44	0.22	0.702	9/17/13 18:27	WSD
Chlorobenzene	ND	0.035		ND	0.16	0.702	9/17/13 18:27	WSD
Chloroethane	ND	0.035		ND	0.093	0.702	9/17/13 18:27	WSD
Chloroform	ND	0.035		ND	0.17	0.702	9/17/13 18:27	WSD
Chloromethane	0.50	0.070		1.0	0.14	0.702	9/17/13 18:27	WSD
Cyclohexane	ND	0.035		ND	0.12	0.702	9/17/13 18:27	WSD
Dibromochloromethane	ND	0.035		ND	0.30	0.702	9/17/13 18:27	WSD
1,2-Dibromoethane (EDB)	ND	0.035		ND	0.27	0.702	9/17/13 18:27	WSD
1,2-Dichlorobenzene	ND	0.035		ND	0.21	0.702	9/17/13 18:27	WSD
1,3-Dichlorobenzene	ND	0.035		ND	0.21	0.702	9/17/13 18:27	WSD
1,4-Dichlorobenzene	ND	0.035		ND	0.21	0.702	9/17/13 18:27	WSD
Dichlorodifluoromethane (Freon 12)	0.51	0.035		2.5	0.17	0.702	9/17/13 18:27	WSD
1,1-Dichloroethane	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
1,2-Dichloroethane	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
1,1-Dichloroethylene	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
cis-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
trans-1,2-Dichloroethylene	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
1,2-Dichloropropane	ND	0.035		ND	0.16	0.702	9/17/13 18:27	WSD
cis-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	9/17/13 18:27	WSD
trans-1,3-Dichloropropene	ND	0.035		ND	0.16	0.702	9/17/13 18:27	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035		ND	0.25	0.702	9/17/13 18:27	WSD
1,4-Dioxane	ND	0.35		ND	1.3	0.702	9/17/13 18:27	WSD
Ethanol	4.7	1.4		8.8	2.6	0.702	9/17/13 18:27	WSD
Ethyl Acetate	ND	0.035		ND	0.13	0.702	9/17/13 18:27	WSD
Ethylbenzene	0.054	0.035		0.23	0.15	0.702	9/17/13 18:27	WSD
4-Ethyltoluene	ND	0.035		ND	0.17	0.702	9/17/13 18:27	WSD
Heptane	0.070	0.035		0.29	0.14	0.702	9/17/13 18:27	WSD
Hexachlorobutadiene	ND	0.035		ND	0.37	0.702	9/17/13 18:27	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: OA-1-91213
Sample ID: 13I0513-11
Sample Matrix: Ambient Air
Sampled: 9/12/2013 14:20

Sample Description/Location:
Sub Description/Location:
Canister ID: 1076
Canister Size: 6 liter
Flow Controller ID: 4258
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -4.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.29	1.4	J	1.0	4.9	0.702	9/17/13 18:27	WSD
2-Hexanone (MBK)	ND	0.035		ND	0.14	0.702	9/17/13 18:27	WSD
Isopropanol	0.47	1.4	J	1.2	3.4	0.702	9/17/13 18:27	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.035		ND	0.13	0.702	9/17/13 18:27	WSD
Methylene Chloride	0.44	0.35		1.5	1.2	0.702	9/17/13 18:27	WSD
4-Methyl-2-pentanone (MIBK)	0.052	0.035		0.21	0.14	0.702	9/17/13 18:27	WSD
Naphthalene	0.056	0.035		0.29	0.18	0.702	9/17/13 18:27	WSD
Propene	ND	1.4		ND	2.4	0.702	9/17/13 18:27	WSD
Styrene	ND	0.035		ND	0.15	0.702	9/17/13 18:27	WSD
1,1,2,2-Tetrachloroethane	ND	0.035		ND	0.24	0.702	9/17/13 18:27	WSD
Tetrachloroethylene	0.20	0.035		1.3	0.24	0.702	9/17/13 18:27	WSD
Tetrahydrofuran	ND	0.035		ND	0.10	0.702	9/17/13 18:27	WSD
Toluene	0.57	0.035		2.1	0.13	0.702	9/17/13 18:27	WSD
1,2,4-Trichlorobenzene	ND	0.035		ND	0.26	0.702	9/17/13 18:27	WSD
1,1,1-Trichloroethane	ND	0.035		ND	0.19	0.702	9/17/13 18:27	WSD
1,1,2-Trichloroethane	ND	0.035		ND	0.19	0.702	9/17/13 18:27	WSD
Trichloroethylene	ND	0.035		ND	0.19	0.702	9/17/13 18:27	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.035		1.3	0.20	0.702	9/17/13 18:27	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.087	0.035		0.67	0.27	0.702	9/17/13 18:27	WSD
1,2,4-Trimethylbenzene	0.094	0.035		0.46	0.17	0.702	9/17/13 18:27	WSD
1,3,5-Trimethylbenzene	ND	0.035		ND	0.17	0.702	9/17/13 18:27	WSD
Vinyl Acetate	ND	0.70		ND	2.5	0.702	9/17/13 18:27	WSD
Vinyl Chloride	ND	0.035		ND	0.090	0.702	9/17/13 18:27	WSD
m&p-Xylene	0.17	0.070		0.75	0.30	0.702	9/17/13 18:27	WSD
o-Xylene	0.064	0.035		0.28	0.15	0.702	9/17/13 18:27	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	106	70-130	9/17/13 18:27

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: PRE-DIL-91213
Sample ID: 13I0513-12
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 1469
Canister Size: 6 liter
Flow Controller ID: 4263
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	9.9	4.0		23	9.5	2	9/18/13 18:24	WSD
Benzene	0.26	0.10		0.82	0.32	2	9/18/13 18:24	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 18:24	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 18:24	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 18:24	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 18:24	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 18:24	WSD
2-Butanone (MEK)	1.6	4.0	J	4.8	12	2	9/18/13 18:24	WSD
Carbon Disulfide	ND	1.0		ND	3.1	2	9/18/13 18:24	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 18:24	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 18:24	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 18:24	WSD
Chloroform	0.69	0.10		3.4	0.49	2	9/18/13 18:24	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 18:24	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 18:24	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 18:24	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 18:24	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 18:24	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 18:24	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 18:24	WSD
Dichlorodifluoromethane (Freon 12)	0.60	0.10		3.0	0.49	2	9/18/13 18:24	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 18:24	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 18:24	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 18:24	WSD
cis-1,2-Dichloroethylene	0.55	0.10		2.2	0.40	2	9/18/13 18:24	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 18:24	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 18:24	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 18:24	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 18:24	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 18:24	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 18:24	WSD
Ethanol	17	4.0		31	7.5	2	9/18/13 18:24	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 18:24	WSD
Ethylbenzene	0.21	0.10		0.92	0.43	2	9/18/13 18:24	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 18:24	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 18:24	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 18:24	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: PRE-DIL-91213
Sample ID: 13I0513-12
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:40

Sample Description/Location:
Sub Description/Location:
Canister ID: 1469
Canister Size: 6 liter
Flow Controller ID: 4263
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4.5
Receipt Vacuum(in Hg): -5.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.30	4.0	J	1.0	14	2	9/18/13 18:24	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 18:24	WSD
Isopropanol	1.4	4.0	J	3.5	9.8	2	9/18/13 18:24	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 18:24	WSD
Methylene Chloride	0.66	1.0	J	2.3	3.5	2	9/18/13 18:24	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 18:24	WSD
Naphthalene	0.32	0.10		1.7	0.52	2	9/18/13 18:24	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 18:24	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 18:24	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 18:24	WSD
Tetrachloroethylene	400	1.0		2700	6.8	20	9/18/13 2:12	WSD
Tetrahydrofuran	0.51	0.10		1.5	0.29	2	9/18/13 18:24	WSD
Toluene	0.40	0.10		1.5	0.38	2	9/18/13 18:24	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 18:24	WSD
1,1,1-Trichloroethane	0.24	0.10		1.3	0.55	2	9/18/13 18:24	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 18:24	WSD
Trichloroethylene	1.7	0.10		8.9	0.54	2	9/18/13 18:24	WSD
Trichlorofluoromethane (Freon 11)	0.27	0.10		1.5	0.56	2	9/18/13 18:24	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 18:24	WSD
1,2,4-Trimethylbenzene	0.72	0.10		3.5	0.49	2	9/18/13 18:24	WSD
1,3,5-Trimethylbenzene	0.12	0.10		0.59	0.49	2	9/18/13 18:24	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 18:24	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 18:24	WSD
m&p-Xylene	0.81	0.20		3.5	0.87	2	9/18/13 18:24	WSD
o-Xylene	0.30	0.10		1.3	0.43	2	9/18/13 18:24	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 2:12
4-Bromofluorobenzene (1)	101	70-130	9/18/13 18:24

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: PRE-GAC-91213
Sample ID: 13I0513-13
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:44

Sample Description/Location:
Sub Description/Location:
Canister ID: 1653
Canister Size: 6 liter
Flow Controller ID: 4262
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	5.7	4.0		14	9.5	2	9/18/13 19:11	WSD
Benzene	0.43	0.10		1.4	0.32	2	9/18/13 19:11	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 19:11	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 19:11	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 19:11	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 19:11	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 19:11	WSD
2-Butanone (MEK)	0.90	4.0	J	2.6	12	2	9/18/13 19:11	WSD
Carbon Disulfide	ND	1.0		ND	3.1	2	9/18/13 19:11	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 19:11	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 19:11	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 19:11	WSD
Chloroform	0.60	0.10		2.9	0.49	2	9/18/13 19:11	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 19:11	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 19:11	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 19:11	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 19:11	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 19:11	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 19:11	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 19:11	WSD
Dichlorodifluoromethane (Freon 12)	0.58	0.10		2.9	0.49	2	9/18/13 19:11	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 19:11	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 19:11	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 19:11	WSD
cis-1,2-Dichloroethylene	0.50	0.10		2.0	0.40	2	9/18/13 19:11	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 19:11	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 19:11	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 19:11	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 19:11	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 19:11	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 19:11	WSD
Ethanol	12	4.0		23	7.5	2	9/18/13 19:11	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 19:11	WSD
Ethylbenzene	0.22	0.10		0.97	0.43	2	9/18/13 19:11	WSD
4-Ethyltoluene	0.13	0.10		0.62	0.49	2	9/18/13 19:11	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 19:11	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 19:11	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: PRE-GAC-91213
Sample ID: 13I0513-13
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:44

Sample Description/Location:
Sub Description/Location:
Canister ID: 1653
Canister Size: 6 liter
Flow Controller ID: 4262
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -6.2
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.21	4.0	J	0.74	14	2	9/18/13 19:11	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 19:11	WSD
Isopropanol	1.3	4.0	J	3.2	9.8	2	9/18/13 19:11	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 19:11	WSD
Methylene Chloride	0.42	1.0	J	1.5	3.5	2	9/18/13 19:11	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 19:11	WSD
Naphthalene	0.25	0.10		1.3	0.52	2	9/18/13 19:11	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 19:11	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 19:11	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 19:11	WSD
Tetrachloroethylene	350	1.0		2400	6.8	20	9/18/13 2:53	WSD
Tetrahydrofuran	0.25	0.10		0.73	0.29	2	9/18/13 19:11	WSD
Toluene	0.42	0.10		1.6	0.38	2	9/18/13 19:11	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 19:11	WSD
1,1,1-Trichloroethane	0.21	0.10		1.1	0.55	2	9/18/13 19:11	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 19:11	WSD
Trichloroethylene	1.5	0.10		7.9	0.54	2	9/18/13 19:11	WSD
Trichlorofluoromethane (Freon 11)	0.25	0.10		1.4	0.56	2	9/18/13 19:11	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 19:11	WSD
1,2,4-Trimethylbenzene	0.69	0.10		3.4	0.49	2	9/18/13 19:11	WSD
1,3,5-Trimethylbenzene	0.12	0.10		0.61	0.49	2	9/18/13 19:11	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 19:11	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 19:11	WSD
m&p-Xylene	0.81	0.20		3.5	0.87	2	9/18/13 19:11	WSD
o-Xylene	0.30	0.10		1.3	0.43	2	9/18/13 19:11	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 19:11
4-Bromofluorobenzene (1)	102	70-130	9/18/13 2:53

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: MID-GAC-91213
Sample ID: 13I0513-14
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 1617
Canister Size: 6 liter
Flow Controller ID: 4240
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -27
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Acetone	5.2	4.0		12	9.5	2	9/18/13 20:00	WSD
Benzene	0.69	0.10		2.2	0.32	2	9/18/13 20:00	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 20:00	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 20:00	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 20:00	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 20:00	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 20:00	WSD
2-Butanone (MEK)	1.0	4.0	J	3.0	12	2	9/18/13 20:00	WSD
Carbon Disulfide	ND	1.0		ND	3.1	2	9/18/13 20:00	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 20:00	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 20:00	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 20:00	WSD
Chloroform	0.55	0.10		2.7	0.49	2	9/18/13 20:00	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 20:00	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 20:00	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 20:00	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 20:00	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 20:00	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 20:00	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 20:00	WSD
Dichlorodifluoromethane (Freon 12)	0.55	0.10		2.7	0.49	2	9/18/13 20:00	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 20:00	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 20:00	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 20:00	WSD
cis-1,2-Dichloroethylene	0.42	0.10		1.7	0.40	2	9/18/13 20:00	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 20:00	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 20:00	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 20:00	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 20:00	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 20:00	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 20:00	WSD
Ethanol	9.1	4.0		17	7.5	2	9/18/13 20:00	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 20:00	WSD
Ethylbenzene	0.10	0.10		0.44	0.43	2	9/18/13 20:00	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 20:00	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 20:00	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 20:00	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: MID-GAC-91213
Sample ID: 13I0513-14
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:46

Sample Description/Location:
Sub Description/Location:
Canister ID: 1617
Canister Size: 6 liter
Flow Controller ID: 4240
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -27
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv Results	ppbv RL	Flag/Qual	ug/m3 Results	ug/m3 RL	Dilution	Date/Time Analyzed	Analyst
Hexane	0.42	4.0	J	1.5	14	2	9/18/13 20:00	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 20:00	WSD
Isopropanol	1.2	4.0	J	3.0	9.8	2	9/18/13 20:00	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 20:00	WSD
Methylene Chloride	0.60	1.0	J	2.1	3.5	2	9/18/13 20:00	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	9/18/13 20:00	WSD
Naphthalene	0.20	0.10		1.1	0.52	2	9/18/13 20:00	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 20:00	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 20:00	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 20:00	WSD
Tetrachloroethylene	400	1.0		2700	6.8	20	9/18/13 3:36	WSD
Tetrahydrofuran	0.67	0.10		2.0	0.29	2	9/18/13 20:00	WSD
Toluene	0.22	0.10		0.84	0.38	2	9/18/13 20:00	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 20:00	WSD
1,1,1-Trichloroethane	0.11	0.10		0.60	0.55	2	9/18/13 20:00	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 20:00	WSD
Trichloroethylene	1.5	0.10		8.0	0.54	2	9/18/13 20:00	WSD
Trichlorofluoromethane (Freon 11)	0.18	0.10		1.0	0.56	2	9/18/13 20:00	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 20:00	WSD
1,2,4-Trimethylbenzene	0.49	0.10		2.4	0.49	2	9/18/13 20:00	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	9/18/13 20:00	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 20:00	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 20:00	WSD
m&p-Xylene	0.37	0.20		1.6	0.87	2	9/18/13 20:00	WSD
o-Xylene	0.15	0.10		0.64	0.43	2	9/18/13 20:00	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	9/18/13 20:00
4-Bromofluorobenzene (1)	103	70-130	9/18/13 3:36

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: POST-GAC-91213
Sample ID: 13I0513-15
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 1674
Canister Size: 6 liter
Flow Controller ID: 4241
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	Results	RL	Flag/Qual	Results	RL	Dilution	Analyzed	Analyst
Acetone	13	4.0		30	9.5	2	9/18/13 20:48	WSD
Benzene	0.18	0.10		0.58	0.32	2	9/18/13 20:48	WSD
Benzyl chloride	ND	0.10		ND	0.52	2	9/18/13 20:48	WSD
Bromodichloromethane	ND	0.10		ND	0.67	2	9/18/13 20:48	WSD
Bromoform	ND	0.10		ND	1.0	2	9/18/13 20:48	WSD
Bromomethane	ND	0.10		ND	0.39	2	9/18/13 20:48	WSD
1,3-Butadiene	ND	0.10		ND	0.22	2	9/18/13 20:48	WSD
2-Butanone (MEK)	1.0	4.0	J	3.0	12	2	9/18/13 20:48	WSD
Carbon Disulfide	4.9	1.0		15	3.1	2	9/18/13 20:48	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63	2	9/18/13 20:48	WSD
Chlorobenzene	ND	0.10		ND	0.46	2	9/18/13 20:48	WSD
Chloroethane	ND	0.10		ND	0.26	2	9/18/13 20:48	WSD
Chloroform	0.52	0.10		2.6	0.49	2	9/18/13 20:48	WSD
Chloromethane	ND	0.20		ND	0.41	2	9/18/13 20:48	WSD
Cyclohexane	ND	0.10		ND	0.34	2	9/18/13 20:48	WSD
Dibromochloromethane	ND	0.10		ND	0.85	2	9/18/13 20:48	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	9/18/13 20:48	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 20:48	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 20:48	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	9/18/13 20:48	WSD
Dichlorodifluoromethane (Freon 12)	0.57	0.10		2.8	0.49	2	9/18/13 20:48	WSD
1,1-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 20:48	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40	2	9/18/13 20:48	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 20:48	WSD
cis-1,2-Dichloroethylene	0.41	0.10		1.6	0.40	2	9/18/13 20:48	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	9/18/13 20:48	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46	2	9/18/13 20:48	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 20:48	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	9/18/13 20:48	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	9/18/13 20:48	WSD
1,4-Dioxane	ND	1.0		ND	3.6	2	9/18/13 20:48	WSD
Ethanol	15	4.0		28	7.5	2	9/18/13 20:48	WSD
Ethyl Acetate	ND	0.10		ND	0.36	2	9/18/13 20:48	WSD
Ethylbenzene	0.20	0.10		0.85	0.43	2	9/18/13 20:48	WSD
4-Ethyltoluene	ND	0.10		ND	0.49	2	9/18/13 20:48	WSD
Heptane	ND	0.10		ND	0.41	2	9/18/13 20:48	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1	2	9/18/13 20:48	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 9/13/2013
Field Sample #: POST-GAC-91213
Sample ID: 13I0513-15
Sample Matrix: Soil Gas
Sampled: 9/12/2013 17:45

Sample Description/Location:
Sub Description/Location:
Canister ID: 1674
Canister Size: 6 liter
Flow Controller ID: 4241
Sample Type: 1 hr

Work Order: 13I0513
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -7.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv			ug/m3			Date/Time	
Analyte	**Results**	**RL**	**Flag/Qual**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Hexane	0.51	4.0	J	1.8	14	2	9/18/13 20:48	WSD
2-Hexanone (MBK)	ND	0.10		ND	0.41	2	9/18/13 20:48	WSD
Isopropanol	1.8	4.0	J	4.3	9.8	2	9/18/13 20:48	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	9/18/13 20:48	WSD
Methylene Chloride	0.73	1.0	J	2.5	3.5	2	9/18/13 20:48	WSD
4-Methyl-2-pentanone (MIBK)	0.15	0.10		0.61	0.41	2	9/18/13 20:48	WSD
Naphthalene	0.22	0.10		1.2	0.52	2	9/18/13 20:48	WSD
Propene	ND	4.0		ND	6.9	2	9/18/13 20:48	WSD
Styrene	ND	0.10		ND	0.43	2	9/18/13 20:48	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	9/18/13 20:48	WSD
Tetrachloroethylene	300	1.0		2000	6.8	20	9/18/13 4:19	WSD
Tetrahydrofuran	0.18	0.10		0.52	0.29	2	9/18/13 20:48	WSD
Toluene	0.62	0.10		2.3	0.38	2	9/18/13 20:48	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	9/18/13 20:48	WSD
1,1,1-Trichloroethane	0.12	0.10		0.64	0.55	2	9/18/13 20:48	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	9/18/13 20:48	WSD
Trichloroethylene	1.6	0.10		8.5	0.54	2	9/18/13 20:48	WSD
Trichlorofluoromethane (Freon 11)	0.20	0.10		1.1	0.56	2	9/18/13 20:48	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77	2	9/18/13 20:48	WSD
1,2,4-Trimethylbenzene	0.64	0.10		3.1	0.49	2	9/18/13 20:48	WSD
1,3,5-Trimethylbenzene	0.11	0.10		0.54	0.49	2	9/18/13 20:48	WSD
Vinyl Acetate	ND	2.0		ND	7.0	2	9/18/13 20:48	WSD
Vinyl Chloride	ND	0.10		ND	0.26	2	9/18/13 20:48	WSD
m&p-Xylene	0.70	0.20		3.0	0.87	2	9/18/13 20:48	WSD
o-Xylene	0.27	0.10		1.2	0.43	2	9/18/13 20:48	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	9/18/13 4:19
4-Bromofluorobenzene (1)	102	70-130	9/18/13 20:48

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
13I0513-01RE1 [ESG-7S-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-02 [ESG-6S-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-03 [ESG-8D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-04 [ESG-5D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-05 [ESG-3D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-06 [SG-1D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-07 [SG-7D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-08 [SG-6D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-08RE1 [SG-6D-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-09 [SG-10D-91213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-09RE1 [SG-10D-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-10 [FD091213]	B081071	1.5	1	N/A	1000	400	300	09/17/13
13I0513-10RE1 [FD091213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-11 [OA-1-91213]	B081071	1.5	1	N/A	1000	400	855	09/17/13
13I0513-12RE1 [PRE-DIL-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-13RE1 [PRE-GAC-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-14RE1 [MID-GAC-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13
13I0513-15RE1 [POST-GAC-91213]	B081071	1.5	1	N/A	1000	400	30	09/17/13

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
13I0513-01 [ESG-7S-91213]	B081198	2	1	N/A	1000	400	400	09/18/13
13I0513-02RE1 [ESG-6S-91213]	B081198	2	1	N/A	1000	400	10	09/18/13
13I0513-12 [PRE-DIL-91213]	B081198	1.5	1	N/A	1000	400	300	09/18/13
13I0513-13 [PRE-GAC-91213]	B081198	1.5	1	N/A	1000	400	300	09/18/13
13I0513-14 [MID-GAC-91213]	B081198	1.5	1	N/A	1000	400	300	09/18/13
13I0513-15 [POST-GAC-91213]	B081198	1.5	1	N/A	1000	400	300	09/18/13

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081071 - TO-15 Prep											
Blank (B081071-BLK1)					Prepared & Analyzed: 09/17/13						
Acetone	ND	0.80									
Benzene	ND	0.020									
Benzyl chloride	ND	0.020									
Bromodichloromethane	ND	0.020									
Bromoform	ND	0.020									
Bromomethane	ND	0.020									
1,3-Butadiene	ND	0.020									
2-Butanone (MEK)	ND	0.80									
Carbon Disulfide	ND	0.20									
Carbon Tetrachloride	ND	0.020									
Chlorobenzene	ND	0.020									
Chloroethane	ND	0.020									
Chloroform	ND	0.020									
Chloromethane	ND	0.040									
Cyclohexane	ND	0.020									
Dibromochloromethane	ND	0.020									
1,2-Dibromoethane (EDB)	ND	0.020									
1,2-Dichlorobenzene	ND	0.020									
1,3-Dichlorobenzene	ND	0.020									
1,4-Dichlorobenzene	ND	0.020									
Dichlorodifluoromethane (Freon 12)	ND	0.020									
1,1-Dichloroethane	ND	0.020									
1,2-Dichloroethane	ND	0.020									
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,2-Dichloropropane	ND	0.020									
cis-1,3-Dichloropropene	ND	0.020									
trans-1,3-Dichloropropene	ND	0.020									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020									
1,4-Dioxane	ND	0.20									
Ethanol	ND	0.80									
Ethyl Acetate	ND	0.020									
Ethylbenzene	ND	0.020									
4-Ethyltoluene	ND	0.020									
Heptane	ND	0.020									
Hexachlorobutadiene	ND	0.020									
Hexane	ND	0.80									
2-Hexanone (MBK)	ND	0.020									
Isopropanol	ND	0.80									
Methyl tert-Butyl Ether (MTBE)	ND	0.020									
Methylene Chloride	0.035	0.20									J
4-Methyl-2-pentanone (MIBK)	ND	0.020									
Naphthalene	ND	0.020									
Propene	ND	0.80									
Styrene	ND	0.020									

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081071 - TO-15 Prep											
Blank (B081071-BLK1)					Prepared & Analyzed: 09/17/13						
1,1,2,2-Tetrachloroethane	ND	0.020									
Tetrachloroethylene	ND	0.020									
Tetrahydrofuran	ND	0.020									
Toluene	ND	0.020									
1,2,4-Trichlorobenzene	ND	0.020									
1,1,1-Trichloroethane	ND	0.020									
1,1,2-Trichloroethane	ND	0.020									
Trichloroethylene	ND	0.020									
Trichlorofluoromethane (Freon 11)	ND	0.020									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.020									
1,2,4-Trimethylbenzene	ND	0.020									
1,3,5-Trimethylbenzene	ND	0.020									
Vinyl Acetate	ND	0.40									
Vinyl Chloride	ND	0.020									
m&p-Xylene	ND	0.040									
o-Xylene	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*8.17*				*8.00*		*102*	*70-130*			
LCS (B081071-BS1)					Prepared & Analyzed: 09/17/13						
Acetone	6.32				5.00		126	70-130			
Benzene	4.03				5.00		80.5	70-130			
Benzyl chloride	5.77				5.00		115	70-130			
Bromodichloromethane	4.20				5.00		83.9	70-130			
Bromoform	5.32				5.00		106	70-130			
Bromomethane	5.02				5.00		100	70-130			
1,3-Butadiene	5.42				5.00		108	70-130			
2-Butanone (MEK)	5.32				5.00		106	70-130			
Carbon Disulfide	4.92				5.00		98.4	70-130			
Carbon Tetrachloride	4.24				5.00		84.9	70-130			
Chlorobenzene	4.78				5.00		95.5	70-130			
Chloroethane	5.40				5.00		108	70-130			
Chloroform	4.73				5.00		94.6	70-130			
Chloromethane	4.63				5.00		92.6	70-130			
Cyclohexane	4.31				5.00		86.2	70-130			
Dibromochloromethane	4.99				5.00		99.8	70-130			
1,2-Dibromoethane (EDB)	4.59				5.00		91.8	70-130			
1,2-Dichlorobenzene	5.44				5.00		109	70-130			
1,3-Dichlorobenzene	5.40				5.00		108	70-130			
1,4-Dichlorobenzene	5.36				5.00		107	70-130			
Dichlorodifluoromethane (Freon 12)	4.78				5.00		95.5	70-130			
1,1-Dichloroethane	4.61				5.00		92.1	70-130			
1,2-Dichloroethane	4.83				5.00		96.6	70-130			
1,1-Dichloroethylene	4.62				5.00		92.3	70-130			
cis-1,2-Dichloroethylene	4.72				5.00		94.5	70-130			
trans-1,2-Dichloroethylene	4.69				5.00		93.8	70-130			
1,2-Dichloropropane	3.81				5.00		76.1	70-130			

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081071 - TO-15 Prep											
LCS (B081071-BS1)					Prepared & Analyzed: 09/17/13						
cis-1,3-Dichloropropene	4.50				5.00		90.1	70-130			
trans-1,3-Dichloropropene	4.69				5.00		93.8	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	5.20				5.00		104	70-130			
1,4-Dioxane	4.30				5.00		86.1	70-130			
Ethanol	4.62				5.00		92.3	70-130			
Ethyl Acetate	6.26				5.00		125	70-130			
Ethylbenzene	4.89				5.00		97.8	70-130			
4-Ethyltoluene	5.32				5.00		106	70-130			
Heptane	4.31				5.00		86.2	70-130			
Hexachlorobutadiene	4.72				5.00		94.5	70-130			
Hexane	4.56				5.00		91.1	70-130			
2-Hexanone (MBK)	4.13				5.00		82.6	70-130			
Isopropanol	5.13				5.00		103	70-130			
Methyl tert-Butyl Ether (MTBE)	5.25				5.00		105	70-130			
Methylene Chloride	4.11				5.00		82.3	70-130			
4-Methyl-2-pentanone (MIBK)	4.40				5.00		88.1	70-130			
Naphthalene	4.89				5.00		97.8	70-130			
Propene	4.58				5.00		91.5	70-130			
Styrene	5.36				5.00		107	70-130			
1,1,2,2-Tetrachloroethane	4.31				5.00		86.2	70-130			
Tetrachloroethylene	5.28				5.00		106	70-130			
Tetrahydrofuran	5.56				5.00		111	70-130			
Toluene	4.71				5.00		94.3	70-130			
1,2,4-Trichlorobenzene	5.17				5.00		103	70-130			
1,1,1-Trichloroethane	4.13				5.00		82.6	70-130			
1,1,2-Trichloroethane	4.49				5.00		89.8	70-130			
Trichloroethylene	4.18				5.00		83.6	70-130			
Trichlorofluoromethane (Freon 11)	4.94				5.00		98.8	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.95				5.00		99.1	70-130			
1,2,4-Trimethylbenzene	5.27				5.00		105	70-130			
1,3,5-Trimethylbenzene	5.36				5.00		107	70-130			
Vinyl Acetate	4.48				5.00		89.7	70-130			
Vinyl Chloride	5.24				5.00		105	70-130			
m&p-Xylene	10.3				10.0		103	70-130			
o-Xylene	4.85				5.00		97.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.84*				*8.00*		*110*	*70-130*			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081071 - TO-15 Prep											
Duplicate (B081071-DUP1)			**Source: 13I0513-03**		Prepared: 09/17/13 Analyzed: 09/18/13						
Acetone	6.6	4.0	16	9.5		6.3			4.26	25	
Benzene	ND	0.10	ND	0.32		ND				25	
Benzyl chloride	ND	0.10	ND	0.52		ND				25	
Bromodichloromethane	ND	0.10	ND	0.67		ND				25	
Bromoform	ND	0.10	ND	1.0		ND				25	
Bromomethane	ND	0.10	ND	0.39		ND				25	
1,3-Butadiene	ND	0.10	ND	0.22		ND				25	
2-Butanone (MEK)	0.78	4.0	2.3	12		0.78			0.514	25	J
Carbon Disulfide	0.17	1.0	0.52	3.1		0.17			3.51	25	J
Carbon Tetrachloride	ND	0.10	ND	0.63		ND				25	
Chlorobenzene	ND	0.10	ND	0.46		ND				25	
Chloroethane	ND	0.10	ND	0.26		ND				25	
Chloroform	ND	0.10	ND	0.49		ND				25	
Chloromethane	ND	0.20	ND	0.41		ND				25	
Cyclohexane	ND	0.10	ND	0.34		ND				25	
Dibromochloromethane	ND	0.10	ND	0.85		ND				25	
1,2-Dibromoethane (EDB)	ND	0.10	ND	0.77		ND				25	
1,2-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
1,3-Dichlorobenzene	0.29	0.10	1.7	0.60		0.31			7.41	25	
1,4-Dichlorobenzene	ND	0.10	ND	0.60		ND				25	
Dichlorodifluoromethane (Freon 12)	0.50	0.10	2.5	0.49		0.52			3.91	25	
1,1-Dichloroethane	ND	0.10	ND	0.40		ND				25	
1,2-Dichloroethane	ND	0.10	ND	0.40		ND				25	
1,1-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
cis-1,2-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
trans-1,2-Dichloroethylene	ND	0.10	ND	0.40		ND				25	
1,2-Dichloropropane	ND	0.10	ND	0.46		ND				25	
cis-1,3-Dichloropropene	ND	0.10	ND	0.45		ND				25	
trans-1,3-Dichloropropene	ND	0.10	ND	0.45		ND				25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	ND	0.70		ND				25	
1,4-Dioxane	ND	1.0	ND	3.6		ND				25	
Ethanol	6.9	4.0	13	7.5		5.8			16.5	25	
Ethyl Acetate	ND	0.10	ND	0.36		ND				25	
Ethylbenzene	ND	0.10	ND	0.43		ND				25	
4-Ethyltoluene	ND	0.10	ND	0.49		ND				25	
Heptane	ND	0.10	ND	0.41		ND				25	
Hexachlorobutadiene	ND	0.10	ND	1.1		ND				25	
Hexane	0.18	4.0	0.63	14		ND				25	J
2-Hexanone (MBK)	ND	0.10	ND	0.41		ND				25	
Isopropanol	0.58	4.0	1.4	9.8		0.55			6.73	25	J
Methyl tert-Butyl Ether (MTBE)	ND	0.10	ND	0.36		ND				25	
Methylene Chloride	0.44	1.0	1.5	3.5		0.43			3.23	25	J
4-Methyl-2-pentanone (MIBK)	ND	0.10	ND	0.41		ND				25	
Naphthalene	0.12	0.10	0.65	0.52		0.13			7.75	25	
Propene	ND	4.0	ND	6.9		ND				25	
Styrene	ND	0.10	ND	0.43		ND				25	

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081071 - TO-15 Prep											
Duplicate (B081071-DUP1)			**Source: 13I0513-03**		Prepared: 09/17/13 Analyzed: 09/18/13						
1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.69		ND				25	
Tetrachloroethylene	5.2	0.10	35	0.68		5.2			0.387	25	
Tetrahydrofuran	ND	0.10	ND	0.29		ND				25	
Toluene	0.18	0.10	0.69	0.38		0.15			20.6	25	
1,2,4-Trichlorobenzene	ND	0.10	ND	0.74		ND				25	
1,1,1-Trichloroethane	ND	0.10	ND	0.55		ND				25	
1,1,2-Trichloroethane	ND	0.10	ND	0.55		ND				25	
Trichloroethylene	ND	0.10	ND	0.54		ND				25	
Trichlorofluoromethane (Freon 11)	0.24	0.10	1.3	0.56		0.24			2.49	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	ND	0.77		ND				25	
1,2,4-Trimethylbenzene	0.25	0.10	1.2	0.49		0.25			1.60	25	
1,3,5-Trimethylbenzene	ND	0.10	ND	0.49		ND				25	
Vinyl Acetate	ND	2.0	ND	7.0		ND				25	
Vinyl Chloride	ND	0.10	ND	0.26		ND				25	
m&p-Xylene	0.33	0.20	1.4	0.87		0.28			18.4	25	
o-Xylene	0.14	0.10	0.59	0.43		0.13			6.06	25	
Surrogate: 4-Bromofluorobenzene (1)	*8.30*				*8.00*		*104*	*70-130*			
Batch B081198 - TO-15 Prep											
Blank (B081198-BLK1)					Prepared & Analyzed: 09/18/13						
Acetone	ND	1.0									
Benzene	ND	0.025									
Benzyl chloride	ND	0.025									
Bromodichloromethane	ND	0.025									
Bromoform	ND	0.025									
Bromomethane	ND	0.025									
1,3-Butadiene	ND	0.025									
2-Butanone (MEK)	ND	1.0									
Carbon Disulfide	ND	0.25									
Carbon Tetrachloride	ND	0.025									
Chlorobenzene	ND	0.025									
Chloroethane	ND	0.025									
Chloroform	ND	0.025									
Chloromethane	ND	0.050									
Cyclohexane	ND	0.025									
Dibromochloromethane	ND	0.025									
1,2-Dibromoethane (EDB)	ND	0.025									
1,2-Dichlorobenzene	ND	0.025									
1,3-Dichlorobenzene	ND	0.025									
1,4-Dichlorobenzene	ND	0.025									
Dichlorodifluoromethane (Freon 12)	ND	0.025									
1,1-Dichloroethane	ND	0.025									
1,2-Dichloroethane	ND	0.025									
1,1-Dichloroethylene	ND	0.025									
cis-1,2-Dichloroethylene	ND	0.025									

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081198 - TO-15 Prep											
Blank (B081198-BLK1)					Prepared & Analyzed: 09/18/13						
trans-1,2-Dichloroethylene	ND	0.025									
1,2-Dichloropropane	ND	0.025									
cis-1,3-Dichloropropene	ND	0.025									
trans-1,3-Dichloropropene	ND	0.025									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.025									
1,4-Dioxane	ND	0.25									
Ethanol	ND	1.0									
Ethyl Acetate	ND	0.025									
Ethylbenzene	ND	0.025									
4-Ethyltoluene	ND	0.025									
Heptane	ND	0.025									
Hexachlorobutadiene	ND	0.025									
Hexane	ND	1.0									
2-Hexanone (MBK)	ND	0.025									
Isopropanol	ND	1.0									
Methyl tert-Butyl Ether (MTBE)	ND	0.025									
Methylene Chloride	0.042	0.25									J
4-Methyl-2-pentanone (MIBK)	ND	0.025									
Naphthalene	ND	0.025									
Propene	ND	1.0									
Styrene	ND	0.025									
1,1,2,2-Tetrachloroethane	ND	0.025									
Tetrachloroethylene	ND	0.025									
Tetrahydrofuran	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trichlorobenzene	ND	0.025									
1,1,1-Trichloroethane	ND	0.025									
1,1,2-Trichloroethane	ND	0.025									
Trichloroethylene	ND	0.025									
Trichlorofluoromethane (Freon 11)	ND	0.025									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
Surrogate: 4-Bromofluorobenzene (1)	*8.16*				*8.00*		*102*	*70-130*			

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081198 - TO-15 Prep											
LCS (B081198-BS1)					Prepared & Analyzed: 09/18/13						
Acetone	6.21				5.00		124	70-130			
Benzene	3.99				5.00		79.7	70-130			
Benzyl chloride	5.74				5.00		115	70-130			
Bromodichloromethane	4.15				5.00		83.0	70-130			
Bromoform	5.05				5.00		101	70-130			
Bromomethane	4.75				5.00		95.0	70-130			
1,3-Butadiene	5.24				5.00		105	70-130			
2-Butanone (MEK)	5.30				5.00		106	70-130			
Carbon Disulfide	4.77				5.00		95.3	70-130			
Carbon Tetrachloride	4.08				5.00		81.6	70-130			
Chlorobenzene	4.64				5.00		92.7	70-130			
Chloroethane	5.20				5.00		104	70-130			
Chloroform	4.59				5.00		91.7	70-130			
Chloromethane	4.46				5.00		89.2	70-130			
Cyclohexane	4.26				5.00		85.2	70-130			
Dibromochloromethane	4.77				5.00		95.3	70-130			
1,2-Dibromoethane (EDB)	4.48				5.00		89.6	70-130			
1,2-Dichlorobenzene	5.08				5.00		102	70-130			
1,3-Dichlorobenzene	5.10				5.00		102	70-130			
1,4-Dichlorobenzene	5.10				5.00		102	70-130			
Dichlorodifluoromethane (Freon 12)	4.59				5.00		91.9	70-130			
1,1-Dichloroethane	4.54				5.00		90.9	70-130			
1,2-Dichloroethane	4.68				5.00		93.7	70-130			
1,1-Dichloroethylene	4.54				5.00		90.9	70-130			
cis-1,2-Dichloroethylene	4.67				5.00		93.4	70-130			
trans-1,2-Dichloroethylene	4.63				5.00		92.6	70-130			
1,2-Dichloropropane	3.79				5.00		75.8	70-130			
cis-1,3-Dichloropropene	4.51				5.00		90.1	70-130			
trans-1,3-Dichloropropene	4.68				5.00		93.7	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.98				5.00		99.6	70-130			
1,4-Dioxane	4.22				5.00		84.4	70-130			
Ethanol	4.55				5.00		91.0	70-130			
Ethyl Acetate	6.22				5.00		124	70-130			
Ethylbenzene	4.77				5.00		95.4	70-130			
4-Ethyltoluene	5.13				5.00		103	70-130			
Heptane	4.31				5.00		86.2	70-130			
Hexachlorobutadiene	4.33				5.00		86.5	70-130			
Hexane	4.55				5.00		91.0	70-130			
2-Hexanone (MBK)	4.04				5.00		80.9	70-130			
Isopropanol	5.09				5.00		102	70-130			
Methyl tert-Butyl Ether (MTBE)	5.20				5.00		104	70-130			
Methylene Chloride	4.25				5.00		85.1	70-130			
4-Methyl-2-pentanone (MIBK)	4.37				5.00		87.4	70-130			
Naphthalene	4.50				5.00		89.9	70-130			
Propene	4.56				5.00		91.2	70-130			
Styrene	5.21				5.00		104	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B081198 - TO-15 Prep											
LCS (B081198-BS1)					Prepared & Analyzed: 09/18/13						
1,1,2,2-Tetrachloroethane	4.18				5.00		83.6	70-130			
Tetrachloroethylene	5.10				5.00		102	70-130			
Tetrahydrofuran	5.53				5.00		111	70-130			
Toluene	4.58				5.00		91.5	70-130			
1,2,4-Trichlorobenzene	4.75				5.00		95.0	70-130			
1,1,1-Trichloroethane	4.06				5.00		81.1	70-130			
1,1,2-Trichloroethane	4.34				5.00		86.9	70-130			
Trichloroethylene	4.11				5.00		82.1	70-130			
Trichlorofluoromethane (Freon 11)	4.62				5.00		92.5	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.82				5.00		96.5	70-130			
1,2,4-Trimethylbenzene	5.05				5.00		101	70-130			
1,3,5-Trimethylbenzene	5.16				5.00		103	70-130			
Vinyl Acetate	4.56				5.00		91.2	70-130			
Vinyl Chloride	5.04				5.00		101	70-130			
m&p-Xylene	9.97				10.0		99.7	70-130			
o-Xylene	4.71				5.00		94.3	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*8.34*				*8.00*		*104*	*70-130*			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
RL-01	Elevated reporting limit due to high concentration of target compounds. Requested reporting limit not met.

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S004691-CCV1)			Lab File ID: G091702.D			Analyzed: 09/17/13 14:47			
Bromochloromethane (1)	403538	8.777	504192	8.786	80	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1335170	10.654	1391643	10.671	96	60 - 140	-0.0170	+/-0.50	
Chlorobenzene-d5 (1)	1176087	15.413	1251346	15.43	94	60 - 140	-0.0170	+/-0.50	
LCS (B081071-BS1)			Lab File ID: G091703.D			Analyzed: 09/17/13 15:25			
Bromochloromethane (1)	395360	8.786	403538	8.777	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1291230	10.663	1335170	10.654	97	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1137573	15.421	1176087	15.413	97	60 - 140	0.0080	+/-0.50	
Blank (B081071-BLK1)			Lab File ID: G091706.D			Analyzed: 09/17/13 17:39			
Bromochloromethane (1)	380419	8.777	403538	8.777	94	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1221210	10.655	1335170	10.654	91	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	1068285	15.422	1176087	15.413	91	60 - 140	0.0090	+/-0.50	
OA-1-91213 (13I0513-11)			Lab File ID: G091707.D			Analyzed: 09/17/13 18:27			
Bromochloromethane (1)	388046	8.777	403538	8.777	96	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1249443	10.654	1335170	10.654	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1100303	15.422	1176087	15.413	94	60 - 140	0.0090	+/-0.50	
ESG-7S-91213 (13I0513-01RE1)			Lab File ID: G091708.D			Analyzed: 09/17/13 19:11			
Bromochloromethane (1)	392185	8.786	403538	8.777	97	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1251690	10.663	1335170	10.654	94	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1095891	15.421	1176087	15.413	93	60 - 140	0.0080	+/-0.50	
ESG-6S-91213 (13I0513-02)			Lab File ID: G091709.D			Analyzed: 09/17/13 19:56			
Bromochloromethane (1)	396065	8.777	403538	8.777	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1268550	10.663	1335170	10.654	95	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1126935	15.421	1176087	15.413	96	60 - 140	0.0080	+/-0.50	
SG-6D-91213 (13I0513-08RE1)			Lab File ID: G091715.D			Analyzed: 09/18/13 00:05			
Bromochloromethane (1)	396205	8.76	403538	8.777	98	60 - 140	-0.0170	+/-0.50	
1,4-Difluorobenzene (1)	1244432	10.638	1335170	10.654	93	60 - 140	-0.0160	+/-0.50	
Chlorobenzene-d5 (1)	1085054	15.413	1176087	15.413	92	60 - 140	0.0000	+/-0.50	
SG-10D-91213 (13I0513-09RE1)			Lab File ID: G091716.D			Analyzed: 09/18/13 00:50			
Bromochloromethane (1)	396285	8.786	403538	8.777	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1262471	10.663	1335170	10.654	95	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1110890	15.421	1176087	15.413	94	60 - 140	0.0080	+/-0.50	
FD091213 (13I0513-10RE1)			Lab File ID: G091717.D			Analyzed: 09/18/13 01:32			
Bromochloromethane (1)	394448	8.786	403538	8.777	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1252681	10.663	1335170	10.654	94	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1112810	15.421	1176087	15.413	95	60 - 140	0.0080	+/-0.50	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
PRE-DIL-91213 (13I0513-12RE1)			Lab File ID: G091718.D			Analyzed: 09/18/13 02:12			
Bromochloromethane (1)	398916	8.768	403538	8.777	99	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1255251	10.646	1335170	10.654	94	60 - 140	-0.0080	+/-0.50	
Chlorobenzene-d5 (1)	1106938	15.421	1176087	15.413	94	60 - 140	0.0080	+/-0.50	
PRE-GAC-91213 (13I0513-13RE1)			Lab File ID: G091719.D			Analyzed: 09/18/13 02:53			
Bromochloromethane (1)	401547	8.786	403538	8.777	100	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1265201	10.663	1335170	10.654	95	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1108439	15.421	1176087	15.413	94	60 - 140	0.0080	+/-0.50	
MID-GAC-91213 (13I0513-14RE1)			Lab File ID: G091720.D			Analyzed: 09/18/13 03:36			
Bromochloromethane (1)	398152	8.777	403538	8.777	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1252243	10.654	1335170	10.654	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1100820	15.422	1176087	15.413	94	60 - 140	0.0090	+/-0.50	
POST-GAC-91213 (13I0513-15RE1)			Lab File ID: G091721.D			Analyzed: 09/18/13 04:19			
Bromochloromethane (1)	394867	8.794	403538	8.777	98	60 - 140	0.0170	+/-0.50	
1,4-Difluorobenzene (1)	1247554	10.671	1335170	10.654	93	60 - 140	0.0170	+/-0.50	
Chlorobenzene-d5 (1)	1114305	15.421	1176087	15.413	95	60 - 140	0.0080	+/-0.50	
ESG-8D-91213 (13I0513-03)			Lab File ID: G091724.D			Analyzed: 09/18/13 08:27			
Bromochloromethane (1)	386991	8.768	403538	8.777	96	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1204108	10.646	1335170	10.654	90	60 - 140	-0.0080	+/-0.50	
Chlorobenzene-d5 (1)	1088742	15.413	1176087	15.413	93	60 - 140	0.0000	+/-0.50	
Duplicate (B081071-DUP1)			Lab File ID: G091725.D			Analyzed: 09/18/13 09:07			
Bromochloromethane (1)	410495	8.777	403538	8.777	102	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1289112	10.654	1335170	10.654	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1129676	15.413	1176087	15.413	96	60 - 140	0.0000	+/-0.50	
ESG-5D-91213 (13I0513-04)			Lab File ID: G091726.D			Analyzed: 09/18/13 09:47			
Bromochloromethane (1)	413712	8.777	403538	8.777	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1300120	10.655	1335170	10.654	97	60 - 140	0.0010	+/-0.50	
Chlorobenzene-d5 (1)	1161886	15.413	1176087	15.413	99	60 - 140	0.0000	+/-0.50	
ESG-3D-91213 (13I0513-05)			Lab File ID: G091727.D			Analyzed: 09/18/13 10:27			
Bromochloromethane (1)	420470	8.777	403538	8.777	104	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1311969	10.654	1335170	10.654	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1160244	15.421	1176087	15.413	99	60 - 140	0.0080	+/-0.50	
SG-1D-91213 (13I0513-06)			Lab File ID: G091728.D			Analyzed: 09/18/13 11:08			
Bromochloromethane (1)	425967	8.777	403538	8.777	106	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1315426	10.654	1335170	10.654	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1186779	15.422	1176087	15.413	101	60 - 140	0.0090	+/-0.50	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SG-7D-91213 (13I0513-07)			Lab File ID: G091729.D			Analyzed: 09/18/13 11:48			
Bromochloromethane (1)	439829	8.786	403538	8.777	109	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1385652	10.663	1335170	10.654	104	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1234188	15.422	1176087	15.413	105	60 - 140	0.0090	+/-0.50	
SG-6D-91213 (13I0513-08)			Lab File ID: G091730.D			Analyzed: 09/18/13 12:28			
Bromochloromethane (1)	441689	8.777	403538	8.777	109	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1370715	10.654	1335170	10.654	103	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1242028	15.421	1176087	15.413	106	60 - 140	0.0080	+/-0.50	
SG-10D-91213 (13I0513-09)			Lab File ID: G091731.D			Analyzed: 09/18/13 13:08			
Bromochloromethane (1)	438922	8.768	403538	8.777	109	60 - 140	-0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1375028	10.654	1335170	10.654	103	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1248106	15.421	1176087	15.413	106	60 - 140	0.0080	+/-0.50	
FD091213 (13I0513-10)			Lab File ID: G091732.D			Analyzed: 09/18/13 13:48			
Bromochloromethane (1)	436474	8.786	403538	8.777	108	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1377384	10.663	1335170	10.654	103	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1239302	15.422	1176087	15.413	105	60 - 140	0.0090	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S004695-CCV1)			Lab File ID: G091802.D			Analyzed: 09/18/13 15:30			
Bromochloromethane (1)	448103	8.768	504192	8.786	89	60 - 140	-0.0180	+/-0.50	
1,4-Difluorobenzene (1)	1436293	10.654	1391643	10.671	103	60 - 140	-0.0170	+/-0.50	
Chlorobenzene-d5 (1)	1278756	15.421	1251346	15.43	102	60 - 140	-0.0090	+/-0.50	
LCS (B081198-BS1)			Lab File ID: G091803.D			Analyzed: 09/18/13 16:09			
Bromochloromethane (1)	441722	8.777	448103	8.768	99	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1430307	10.663	1436293	10.654	100	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1267586	15.422	1278756	15.421	99	60 - 140	0.0010	+/-0.50	
Blank (B081198-BLK1)			Lab File ID: G091805.D			Analyzed: 09/18/13 17:35			
Bromochloromethane (1)	408872	8.777	448103	8.768	91	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1283484	10.654	1436293	10.654	89	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1111086	15.421	1278756	15.421	87	60 - 140	0.0000	+/-0.50	
PRE-DIL-91213 (13I0513-12)			Lab File ID: G091807.D			Analyzed: 09/18/13 18:24			
Bromochloromethane (1)	403939	8.76	448103	8.768	90	60 - 140	-0.0080	+/-0.50	
1,4-Difluorobenzene (1)	1284550	10.646	1436293	10.654	89	60 - 140	-0.0080	+/-0.50	
Chlorobenzene-d5 (1)	1196162	15.421	1278756	15.421	94	60 - 140	0.0000	+/-0.50	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
PRE-GAC-91213 (13I0513-13)			Lab File ID: G091808.D			Analyzed: 09/18/13 19:11			
Bromochloromethane (1)	432607	8.768	448103	8.768	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1353901	10.654	1436293	10.654	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1252986	15.422	1278756	15.421	98	60 - 140	0.0010	+/-0.50	
MID-GAC-91213 (13I0513-14)			Lab File ID: G091809.D			Analyzed: 09/18/13 20:00			
Bromochloromethane (1)	443763	8.777	448103	8.768	99	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1375711	10.663	1436293	10.654	96	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1271533	15.421	1278756	15.421	99	60 - 140	0.0000	+/-0.50	
POST-GAC-91213 (13I0513-15)			Lab File ID: G091810.D			Analyzed: 09/18/13 20:48			
Bromochloromethane (1)	439093	8.777	448103	8.768	98	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1371368	10.654	1436293	10.654	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1254948	15.422	1278756	15.421	98	60 - 140	0.0010	+/-0.50	
ESG-7S-91213 (13I0513-01)			Lab File ID: G091814.D			Analyzed: 09/19/13 11:11			
Bromochloromethane (1)	400684	8.777	448103	8.768	89	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	1260624	10.654	1436293	10.654	88	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1160874	15.422	1278756	15.421	91	60 - 140	0.0010	+/-0.50	
ESG-6S-91213 (13I0513-02RE1)			Lab File ID: G091815.D			Analyzed: 09/19/13 11:50			
Bromochloromethane (1)	415170	8.786	448103	8.768	93	60 - 140	0.0180	+/-0.50	
1,4-Difluorobenzene (1)	1254052	10.663	1436293	10.654	87	60 - 140	0.0090	+/-0.50	
Chlorobenzene-d5 (1)	1161951	15.421	1278756	15.421	91	60 - 140	0.0000	+/-0.50	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S004691-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	6.10	0.6517469	0.795028		22.0	30
Benzene	A	5.00	4.20	0.8942447	0.7510426		-16.0	30
Benzyl chloride	A	5.00	5.99	0.7819351	0.9369008		19.8	30
Bromodichloromethane	A	5.00	4.38	0.6024274	0.5280274		-12.4	30
Bromoform	A	5.00	5.55	0.5251071	0.5832031		11.1	30
Bromomethane	A	5.00	5.10	0.628712	0.6409666		1.9	30
1,3-Butadiene	A	5.00	5.38	0.3792058	0.4079318		7.6	30
2-Butanone (MEK)	A	5.00	5.55	1.267082	1.405548		10.9	30
Carbon Disulfide	A	5.00	4.83	2.143665	2.070558		-3.4	30
Carbon Tetrachloride	A	5.00	4.52	0.4914556	0.4444138		-9.6	30
Chlorobenzene	A	5.00	4.92	0.884138	0.8708267		-1.5	30
Chloroethane	A	5.00	5.43	0.2819568	0.3061323		8.6	30
Chloroform	A	5.00	5.02	1.57814	1.584446		0.4	30
Chloromethane	A	5.00	4.71	0.5481299	0.5162299		-5.8	30
Cyclohexane	A	5.00	4.47	0.3737589	0.3338793		-10.7	30
Dibromochloromethane	A	5.00	5.15	0.5874548	0.6052967		3.0	30
1,2-Dibromoethane (EDB)	A	5.00	4.81	0.6051551	0.5825746		-3.7	30
1,2-Dichlorobenzene	A	5.00	5.54	0.7348896	0.8137153		10.7	30
1,3-Dichlorobenzene	A	5.00	5.56	0.7874897	0.8751679		11.1	30
1,4-Dichlorobenzene	A	5.00	5.54	0.7922155	0.8775052		10.8	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.16	1.784229	1.842356		3.3	30
1,1-Dichloroethane	A	5.00	4.92	1.419752	1.398586		-1.5	30
1,2-Dichloroethane	A	5.00	5.14	1.008311	1.036524		2.8	30
1,1-Dichloroethylene	A	5.00	4.97	1.096519	1.090114		-0.6	30
cis-1,2-Dichloroethylene	A	5.00	4.96	1.067416	1.059869		-0.7	30
trans-1,2-Dichloroethylene	A	5.00	4.96	1.077323	1.068025		-0.9	30
1,2-Dichloropropane	A	5.00	3.94	0.3618054	0.285001		-21.2	30
cis-1,3-Dichloropropene	A	5.00	4.67	0.437819	0.4091943		-6.5	30
trans-1,3-Dichloropropene	A	5.00	4.81	0.4163178	0.4003325		-3.8	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1	A	5.00	5.45	1.762348	1.920826		9.0	30
1,4-Dioxane	A	5.00	4.79	0.1837701	0.1760783		-4.2	30
Ethanol	A	5.00	5.42	0.1383791	0.1499378		8.4	30
Ethyl Acetate	A	5.00	5.87	0.2184979	0.2566222		17.4	30
Ethylbenzene	A	5.00	5.00	1.335633	1.335169		-0.03	30
4-Ethyltoluene	A	5.00	5.50	1.327228	1.460564		10.0	30
Heptane	A	5.00	4.55	0.2483239	0.2260039		-9.0	30
Hexachlorobutadiene	A	5.00	5.18	0.4770225	0.4941158		3.6	30
Hexane	A	5.00	4.66	0.8138059	0.758622		-6.8	30

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S004691-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	4.49	0.6602144	0.5926963		-10.2	30
Isopropanol	A	5.00	5.24	0.7469515	0.7835812		4.9	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.51	1.775522	1.958049		10.3	30
Methylene Chloride	A	5.00	4.40	0.8989836	0.7914397		-12.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.71	0.57191	0.5391182		-5.7	30
Naphthalene	A	5.00	5.56	1.350914	1.50121		11.1	30
Propene	A	5.00	4.92	0.528133	0.5200442		-1.5	30
Styrene	A	5.00	5.52	0.749994	0.8271919		10.3	30
1,1,2,2-Tetrachloroethane	A	5.00	4.43	0.9423023	0.8353777		-11.3	30
Tetrachloroethylene	A	5.00	5.50	0.459785	0.5060483		10.1	30
Tetrahydrofuran	A	5.00	5.75	0.3133766	0.3606302		15.1	30
Toluene	A	5.00	4.86	1.069888	1.039373		-2.9	30
1,2,4-Trichlorobenzene	A	5.00	5.78	0.530782	0.6134934		15.6	30
1,1,1-Trichloroethane	A	5.00	4.35	0.5060595	0.4406198		-12.9	30
1,1,2-Trichloroethane	A	5.00	4.58	0.4037585	0.3696434		-8.4	30
Trichloroethylene	A	5.00	4.35	0.3767178	0.3279618		-12.9	30
Trichlorofluoromethane (Freon 11)	A	5.00	5.08	1.469825	1.492431		1.5	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	A	5.00	5.36	1.348989	1.446863		7.3	30
1,2,4-Trimethylbenzene	A	5.00	5.38	1.145482	1.232044		7.6	30
1,3,5-Trimethylbenzene	A	5.00	5.54	1.124122	1.246311		10.9	30
Vinyl Acetate	A	5.00	5.21	1.840912	1.916889		4.1	30
Vinyl Chloride	A	5.00	5.34	0.587916	0.627922		6.8	30
m&p-Xylene	A	10.0	10.5	1.040292	1.097113		5.5	30
o-Xylene	A	5.00	5.02	1.091483	1.095984		0.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S004695-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	5.54	0.6517469	0.7220697		10.8	30
Benzene	A	5.00	4.11	0.8942447	0.7343939		-17.9	30
Benzyl chloride	A	5.00	5.87	0.7819351	0.9175517		17.3	30
Bromodichloromethane	A	5.00	4.24	0.6024274	0.5103683		-15.3	30
Bromoform	A	5.00	5.16	0.5251071	0.5424835		3.3	30
Bromomethane	A	5.00	4.54	0.628712	0.5707152		-9.2	30
1,3-Butadiene	A	5.00	4.89	0.3792058	0.370547		-2.3	30
2-Butanone (MEK)	A	5.00	5.32	1.267082	1.34899		6.5	30
Carbon Disulfide	A	5.00	4.44	2.143665	1.904284		-11.2	30
Carbon Tetrachloride	A	5.00	4.27	0.4914556	0.4194743		-14.6	30
Chlorobenzene	A	5.00	4.69	0.884138	0.8292309		-6.2	30
Chloroethane	A	5.00	4.88	0.2819568	0.2750011		-2.5	30
Chloroform	A	5.00	4.77	1.57814	1.506454		-4.5	30
Chloromethane	A	5.00	4.14	0.5481299	0.4535279		-17.3	30
Cyclohexane	A	5.00	4.35	0.3737589	0.3248808		-13.1	30
Dibromochloromethane	A	5.00	4.89	0.5874548	0.5747173		-2.2	30
1,2-Dibromoethane (EDB)	A	5.00	4.57	0.6051551	0.552582		-8.7	30
1,2-Dichlorobenzene	A	5.00	5.23	0.7348896	0.7687747		4.6	30
1,3-Dichlorobenzene	A	5.00	5.23	0.7874897	0.8240008		4.6	30
1,4-Dichlorobenzene	A	5.00	5.23	0.7922155	0.8279672		4.5	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.73	1.784229	1.686362		-5.5	30
1,1-Dichloroethane	A	5.00	4.69	1.419752	1.331155		-6.2	30
1,2-Dichloroethane	A	5.00	4.87	1.008311	0.9828169		-2.5	30
1,1-Dichloroethylene	A	5.00	4.73	1.096519	1.03653		-5.5	30
cis-1,2-Dichloroethylene	A	5.00	4.76	1.067416	1.017095		-4.7	30
trans-1,2-Dichloroethylene	A	5.00	4.72	1.077323	1.016952		-5.6	30
1,2-Dichloropropane	A	5.00	3.89	0.3618054	0.2817464		-22.1	30
cis-1,3-Dichloropropene	A	5.00	4.54	0.437819	0.3977361		-9.2	30
trans-1,3-Dichloropropene	A	5.00	4.69	0.4163178	0.3903516		-6.2	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1	A	5.00	4.79	1.762348	1.687337		-4.3	30
1,4-Dioxane	A	5.00	4.66	0.1837701	0.1711216		-6.9	30
Ethanol	A	5.00	4.72	0.1383791	0.1305878		-5.6	30
Ethyl Acetate	A	5.00	5.79	0.2184979	0.252824		15.7	30
Ethylbenzene	A	5.00	4.76	1.335633	1.272951		-4.7	30
4-Ethyltoluene	A	5.00	5.26	1.327228	1.395168		5.1	30
Heptane	A	5.00	4.50	0.2483239	0.2233984		-10.0	30
Hexachlorobutadiene	A	5.00	4.74	0.4770225	0.4526887		-5.1	30
Hexane	A	5.00	4.45	0.8138059	0.7244406		-11.0	30

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S004695-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	4.28	0.6602144	0.5644723		-14.5	30
Isopropanol	A	5.00	4.87	0.7469515	0.728179		-2.5	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.29	1.775522	1.88005		5.9	30
Methylene Chloride	A	5.00	4.15	0.8989836	0.7464462		-17.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	4.69	0.57191	0.536187		-6.2	30
Naphthalene	A	5.00	5.13	1.350914	1.387222		2.7	30
Propene	A	5.00	4.71	0.528133	0.4974463		-5.8	30
Styrene	A	5.00	5.28	0.749994	0.7924464		5.7	30
1,1,2,2-Tetrachloroethane	A	5.00	4.26	0.9423023	0.8023398		-14.9	30
Tetrachloroethylene	A	5.00	5.12	0.459785	0.4713231		2.5	30
Tetrahydrofuran	A	5.00	5.60	0.3133766	0.35103		12.0	30
Toluene	A	5.00	4.66	1.069888	0.9978548		-6.7	30
1,2,4-Trichlorobenzene	A	5.00	5.44	0.530782	0.5776539		8.8	30
1,1,1-Trichloroethane	A	5.00	4.18	0.5060595	0.423586		-16.3	30
1,1,2-Trichloroethane	A	5.00	4.42	0.4037585	0.3571283		-11.5	30
Trichloroethylene	A	5.00	4.27	0.3767178	0.3215121		-14.7	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.44	1.469825	1.306353		-11.1	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	A	5.00	4.96	1.348989	1.339363		-0.7	30
1,2,4-Trimethylbenzene	A	5.00	5.13	1.145482	1.175391		2.6	30
1,3,5-Trimethylbenzene	A	5.00	5.26	1.124122	1.181414		5.1	30
Vinyl Acetate	A	5.00	5.08	1.840912	1.869206		1.5	30
Vinyl Chloride	A	5.00	4.74	0.587916	0.5569148		-5.3	30
m&p-Xylene	A	10.0	10.1	1.040292	1.048055		0.7	30
o-Xylene	A	5.00	4.80	1.091483	1.048892		-3.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Acetone	AIHA,NY
Benzene	AIHA,FL,NJ,NY,VA
Benzyl chloride	AIHA,FL,NJ,NY,VA
Bromodichloromethane	AIHA,NJ,NY,VA
Bromoform	AIHA,NJ,NY,VA
Bromomethane	AIHA,FL,NJ,NY
1,3-Butadiene	AIHA,NJ,NY,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,VA
Carbon Disulfide	AIHA,NJ,NY,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,VA
Chlorobenzene	AIHA,FL,NJ,NY,VA
Chloroethane	AIHA,FL,NJ,NY,VA
Chloroform	AIHA,FL,NJ,NY,VA
Chloromethane	AIHA,FL,NJ,NY,VA
Cyclohexane	AIHA,NJ,NY,VA
Dibromochloromethane	AIHA,NY
1,2-Dibromoethane (EDB)	AIHA,NJ,NY
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,VA
1,3-Dichlorobenzene	AIHA,NJ,NY
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY
1,1-Dichloroethane	AIHA,FL,NJ,NY,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,VA
trans-1,3-Dichloropropene	AIHA,NY
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,VA
1,4-Dioxane	AIHA,NJ,NY,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,VA
Hexachlorobutadiene	AIHA,NJ,NY,VA
Hexane	AIHA,FL,NJ,NY,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,VA
Methylene Chloride	AIHA,FL,NJ,NY,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY
Naphthalene	NY
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,VA

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Tetrachloroethylene	AIHA,FL,NJ,NY,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,VA
Trichloroethylene	AIHA,FL,NJ,NY,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY
1,3,5-Trimethylbenzene	AIHA,NJ,NY
Vinyl Acetate	AIHA,FL,NJ,NY,VA
Vinyl Chloride	AIHA,FL,NJ,NY,VA
m&p-Xylene	AIHA,FL,NJ,NY,VA
o-Xylene	AIHA,FL,NJ,NY,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 SPRUCE ST
EAST LONGMEADOW, MA 01028

AIR SAMPLE CHAIN OF CUSTODY RECORD

Page 1 of 2

13I0513

Company Name: ARCADIS-US, INC.
Address: 855 ROUTE 146 - SUITE 210
CLIFTON PARK, NY 12065
Attention: ELY MOSKAL
Project Location: PLAZA CLEANERS - PORT WASHINGTON, NY
Sampled By: CURT WHIPPLE

Telephone: (518) 250-7333
Project # 00266408.0000
Client PO # 1

DATA DELIVERY (check one):
☐ FAX ☒ EMAIL ☐ WEBSITE CLIENT
Fax # :
Email: Elias.moskal@arcadis-us.com
Format: ☒ EXCEL ☒ PDF ☐ GIS KEY ☒ OTHER EQUIS

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

Field ID	Sample Description	Media	Lab #	Date Sampled Start Date Time	Date Sampled Stop Date Time	ONLY USE WHEN USING PUMPS: Total Minutes Sampled	Flow Rate M^3/Min. or L / Min.	Volume Liters or M^3	Matrix Code*	ANALYSIS REQUESTED: TO-15	" Hg: Initial pressure	" Hg: Final Pressure	" Hg: Lab Receipt Pressure	Summa Canister ID	Flow Controller ID
✓	ESC-7S-91213	S	01	9/12/13 906	9/12/13 1005	59		6L	SG	X	-30	-2	-3	1466	4261
✓	ESC-6S-91213	S	02	9/12/13 937	9/12/13 1030	53		6L	SG	X	-30	-5	-5.3	1337	4260
✓	ESC-8D-91213	S	03	9/12/13 1040	9/12/13 1132	52		6L	SG	X	-28	-4.5	-5.8	1257	4161
✓	ESC-5D-91213	S	04	9/12/13 1137	9/12/13 1231	54		6L	SG	X	-27	-3	-4.6	1222	4160
✓	ESC-3D-91213	S	05	9/12/13 1226	9/12/13 1321	55		6L	SG	X	-30	-4	-4.4	1146	4259
✓	SG-1D-91213	S	06	9/12/13 1405	9/12/13 1500	55		6L	SG	X	-30	-4.5	-4.6	1161	4234
✓	SG-7D-91213	S	07	9/12/13 1429	9/12/13 1525	56		6L	SG	X	-30	-3	-3.7	1218	4235
✓	SG-6D-91213	S	08	9/12/13 1510	9/12/13 1404	54		6L	SG	X	-30	-5	-4.9	1852	4061

Please fill out completely, sign, date and retain the yellow copy for your records.
Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.
Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.

Laboratory Comments:

CLIENT COMMENTS:
• EQUIS EDD

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
[signature]	9/13/13 13:15	Paul Racicot	9/13/13 13:15
Paul Racicot	9/13/13 18:00	Paula Blakeboro	9/13/13 18:00

Turnaround **
☐ 7-Day
☒ 10-Day
☐ Other ___
RUSH *
☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day
*Approval Required

Special Requirements
Regulations: NYSDEC ASP CAT. B
Data Enhancement/RCP? ☐ Y ☒ N
Enhanced Data Package ☐ Y ☒ N
(Surchage Applies)
Required Detection Limits:
Other:

***Matrix Code:**
SG= SOIL GAS
IA= INDOOR AIR
AMB=AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = other

****Media Codes:**
S=summa can
TB=tedlar bag
P=PUF
T=tube
F= filter
C=cassette
O = Other

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

AIR SAMPLE CHAIN OF CUSTODY RECORD

13I0513

39 SPRUCE ST
EAST LONGMEADOW, MA 01028

Company Name: ARCADIS-US, INC.
Address: SEE PAGE 1
Attention:
Project Location: PLAZA CLEANERS - PORT WASHINGTON, NY
Sampled By: CURT WHIPPLE

Telephone: (518) 250-7333
Project # 00266408.0000
Client PO # "

DATA DELIVERY (check one):
☐FAX ☐EMAIL ☐WEBSITE CLIENT
Fax # :
Email: ELIAS.MOSKAL@ARCADIS-US.COM
Format: ☐ EXCEL ☒ PDF ☐ GIS KEY ☒ OTHER EQUIS

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

Field ID	Sample Description	Media	Lab #	Date Sampled Start Date Time	Date Sampled Stop Date Time	ONLY USE WHEN USING PUMPS: Total Minutes Sampled	Flow Rate M^3/Min. or L / Min.	Volume Liters or M^3	Matrix Code*	ANALYSIS REQUESTED: TO-15	" Hg Initial pressure	" Hg Final Pressure	Lab Receipt Pressure	Summa Canister ID	Flow Controller ID
✓	SG-10D-91213	S	09	9/12/13 1605	9/12/13 1658	55		6L	SG	X	-30	-4	4.4	1735	4257
✓	FD091213	S	10	9/12/13 1603	9/12/13 1658	55		6L	SG	X	-30	-4	4.6	1747	4256
✓	OA-1-91213	S	11	9/12/13 1320	9/12/13 1420	60		6L	AMB	X	-30	-4.5	4.6	1076	4258
✓	PRE-DIL-91213	S	12	9/12/13 1643	9/12/13 1740	57		6L	SG	X	-30	-4.5	5.7	1469	4263
✓	PRE-GAC-91213	S	13	9/12/13 1654	9/12/13 1744	50		6L	SG	X	-30	-4	2.4	1653	4262
✓	MID-GAC-91213	S	14	9/12/13 1658	9/12/13 1746	48		6L	SG	X	~~-30~~ -27	-4	2.9	1617	4240
✓	POST-GAC-91213	S	15	9/12/13 1701	9/12/13 1745	44		6L	SG	X	-28	-4	2.1	1674	4241

Laboratory Comments:

CLIENT COMMENTS:
· EQUIS EDP
·

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	9.13.13 13:15	Paul Racicot	9.13.13 13:15
Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
Paul Racicot	9.13.13 18:00	Paula R	9.13.13 18:00

Turnaround **
☐ 7-Day
☒ 10-Day
☐ Other ___
RUSH *
☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day
*Approval Required

Special Requirements
Regulations: NYSDEC ASP CAT. B
Data Enhancement/RCP? ☐ Y ☒ N
Enhanced Data Package ☐ Y ☒ N
(Surchage Applies)
Required Detection Limits:
Other:

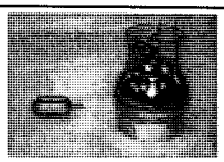
***Matrix Code:**
SG= SOIL GAS
IA= INDOOR AIR
AMB=AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = other

****Media Codes:**
S=summa can
TB=tedlar bag
P=PUF
T=tube
F= filter
C=cassette
O = Other

Please fill out completely, sign, date and retain the yellow copy for your records.
Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.
Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified



www.contestlabs.com

con-test® ANALYTICAL LABORATORY

AIR Only Receipt Checklist

39 Spruce St.
East Longmeadow, MA.
01028
P: 413-525-2332
F: 413-525-6405

CLIENT NAME: Arcadis RECEIVED BY: PB DATE: ~~9.12.13~~ 9.13.13

1) Was the chain(s) of custody relinquished and signed? (Yes) No

2) Does the chain agree with the samples? (Yes) No
If not, explain:

3) Are all the samples in good condition? (Yes) No
If not, explain:

4) Are there any samples "On Hold"? Yes (No) Stored where:

5) Are there any RUSH or SHORT HOLDING TIME samples? Yes (No)
Who was notified _____ Date _____ Time _____

6) Location where samples are stored: Air Lab

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

7) Temperature °C by Temp blank _____ Temperature °C by Temp gun _____

Containers received at Con-Test

	# of Containers	Types (Size, Duration)
Summa Cans (TO-14/TO-15/APH)	15	6 Lit
Tedlar Bags		
TO-17 Tubes		
Regulators	15	1 hr
Restrictors		
Hg/Hopcalite Tube (NIOSH 6009)		
(TO-4A/ TO-10A/TO-13) PUFs		
PCB Florisil Tubes (NIOSH 5503)		
Air cassette		
PM 2.5/PM 10		
TO-11A Cartridges		
Other		

Unused Summas/PUF Media:

Unused Regulators:

1) Was all media (used & unused) checked into the WASP?

2) Were all returned summa cans, Restrictors & Regulators and PUF's documented as returned in the Air Lab Inbound/Outbound Excel Spreadsheet?

Laboratory Comments:

1466 1222 1218 1747 1617
1337 1146 1852 1076 1674
1257 1161 1735 1469 1653

4258 4260 4262 4256
4259 4261 4263 4257
4234 4160 4240 4061
4235 4161 4241

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.		
2) The cooler or samples do not appear to have been compromised or tampered with.		
3) Samples were received on ice.		
4) Cooler Temperature is acceptable.		
5) Cooler Temperature is recorded.		
6) COC is filled out in ink and legible.		
7) COC is filled out with all pertinent information.		
8) Field Sampler's name present on COC.		
9) There are no discrepancies between the sample IDs on the container and the COC.		
10) Samples are received within Holding Time.		
11) Sample containers have legible labels.		
12) Containers are not broken or leaking.		
13) Air Cassettes are not broken/open.		
14) Sample collection date/times are provided.		
15) Appropriate sample containers are used.		
16) Proper collection media used.		
17) No headspace sample bottles are completely filled.		
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.		
19) Trip blanks provided if applicable.		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.		
21) Samples do not require splitting or compositing.		

Who notified of False statements? **Date/Time:**

Log-In Technician Initials: **Date/Time:**

Air Sampling Media Certificate of Analysis

Date Analyzed: 9/4/2013 **Batch #:** 13CC0436

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs:		
BC1257	BC1222	BC1146
BC1161	BC1852	BC1747
BC1617	BC1076	

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.80	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.80	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: WSD 9/19/13

Air Sampling Media Certificate of Analysis

Date Analyzed: 9/4/2013 **Batch #:** 13CC0437

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs:			
	BC1466	BC1337	BC1218
	BC1735	BC1469	BC1674

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.80	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.80	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: WSD 9/19/13

Air Sampling Media Certificate of Analysis

Date Analyzed: 9/4/2013 **Batch #:** 13CC0416

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC1653

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.80	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.80	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: WSD 9/19/13

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com

AIR SAMPLE CHAIN OF CUSTODY RECORD

39 SPRUCE ST
EAST LONGMEADOW, MA 01028

13I0513

Company Name: ARCADIS-US, INC.
Address: 855 ROUTE 146 - SUITE 210
CLIFTON PARK, NY 12065
Attention: ELY MOSKAL
Project Location: PLAZA CLEANERS - PORT WASHINGTON, NY
Sampled By: CURT WHIPPLE

Telephone: (518) 250-7333
Project # 00266408.0000
Client PO # 4

DATA DELIVERY (check one):
☐FAX ☒EMAIL ☐WEBSITE CLIENT
Fax # :
Email: Elias.moskal@arcadis-us.com
Format: ☒EXCEL ☒PDF ☐GIS KEY ☒OTHER EQUIS

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

Field ID	Sample Description	Media	Lab #	Date Sampled Start Date Time	Date Sampled Stop Date Time	ONLY USE WHEN USING PUMPS Total Minutes Sampled	Flow Rate M³/Min. or L / Min.	Volume Liters or M³	Matrix Code*	ANALYSIS REQUESTED TO-15	" Hg Initial pressure	" Hg Final Pressure	" Hg Lab Receipt Pressure	Summa Canister ID	Flow Controller ID
✓	~~ESG-7S-91213~~ ESC-7S-91213	S	01	9/12/13 906	9/12/13 1005	59		6L	SG	X	-30	-2	-3	1466	4261
✓	~~ESG-6S-91213~~ ESC-6S-91213	S	02	9/12/13 937	9/12/13 1030	53		6L	SG	X	-30	-5	-5.3	1337	4260
✓	~~ESG-8D-91213~~ ESC-8D-91213	S	03	9/12/13 1042	9/12/13 1132	52		6L	SG	X	-28	-4.5	-5.8	1257	4161
✓	~~ESG-5D-91213~~ ESC-5D-91213	S	04	9/12/13 1137	9/12/13 1231	54		6L	SG	X	-29	-3	-4.6	1222	4160
✓	~~ESG-3D-91213~~ ESC-3D-91213	S	05	9/12/13 1226	9/12/13 1321	55		6L	SG	X	-30	-4	-4.4	1146	4259
✓	SG-1D-91213	S	06	9/12/13 1405	9/12/13 1500	55		6L	SG	X	-30	-4.5	-4.9	1161	4234
✓	SG-7D-91213	S	07	9/12/13 1429	9/12/13 1525	56		6L	SG	X	-30	-3	-3.7	1218	4235
✓	SG-6D-91213	S	08	9/12/13 1510	9/12/13 1404	54		6L	SG	X	-30	-5	-4.9	1852	4061

Please fill out completely, sign, date and retain the yellow copy for your record.
Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.
Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.

Laboratory Comments:

CLIENT COMMENTS:
• EQUIS EDD

Relinquished by: (signature)	Date/Time: 9/12/13 13:05	
Received by: (signature)	Date/Time: 9/13/13 13:15	
Relinquished by: (signature)	Date/Time: 9/13/13 18:00	
Received by: (signature)	Date/Time: 9.13.13 18:00	

Turnaround **
☐ 7-Day
☒ 10-Day
☐ Other ___
RUSH *
☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day
*Approval Required

Special Requirements
Regulations: NYSDEC ASP CAT. B
Data Enhancement/RCP? ☐ Y ☒ N
Enhanced Data Package ☐ Y ☒ N
(Surchage Applies)
Required Detection Limits:
Other:

*Matrix Code:
SG= SOIL GAS
IA= INDOOR AIR
AMB=AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = other

**Media Codes:
S=summa can
TB=tedlar bag
P=PUF
T=tube
F= filter
C=cassette
O = Other

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 SPRUCE ST
EAST LONGMEADOW, MA 01028

AIR SAMPLE CHAIN OF CUSTODY RECORD

1310513

Company Name: ARCADIS-US, INC.
Address: SEE PAGE 1
Attention:
Project Location: PLAZA CLEANERS - PORT WASHINGTON, NY
Sampled By: CURT WHIPPLE
Telephone: (518) 250-7333
Project # 30026640.0000
Client PO #

DATA DELIVERY (check one):
☐FAX ☐EMAIL ☐WEBSITE CLIENT
Fax # :
Email: ELIAS.MOSKAL@ARCADIS-US.COM
Format: ☐ EXCEL ☑ PDF ☐ GIS KEY ☑ OTHER EQUIS

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

Field ID	Sample Description	Media	Lab #	Date Sampled Start Date Time	Date Sampled Stop Date Time	ONLY USE WHEN USING PUMPS Total Minutes Sampled	Flow Rate M^3/Min. or L / Min.	Volume Liters or M^3	Matrix Code*	ANALYSIS REQUESTED TO-15	" Hg Initial pressure	" Hg Final Pressure	" Hg Lab Receipt Pressure	Summa Canister ID	Flow Controller ID
	SG-10D-91213	S	09	9/12/13 1605	9/12/13 1658	55		6L	SG	X	-30	-4	11.4	1735	4257
	FD091213	S	10	9/12/13 1603	9/12/13 1658	55		6L	SG	X	-30	-4	11.6	1747	4256
	OA-1-91213	S	11	9/12/13 1320	9/12/13 1420	60		6L	AMB	X	-30	-4.5	11.6	1076	4258
	PRE-DIL-91213	S	12	9/12/13 1643	9/12/13 1740	57		6L	SG	X	-30	-4.6	15.7	1469	4263
	PRE-GAC-91213	S	13	9/12/13 1654	9/12/13 1744	50		6L	SG	X	-30	-4	2.4	1653	4262
	MID-GAC-91213	S	14	9/12/13 1658	9/13/13 1746	48		6L	SG	X	-27 -30	-4	7.9	1617	4240
	POST-GAC-91213	S	15	9/12/13 1701	9/12/13 1745	44		6L	SG	X	-28	-4	7.1	1674	4241

Please fill out completely, sign, date and retain the yellow copy for your record.
Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.
Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.

Laboratory Comments:

CLIENT COMMENTS:
- EQUIS EDD
-

Relinquished by: (signature)	Date/Time: 9.13.13 13:15
Received by: (signature)	Date/Time: 9.13.13 13:15
Relinquished by: (signature)	Date/Time: 9.13.13 18:00
Received by: (signature)	Date/Time: 9.13.13 18:00

Turnaround **
☐ 7-Day
☑ 10-Day
☐ Other ___
RUSH *
☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day
*Approval Required

Special Requirements
Regulations: NJ SRP CAT. B
Data Enhancement/RCP? ☐ Y ☑ N
Enhanced Data Package ☐ Y ☑ N
(Surcharge Applies)
Required Detection Limits:
Other:

*Matrix Code:	**Media Codes:
SG= SOIL GAS	S=summa can
IA= INDOOR AIR	TB=tedlar bag
AMB=AMBIENT	P=PUF
SS = SUB SLAB	T=tube
D = DUP	F= filter
BL = BLANK	C=cassette
O = other	O = Other

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified

Report Date:
09-Oct-13 09:46

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

ARCADIS U.S., Inc.
855 Route 146, Suite 210
Clifton Park, NY 12065

Work Order: M1725
Project : NYSDEC Former Plaza Cleaners
Project #: 00266408.0000

Attn: Elias Moskal

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1725-01	CB-W1-91213	Aqueous	12-Sep-13 17:05	14-Sep-13 09:50
M1725-02	CB-W2-91213	Aqueous	12-Sep-13 17:05	14-Sep-13 09:50
M1725-03	CB-S1-91213	Soil	12-Sep-13 17:20	14-Sep-13 09:50
M1725-04	CB-S2-91213	Soil	12-Sep-13 17:20	14-Sep-13 09:50

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

All applicable NELAC or USEPA CLP requirments have been meet.

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

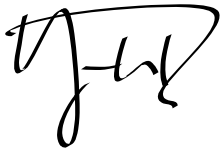
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
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

* Data Summary Pack *

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

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1725

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
CB-W1-91213	M1725-01	SW8260_W				
CB-W2-91213	M1725-02	SW8260_W				
CB-S1-91213	M1725-03	SW8260_LOW_S				
CB-S2-91213	M1725-04	SW8260_LOW_S				

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1725

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_LOW_S					
M1725-03A	SL	9/12/2013	9/14/2013	NA	9/20/2013
M1725-04A	SL	9/12/2013	9/14/2013	NA	9/20/2013
SW8260_W					
M1725-01A	AQ	9/12/2013	9/14/2013	NA	9/20/2013
M1725-02A	AQ	9/12/2013	9/14/2013	NA	9/20/2013

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1725

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_LOW_S					
M1725-03A	SL	SW8260_LOW_S	NA	LOW	1
M1725-04A	SL	SW8260_LOW_S	NA	LOW	1
SW8260_W					
M1725-01A	AQ	SW8260_W	NA	LOW	1
M1725-02A	AQ	SW8260_W	NA	LOW	1

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

WorkOrder: M1725

Client ID: MALCOLM_LATHAM
Project: NYSDEC Former Plaza Cleaners
WO Name: NYSDEC Former Plaza Cleaners
Location: ARCADIS_PLAZA_CLEANERS, 00266408.0000
Comments: N/A

Case:
SDG:
PO: 00266408.0000

HC Due: 10/03/13
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M1725-01A	CB-W1-91213	09/12/2013 17:05	09/14/2013	Aqueous	SW8260_W	/					VOA
M1725-02A	CB-W2-91213	09/12/2013 17:05	09/14/2013	Aqueous	SW8260_W	/					VOA
M1725-03A	CB-S1-91213	09/12/2013 17:20	09/14/2013	Soil	PMoist	/					VOA
M1725-03A	CB-S1-91213	09/12/2013 17:20	09/14/2013	Soil	SW8260_LOW_S	/					VOA
M1725-03A	CB-S1-91213	09/12/2013 17:20	09/14/2013	Soil	SW8260_MED_S	/		Y			VOA
M1725-04A	CB-S2-91213	09/12/2013 17:20	09/14/2013	Soil	PMoist	/					VOA
M1725-04A	CB-S2-91213	09/12/2013 17:20	09/14/2013	Soil	SW8260_LOW_S	/					VOA
M1725-04A	CB-S2-91213	09/12/2013 17:20	09/14/2013	Soil	SW8260_MED_S	/		Y			VOA

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

HT = Test logged in but has been placed on hold

09/18/2013 08:39

Lab Client Rep: Agnes R Huntley

* Volatiles *

REPORT NARRATIVE

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

Client : ARCADIS U.S., Inc.

Project: NYSDEC Former Plaza Cleaners

Laboratory Workorder / SDG #: M1725

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
Soil Samples were prepared following procedures in laboratory test code: SW5035

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1
Instrument Type: GCMS-VOA
Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

Instrument Code: 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.

CB-S2-91213 (M1725-04A), recovery is above criteria for 1,2-Dichloroethane-d4 at 112% with criteria of (88-110).

D. Spikes:

1. Laboratory Control Spikes (LCS):

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

LCS-73808 in batch 73808, recovery is above criteria for 1,2-Dichloroethane at 133% with criteria of (70-130).

LCSD-73808 in batch 73808, recovery is above criteria for 1,2-Dichloroethane at 134% with criteria of (70-130).

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

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

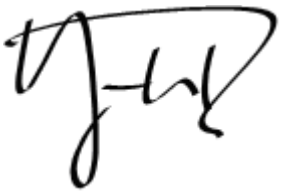
G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

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



Signed:_____ _____

Date:_____10/8/2013_____

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-W1-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1725-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0702.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. Date Analyzed: 09/20/2013

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.

CB-W1-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1725-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0702.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. Date Analyzed: 09/20/2013

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-W2-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1725-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0703.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. Date Analyzed: 09/20/2013

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.

CB-W2-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: M1725-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0703.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. Date Analyzed: 09/20/2013

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-S1-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1725-03A

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M4730.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. 29 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	6.4	U
74-87-3	Chloromethane	6.4	U
75-01-4	Vinyl chloride	6.4	U
74-83-9	Bromomethane	6.4	U
75-00-3	Chloroethane	6.4	U
75-69-4	Trichlorofluoromethane	6.4	U
75-35-4	1,1-Dichloroethene	6.4	U
67-64-1	Acetone	4.3	J
74-88-4	Iodomethane	6.4	U
75-15-0	Carbon disulfide	6.4	U
75-09-2	Methylene chloride	3.1	J
156-60-5	trans-1,2-Dichloroethene	6.4	U
1634-04-4	Methyl tert-butyl ether	6.4	U
75-34-3	1,1-Dichloroethane	6.4	U
108-05-4	Vinyl acetate	6.4	U
78-93-3	2-Butanone	6.4	U
156-59-2	cis-1,2-Dichloroethene	6.4	U
594-20-7	2,2-Dichloropropane	6.4	U
74-97-5	Bromochloromethane	6.4	U
67-66-3	Chloroform	6.4	U
71-55-6	1,1,1-Trichloroethane	6.4	U
563-58-6	1,1-Dichloropropene	6.4	U
56-23-5	Carbon tetrachloride	6.4	U
107-06-2	1,2-Dichloroethane	6.4	U
71-43-2	Benzene	6.4	U
79-01-6	Trichloroethene	6.4	U
78-87-5	1,2-Dichloropropane	6.4	U
74-95-3	Dibromomethane	6.4	U
75-27-4	Bromodichloromethane	6.4	U
10061-01-5	cis-1,3-Dichloropropene	6.4	U
108-10-1	4-Methyl-2-pentanone	6.4	U
108-88-3	Toluene	6.4	U
10061-02-6	trans-1,3-Dichloropropene	6.4	U
79-00-5	1,1,2-Trichloroethane	6.4	U
142-28-9	1,3-Dichloropropane	6.4	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-S1-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1725-03A

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M4730.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. 29 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	6.4	U
591-78-6	2-Hexanone	6.4	U
124-48-1	Dibromochloromethane	6.4	U
106-93-4	1,2-Dibromoethane	6.4	U
108-90-7	Chlorobenzene	6.4	U
630-20-6	1,1,1,2-Tetrachloroethane	6.4	U
100-41-4	Ethylbenzene	6.4	U
179601-23-1	m,p-Xylene	6.4	U
95-47-6	o-Xylene	6.4	U
1330-20-7	Xylene (Total)	6.4	U
100-42-5	Styrene	6.4	U
75-25-2	Bromoform	6.4	U
98-82-8	Isopropylbenzene	6.4	U
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U
108-86-1	Bromobenzene	6.4	U
96-18-4	1,2,3-Trichloropropane	6.4	U
103-65-1	n-Propylbenzene	6.4	U
95-49-8	2-Chlorotoluene	6.4	U
108-67-8	1,3,5-Trimethylbenzene	6.4	U
106-43-4	4-Chlorotoluene	6.4	U
98-06-6	tert-Butylbenzene	6.4	U
95-63-6	1,2,4-Trimethylbenzene	6.4	U
135-98-8	sec-Butylbenzene	6.4	U
99-87-6	4-Isopropyltoluene	6.4	U
541-73-1	1,3-Dichlorobenzene	6.4	U
106-46-7	1,4-Dichlorobenzene	6.4	U
104-51-8	n-Butylbenzene	6.4	U
95-50-1	1,2-Dichlorobenzene	6.4	U
96-12-8	1,2-Dibromo-3-chloropropane	6.4	U
120-82-1	1,2,4-Trichlorobenzene	6.4	U
87-68-3	Hexachlorobutadiene	6.4	U
87-61-6	1,2,3-Trichlorobenzene	6.4	U
91-20-3	Naphthalene	6.4	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-S2-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1725-04A

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M4731.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. 33 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	6.7	U
74-87-3	Chloromethane	6.7	U
75-01-4	Vinyl chloride	6.7	U
74-83-9	Bromomethane	6.7	U
75-00-3	Chloroethane	6.7	U
75-69-4	Trichlorofluoromethane	6.7	U
75-35-4	1,1-Dichloroethene	6.7	U
67-64-1	Acetone	3.5	J
74-88-4	Iodomethane	6.7	U
75-15-0	Carbon disulfide	6.7	U
75-09-2	Methylene chloride	3.0	J
156-60-5	trans-1,2-Dichloroethene	6.7	U
1634-04-4	Methyl tert-butyl ether	6.7	U
75-34-3	1,1-Dichloroethane	6.7	U
108-05-4	Vinyl acetate	6.7	U
78-93-3	2-Butanone	6.7	U
156-59-2	cis-1,2-Dichloroethene	6.7	U
594-20-7	2,2-Dichloropropane	6.7	U
74-97-5	Bromochloromethane	6.7	U
67-66-3	Chloroform	6.7	U
71-55-6	1,1,1-Trichloroethane	6.7	U
563-58-6	1,1-Dichloropropene	6.7	U
56-23-5	Carbon tetrachloride	6.7	U
107-06-2	1,2-Dichloroethane	6.7	U
71-43-2	Benzene	6.7	U
79-01-6	Trichloroethene	6.7	U
78-87-5	1,2-Dichloropropane	6.7	U
74-95-3	Dibromomethane	6.7	U
75-27-4	Bromodichloromethane	6.7	U
10061-01-5	cis-1,3-Dichloropropene	6.7	U
108-10-1	4-Methyl-2-pentanone	6.7	U
108-88-3	Toluene	6.7	U
10061-02-6	trans-1,3-Dichloropropene	6.7	U
79-00-5	1,1,2-Trichloroethane	6.7	U
142-28-9	1,3-Dichloropropane	6.7	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CB-S2-91213

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1725-04A

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M4731.D

Level: (TRACE/LOW/MED) LOW Date Received: 09/14/2013

% Moisture: not dec. 33 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	6.7	U
591-78-6	2-Hexanone	6.7	U
124-48-1	Dibromochloromethane	6.7	U
106-93-4	1,2-Dibromoethane	6.7	U
108-90-7	Chlorobenzene	6.7	U
630-20-6	1,1,1,2-Tetrachloroethane	6.7	U
100-41-4	Ethylbenzene	6.7	U
179601-23-1	m,p-Xylene	6.7	U
95-47-6	o-Xylene	6.7	U
1330-20-7	Xylene (Total)	6.7	U
100-42-5	Styrene	6.7	U
75-25-2	Bromoform	6.7	U
98-82-8	Isopropylbenzene	6.7	U
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U
108-86-1	Bromobenzene	6.7	U
96-18-4	1,2,3-Trichloropropane	6.7	U
103-65-1	n-Propylbenzene	6.7	U
95-49-8	2-Chlorotoluene	6.7	U
108-67-8	1,3,5-Trimethylbenzene	6.7	U
106-43-4	4-Chlorotoluene	6.7	U
98-06-6	tert-Butylbenzene	6.7	U
95-63-6	1,2,4-Trimethylbenzene	6.7	U
135-98-8	sec-Butylbenzene	6.7	U
99-87-6	4-Isopropyltoluene	6.7	U
541-73-1	1,3-Dichlorobenzene	6.7	U
106-46-7	1,4-Dichlorobenzene	6.7	U
104-51-8	n-Butylbenzene	6.7	U
95-50-1	1,2-Dichlorobenzene	6.7	U
96-12-8	1,2-Dibromo-3-chloropropane	6.7	U
120-82-1	1,2,4-Trichlorobenzene	6.7	U
87-68-3	Hexachlorobutadiene	6.7	U
87-61-6	1,2,3-Trichlorobenzene	6.7	U
91-20-3	Naphthalene	6.7	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-73808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0689.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/20/2013

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-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-73808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0689.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/20/2013

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-73820

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M4725.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-73820

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M4725.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-73808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0686.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/20/2013

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	58	
74-87-3	Chloromethane	56	
75-01-4	Vinyl chloride	54	
74-83-9	Bromomethane	56	
75-00-3	Chloroethane	53	
75-69-4	Trichlorofluoromethane	66	
75-35-4	1,1-Dichloroethene	58	
67-64-1	Acetone	51	
74-88-4	Iodomethane	58	
75-15-0	Carbon disulfide	49	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	48	
1634-04-4	Methyl tert-butyl ether	53	
75-34-3	1,1-Dichloroethane	56	
108-05-4	Vinyl acetate	62	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	53	
594-20-7	2,2-Dichloropropane	62	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	57	
71-55-6	1,1,1-Trichloroethane	61	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	62	
107-06-2	1,2-Dichloroethane	67	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	52	
74-95-3	Dibromomethane	57	
75-27-4	Bromodichloromethane	58	
10061-01-5	cis-1,3-Dichloropropene	54	
108-10-1	4-Methyl-2-pentanone	58	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	57	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-73808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0686.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/20/2013

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	51	
591-78-6	2-Hexanone	60	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	54	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	56	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	51	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	50	
75-25-2	Bromoform	45	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	43	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	46	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	48	
120-82-1	1,2,4-Trichlorobenzene	48	
87-68-3	Hexachlorobutadiene	50	
87-61-6	1,2,3-Trichlorobenzene	50	
91-20-3	Naphthalene	42	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-73820

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M4723.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	41	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	41	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	49	
74-88-4	Iodomethane	58	
75-15-0	Carbon disulfide	55	
75-09-2	Methylene chloride	49	
156-60-5	trans-1,2-Dichloroethene	52	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	46	
78-93-3	2-Butanone	50	
156-59-2	cis-1,2-Dichloroethene	52	
594-20-7	2,2-Dichloropropane	45	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	43	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	44	
107-06-2	1,2-Dichloroethane	40	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	45	
75-27-4	Bromodichloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	47	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	47	
79-00-5	1,1,2-Trichloroethane	48	
142-28-9	1,3-Dichloropropane	46	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-73820

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M4723.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 09/20/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	44	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	46	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	51	
75-25-2	Bromoform	49	
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	42	
103-65-1	n-Propylbenzene	45	
95-49-8	2-Chlorotoluene	45	
108-67-8	1,3,5-Trimethylbenzene	45	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	45	
135-98-8	sec-Butylbenzene	45	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	45	
96-12-8	1,2-Dibromo-3-chloropropane	36	
120-82-1	1,2,4-Trichlorobenzene	43	
87-68-3	Hexachlorobutadiene	42	
87-61-6	1,2,3-Trichlorobenzene	43	
91-20-3	Naphthalene	41	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-73808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0687.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/20/2013

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	57	
74-87-3	Chloromethane	59	
75-01-4	Vinyl chloride	54	
74-83-9	Bromomethane	57	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	65	
75-35-4	1,1-Dichloroethene	59	
67-64-1	Acetone	58	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	47	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	58	
108-05-4	Vinyl acetate	64	
78-93-3	2-Butanone	52	
156-59-2	cis-1,2-Dichloroethene	55	
594-20-7	2,2-Dichloropropane	62	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	59	
71-55-6	1,1,1-Trichloroethane	63	
563-58-6	1,1-Dichloropropene	54	
56-23-5	Carbon tetrachloride	63	
107-06-2	1,2-Dichloroethane	67	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	59	
75-27-4	Bromodichloromethane	59	
10061-01-5	cis-1,3-Dichloropropene	55	
108-10-1	4-Methyl-2-pentanone	62	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	58	
79-00-5	1,1,2-Trichloroethane	53	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-73808

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D0687.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/20/2013

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	52	
591-78-6	2-Hexanone	63	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	54	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	55	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	51	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	53	
79-34-5	1,1,2,2-Tetrachloroethane	43	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	47	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	49	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	51	
91-20-3	Naphthalene	44	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-73808	108	102	96	104				0
02	LCSD-73808	113	98	100	107				0
03	MB-73808	110	97	98	99				0
04	CB-W1-91213	99	92	118	97				0
05	CB-W2-91213	101	94	118	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

som13.08.22.A

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-73820	95	103	95	92				0
02	MB-73820	96	101	97	91				0
03	CB-S1-91213	99	107	98	90				0
04	CB-S2-91213	99	112 *	97	91				1

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.08.22.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab Sample ID: LCS-73808 LCS Lot No.:

Date Extracted: 09/20/2013 Date Analyzed (1): 09/20/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	58.3705	117		30 - 155
Chloromethane	50.0000	0.0000	56.2625	113		40 - 125
Vinyl chloride	50.0000	0.0000	54.2468	108		50 - 145
Bromomethane	50.0000	0.0000	56.3820	113		30 - 145
Chloroethane	50.0000	0.0000	52.6823	105		60 - 135
Trichlorofluoromethane	50.0000	0.0000	66.4670	133		60 - 145
1,1-Dichloroethene	50.0000	0.0000	58.4223	117		70 - 130
Acetone	50.0000	0.0000	51.1848	102		40 - 140
Iodomethane	50.0000	0.0000	57.5144	115		72 - 121
Carbon disulfide	50.0000	0.0000	48.8060	98		35 - 160
Methylene chloride	50.0000	0.0000	47.8333	96		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.3753	97		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.7154	105		65 - 125
1,1-Dichloroethane	50.0000	0.0000	56.3756	113		70 - 135
Vinyl acetate	50.0000	0.0000	61.9278	124		38 - 163
2-Butanone	50.0000	0.0000	50.9151	102		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	53.4538	107		70 - 125
2,2-Dichloropropane	50.0000	0.0000	61.6308	123		70 - 135
Bromochloromethane	50.0000	0.0000	54.8247	110		65 - 130
Chloroform	50.0000	0.0000	57.4997	115		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	60.6450	121		65 - 130
1,1-Dichloropropene	50.0000	0.0000	52.6996	105		75 - 130
Carbon tetrachloride	50.0000	0.0000	61.6697	123		65 - 140
1,2-Dichloroethane	50.0000	0.0000	66.6151	133	*	70 - 130
Benzene	50.0000	0.0000	50.7966	102		80 - 120
Trichloroethene	50.0000	0.0000	52.1319	104		70 - 125
1,2-Dichloropropane	50.0000	0.0000	51.6424	103		75 - 125
Dibromomethane	50.0000	0.0000	57.2232	114		75 - 125
Bromodichloromethane	50.0000	0.0000	58.2864	117		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.8533	108		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	57.7202	115		60 - 135
Toluene	50.0000	0.0000	52.2291	104		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	56.9467	114		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	52.3210	105		75 - 125
1,3-Dichloropropane	50.0000	0.0000	53.3821	107		75 - 125
Tetrachloroethene	50.0000	0.0000	51.1883	102		45 - 150
2-Hexanone	50.0000	0.0000	59.8863	120		55 - 130
Dibromochloromethane	50.0000	0.0000	53.9895	108		60 - 135
1,2-Dibromoethane	50.0000	0.0000	53.8546	108		80 - 120
Chlorobenzene	50.0000	0.0000	52.0246	104		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	56.0039	112		80 - 130
Ethylbenzene	50.0000	0.0000	50.6724	101		75 - 125
m,p-Xylene	100.0000	0.0000	104.6298	105		75 - 130
o-Xylene	50.0000	0.0000	51.2754	103		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab Sample ID: LCS-73808 LCS Lot No.:

Date Extracted: 09/20/2013 Date Analyzed (1): 09/20/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	155.9051	104		81 - 121
Styrene	50.0000	0.0000	50.3932	101		65 - 135
Bromoform	50.0000	0.0000	44.5368	89		70 - 130
Isopropylbenzene	50.0000	0.0000	51.4299	103		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	42.5957	85		65 - 130
Bromobenzene	50.0000	0.0000	49.3649	99		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	46.2145	92		75 - 125
n-Propylbenzene	50.0000	0.0000	47.3980	95		70 - 130
2-Chlorotoluene	50.0000	0.0000	47.8808	96		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	47.6653	95		75 - 130
4-Chlorotoluene	50.0000	0.0000	48.0220	96		75 - 130
tert-Butylbenzene	50.0000	0.0000	48.5639	97		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.5911	97		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.9716	94		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.4052	97		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	49.5424	99		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.4316	95		75 - 125
n-Butylbenzene	50.0000	0.0000	48.8828	98		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	49.0210	98		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	47.6774	95		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	48.1003	96		65 - 135
Hexachlorobutadiene	50.0000	0.0000	50.2623	101		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	49.9039	100		55 - 140
Naphthalene	50.0000	0.0000	41.8982	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
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab Sample ID: LCS-73820 LCS Lot No.:

Date Extracted: 09/20/2013 Date Analyzed (1): 09/20/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	41.2561	83		35 - 135
Chloromethane	50.0000	0.0000	48.7096	97		50 - 130
Vinyl chloride	50.0000	0.0000	51.5836	103		60 - 125
Bromomethane	50.0000	0.0000	48.7804	98		30 - 160
Chloroethane	50.0000	0.0000	46.6582	93		40 - 155
Trichlorofluoromethane	50.0000	0.0000	40.5211	81		25 - 185
1,1-Dichloroethene	50.0000	0.0000	52.0155	104		65 - 135
Acetone	50.0000	0.0000	49.0460	98		20 - 160
Iodomethane	50.0000	0.0000	58.2753	117		70 - 126
Carbon disulfide	50.0000	0.0000	55.2149	110		45 - 160
Methylene chloride	50.0000	0.0000	49.0408	98		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.3317	105		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	46.8608	94		75 - 126
1,1-Dichloroethane	50.0000	0.0000	49.1755	98		75 - 125
Vinyl acetate	50.0000	0.0000	45.7075	91		65 - 138
2-Butanone	50.0000	0.0000	49.9439	100		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	51.6158	103		65 - 125
2,2-Dichloropropane	50.0000	0.0000	45.1637	90		65 - 135
Bromochloromethane	50.0000	0.0000	49.9191	100		70 - 125
Chloroform	50.0000	0.0000	46.5060	93		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	43.2405	86		70 - 135
1,1-Dichloropropene	50.0000	0.0000	52.7483	105		70 - 135
Carbon tetrachloride	50.0000	0.0000	43.5823	87		65 - 135
1,2-Dichloroethane	50.0000	0.0000	39.6177	79		70 - 135
Benzene	50.0000	0.0000	51.5380	103		75 - 125
Trichloroethene	50.0000	0.0000	52.2095	104		75 - 125
1,2-Dichloropropane	50.0000	0.0000	50.5246	101		70 - 120
Dibromomethane	50.0000	0.0000	45.4252	91		75 - 130
Bromodichloromethane	50.0000	0.0000	45.6000	91		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	48.9390	98		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	46.7023	93		45 - 145
Toluene	50.0000	0.0000	50.4122	101		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	46.9897	94		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	48.3292	97		60 - 125
1,3-Dichloropropane	50.0000	0.0000	46.4596	93		75 - 125
Tetrachloroethene	50.0000	0.0000	48.6052	97		65 - 140
2-Hexanone	50.0000	0.0000	43.8848	88		45 - 145
Dibromochloromethane	50.0000	0.0000	46.0607	92		65 - 130
1,2-Dibromoethane	50.0000	0.0000	45.7172	91		70 - 125
Chlorobenzene	50.0000	0.0000	46.2984	93		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	47.5911	95		75 - 125
Ethylbenzene	50.0000	0.0000	48.4227	97		75 - 125
m,p-Xylene	100.0000	0.0000	104.2846	104		80 - 125
o-Xylene	50.0000	0.0000	48.2828	97		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab Sample ID: LCS-73820 LCS Lot No.:

Date Extracted: 09/20/2013 Date Analyzed (1): 09/20/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	152.5674	102		83 - 125
Styrene	50.0000	0.0000	51.0568	102		75 - 125
Bromoform	50.0000	0.0000	49.3244	99		55 - 135
Isopropylbenzene	50.0000	0.0000	46.9692	94		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	43.5474	87		55 - 130
Bromobenzene	50.0000	0.0000	44.9179	90		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	42.4817	85		65 - 130
n-Propylbenzene	50.0000	0.0000	45.1886	90		65 - 135
2-Chlorotoluene	50.0000	0.0000	45.4460	91		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	45.2941	91		65 - 135
4-Chlorotoluene	50.0000	0.0000	46.0303	92		75 - 125
tert-Butylbenzene	50.0000	0.0000	44.2470	88		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	45.0711	90		65 - 135
sec-Butylbenzene	50.0000	0.0000	45.2964	91		65 - 130
4-Isopropyltoluene	50.0000	0.0000	46.6240	93		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	45.6337	91		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	45.3945	91		70 - 125
n-Butylbenzene	50.0000	0.0000	44.4072	89		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	44.6750	89		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	36.4124	73		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	42.9909	86		65 - 130
Hexachlorobutadiene	50.0000	0.0000	42.1005	84		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	42.6836	85		60 - 135
Naphthalene	50.0000	0.0000	41.3892	83		40 - 125

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab Sample ID: LCSD-73808 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	57.0455	114		3		40	30 - 155
Chloromethane	50.0000	59.3269	119		5		40	40 - 125
Vinyl chloride	50.0000	54.3206	109		1		40	50 - 145
Bromomethane	50.0000	56.9348	114		1		40	30 - 145
Chloroethane	50.0000	53.9366	108		3		40	60 - 135
Trichlorofluoromethane	50.0000	65.4380	131		2		40	60 - 145
1,1-Dichloroethene	50.0000	59.2153	118		1		40	70 - 130
Acetone	50.0000	57.9529	116		13		40	40 - 140
Iodomethane	50.0000	56.4529	113		2		40	72 - 121
Carbon disulfide	50.0000	46.6117	93		5		40	35 - 160
Methylene chloride	50.0000	48.1503	96		0		40	55 - 140
trans-1,2-Dichloroethene	50.0000	50.0367	100		3		40	60 - 140
Methyl tert-butyl ether	50.0000	54.5047	109		4		40	65 - 125
1,1-Dichloroethane	50.0000	57.9757	116		3		40	70 - 135
Vinyl acetate	50.0000	63.7556	128		3		40	38 - 163
2-Butanone	50.0000	52.0408	104		2		40	30 - 150
cis-1,2-Dichloroethene	50.0000	54.8542	110		3		40	70 - 125
2,2-Dichloropropane	50.0000	62.3493	125		2		40	70 - 135
Bromochloromethane	50.0000	54.9772	110		0		40	65 - 130
Chloroform	50.0000	59.3557	119		3		40	65 - 135
1,1,1-Trichloroethane	50.0000	62.5789	125		3		40	65 - 130
1,1-Dichloropropene	50.0000	53.5803	107		2		40	75 - 130
Carbon tetrachloride	50.0000	63.0158	126		2		40	65 - 140
1,2-Dichloroethane	50.0000	67.2491	134	*	1		40	70 - 130
Benzene	50.0000	51.3962	103		1		40	80 - 120
Trichloroethene	50.0000	52.5316	105		1		40	70 - 125
1,2-Dichloropropane	50.0000	52.8768	106		3		40	75 - 125
Dibromomethane	50.0000	59.1316	118		3		40	75 - 125
Bromodichloromethane	50.0000	59.0183	118		1		40	75 - 120
cis-1,3-Dichloropropene	50.0000	54.5123	109		1		40	70 - 130
4-Methyl-2-pentanone	50.0000	62.2926	125		8		40	60 - 135
Toluene	50.0000	53.2183	106		2		40	75 - 120
trans-1,3-Dichloropropene	50.0000	58.4922	117		3		40	55 - 140
1,1,2-Trichloroethane	50.0000	53.4195	107		2		40	75 - 125
1,3-Dichloropropane	50.0000	52.5313	105		2		40	75 - 125
Tetrachloroethene	50.0000	51.6045	103		1		40	45 - 150
2-Hexanone	50.0000	63.3056	127		6		40	55 - 130
Dibromochloromethane	50.0000	53.8055	108		0		40	60 - 135
1,2-Dibromoethane	50.0000	53.8162	108		0		40	80 - 120
Chlorobenzene	50.0000	52.0282	104		0		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	55.1250	110		2		40	80 - 130
Ethylbenzene	50.0000	50.9040	102		1		40	75 - 125
m,p-Xylene	100.0000	107.7612	108		3		40	75 - 130
o-Xylene	50.0000	52.4463	105		2		40	80 - 120
Xylene (Total)	150.0000	160.2075	107		3		40	81 - 121
Styrene	50.0000	51.2598	103		2		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab Sample ID: LCSD-73808 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	45.9600	92		3		40	70 - 130
Isopropylbenzene	50.0000	53.2555	107		4		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	43.0588	86		1		40	65 - 130
Bromobenzene	50.0000	48.4949	97		2		40	75 - 125
1,2,3-Trichloropropane	50.0000	46.6248	93		1		40	75 - 125
n-Propylbenzene	50.0000	46.2453	92		3		40	70 - 130
2-Chlorotoluene	50.0000	47.8237	96		0		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	48.6486	97		2		40	75 - 130
4-Chlorotoluene	50.0000	48.0395	96		0		40	75 - 130
tert-Butylbenzene	50.0000	48.0045	96		1		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	49.1300	98		1		40	75 - 130
sec-Butylbenzene	50.0000	47.0054	94		0		40	70 - 125
4-Isopropyltoluene	50.0000	47.7608	96		1		40	75 - 130
1,3-Dichlorobenzene	50.0000	48.7481	97		2		40	75 - 125
1,4-Dichlorobenzene	50.0000	48.1597	96		1		40	75 - 125
n-Butylbenzene	50.0000	47.9624	96		2		40	70 - 135
1,2-Dichlorobenzene	50.0000	48.2466	96		2		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	48.7416	97		2		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	48.6795	97		1		40	65 - 135
Hexachlorobutadiene	50.0000	47.2215	94		7		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	50.6514	101		1		40	55 - 140
Naphthalene	50.0000	44.0926	88		5		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:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-73820

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab File ID: V1M4725.D Lab Sample ID: MB-73820

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 09/20/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:57

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-73820	LCS-73820	V1M4723.D	10:46
02	CB-S1-91213	M1725-03A	V1M4730.D	14:02
03	CB-S2-91213	M1725-04A	V1M4731.D	14:28

COMMENTS:

som13.08.22.A

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-73808

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

Lab File ID: V8D0689.D Lab Sample ID: MB-73808

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 09/20/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:52

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-73808	LCS-73808	V8D0686.D	9:30
02	LCSD-73808	LCSD-73808	V8D0687.D	9:57
03	CB-W1-91213	M1725-01A	V8D0702.D	16:48
04	CB-W2-91213	M1725-02A	V8D0703.D	17:15

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1725 Mod. Ref No.: SDG No.: SM1725

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 09/17/2013 09/17/2013

EPA Sample No.(VSTD#####): VSTD0501L Date Analyzed: 09/20/2013

Lab File ID (Standard): V1M4722.D Time Analyzed: 9:49

Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	262999		4.548		188158		7.413		81600		9.973	
	UPPER LIMIT	525998		5.048		376316		7.913		163200		10.473	
	LOWER LIMIT	131500		4.048		94079		6.913		40800		9.473	
	EPA SAMPLE NO.												
01	LCS-73820	256033		4.550		190140		7.425		83724		9.975	
02	MB-73820	260705		4.545		191114		7.420		82094		9.970	
03	CB-S1-91213	217752		4.553		152592		7.419		60458		9.979	
04	CB-S2-91213	212644		4.546		153229		7.421		61506		9.971	

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.: M1725 Mod. Ref No.: SDG No.: SM1725

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 09/18/2013 09/18/2013

EPA Sample No.(VSTD#####): VSTD05010T Date Analyzed: 09/20/2013

Lab File ID (Standard): V8D0685.D Time Analyzed: 8:49

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	99184		5.236		109392		8.223		71349		10.725	
	UPPER LIMIT	198368		5.736		218784		8.723		142698		11.225	
	LOWER LIMIT	49592		4.736		54696		7.723		35675		10.225	
	EPA SAMPLE NO.												
01	LCS-73808	100619		5.239		110764		8.226		71649		10.728	
02	LCSD-73808	98807		5.239		111531		8.226		73937		10.728	
03	MB-73808	97528		5.236		109287		8.223		62557		10.728	
04	CB-W1-91213	125102		5.236		99748		8.223		52585		10.728	
05	CB-W2-91213	123750		5.236		99400		8.227		53499		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.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

February 28, 2014

Elias Moskal
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Plaza Cleaners
Client Job Number:
Project Number: 00266408.0000
Laboratory Work Order Number: 14B0575

Enclosed are results of analyses for samples received by the laboratory on February 21, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Aaron L. Benoit
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Elias Moskal

REPORT DATE: 2/28/2014

PURCHASE ORDER NUMBER: 00266408.0000

PROJECT NUMBER: 00266408.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14B0575

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Plaza Cleaners

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SVE-3D-021814	14B0575-01	Soil Gas		EPA TO-15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

1,2-Dichloropropane, Acetone, Benzyl chloride

14B0575-01[SVE-3D-021814], B091084-BLK1, B091084-BS1, S005498-CCV1

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

14B0575-01[SVE-3D-021814]

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,1,2,2-Tetrachloroethane, 1,2-Dichloropropane

14B0575-01[SVE-3D-021814], B091084-BLK1, B091084-BS1, S005498-CCV1

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

Acetone, Benzyl chloride, Ethanol

B091084-BS1, S005498-CCV1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 2/21/2014
Field Sample #: SVE-3D-021814
Sample ID: 14B0575-01
Sample Matrix: Soil Gas
Sampled: 2/18/2014 17:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 1331
Canister Size: 6 liter
Flow Controller ID: 4002
Sample Type: Grab

Work Order: 14B0575
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Sample Flags: RL-11

	ppbv				ug/m3			Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
Acetone	ND	40	14		ND	95	20	2/22/14 11:19	WSD
Benzene	3.0	1.0	0.52		9.6	3.2	20	2/22/14 11:19	WSD
Benzyl chloride	ND	1.0	0.19		ND	5.2	20	2/22/14 11:19	WSD
Bromodichloromethane	ND	1.0	0.22		ND	6.7	20	2/22/14 11:19	WSD
Bromoform	ND	1.0	0.19		ND	10	20	2/22/14 11:19	WSD
Bromomethane	ND	1.0	0.69		ND	3.9	20	2/22/14 11:19	WSD
1,3-Butadiene	ND	1.0	0.51		ND	2.2	20	2/22/14 11:19	WSD
2-Butanone (MEK)	1.5	40	0.75	J	4.4	120	20	2/22/14 11:19	WSD
Carbon Disulfide	ND	10	0.34		ND	31	20	2/22/14 11:19	WSD
Carbon Tetrachloride	ND	1.0	0.24		ND	6.3	20	2/22/14 11:19	WSD
Chlorobenzene	ND	1.0	0.35		ND	4.6	20	2/22/14 11:19	WSD
Chloroethane	ND	1.0	0.38		ND	2.6	20	2/22/14 11:19	WSD
Chloroform	0.40	1.0	0.23	J	2.0	4.9	20	2/22/14 11:19	WSD
Chloromethane	ND	2.0	0.44		ND	4.1	20	2/22/14 11:19	WSD
Cyclohexane	ND	1.0	0.57		ND	3.4	20	2/22/14 11:19	WSD
Dibromochloromethane	ND	1.0	0.27		ND	8.5	20	2/22/14 11:19	WSD
1,2-Dibromoethane (EDB)	ND	1.0	0.22		ND	7.7	20	2/22/14 11:19	WSD
1,2-Dichlorobenzene	ND	1.0	0.27		ND	6.0	20	2/22/14 11:19	WSD
1,3-Dichlorobenzene	ND	1.0	0.22		ND	6.0	20	2/22/14 11:19	WSD
1,4-Dichlorobenzene	ND	1.0	0.25		ND	6.0	20	2/22/14 11:19	WSD
Dichlorodifluoromethane (Freon 12)	0.66	1.0	0.43	J	3.3	4.9	20	2/22/14 11:19	WSD
1,1-Dichloroethane	ND	1.0	0.28		ND	4.0	20	2/22/14 11:19	WSD
1,2-Dichloroethane	ND	1.0	0.28		ND	4.0	20	2/22/14 11:19	WSD
1,1-Dichloroethylene	ND	1.0	0.24		ND	4.0	20	2/22/14 11:19	WSD
cis-1,2-Dichloroethylene	0.64	1.0	0.38	J	2.5	4.0	20	2/22/14 11:19	WSD
trans-1,2-Dichloroethylene	ND	1.0	0.26		ND	4.0	20	2/22/14 11:19	WSD
1,2-Dichloropropane	ND	1.0	0.35	L-05, V-05	ND	4.6	20	2/22/14 11:19	WSD
cis-1,3-Dichloropropene	ND	1.0	0.27		ND	4.5	20	2/22/14 11:19	WSD
trans-1,3-Dichloropropene	ND	1.0	0.27		ND	4.5	20	2/22/14 11:19	WSD
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	1.0	0.24		ND	7.0	20	2/22/14 11:19	WSD
1,4-Dioxane	ND	10	6.4		ND	36	20	2/22/14 11:19	WSD
Ethanol	ND	40	18		ND	75	20	2/22/14 11:19	WSD
Ethyl Acetate	ND	1.0	0.75		ND	3.6	20	2/22/14 11:19	WSD
Ethylbenzene	0.52	1.0	0.28	J	2.3	4.3	20	2/22/14 11:19	WSD
4-Ethyltoluene	ND	1.0	0.23		ND	4.9	20	2/22/14 11:19	WSD
Heptane	4.5	1.0	0.32		18	4.1	20	2/22/14 11:19	WSD
Hexachlorobutadiene	ND	1.0	0.38		ND	11	20	2/22/14 11:19	WSD
Hexane	21	40	1.8	J	72	140	20	2/22/14 11:19	WSD

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Plaza Cleaners
Date Received: 2/21/2014
Field Sample #: SVE-3D-021814
Sample ID: 14B0575-01
Sample Matrix: Soil Gas
Sampled: 2/18/2014 17:16

Sample Description/Location:
Sub Description/Location:
Canister ID: 1331
Canister Size: 6 liter
Flow Controller ID: 4002
Sample Type: Grab

Work Order: 14B0575
Initial Vacuum(in Hg): -28
Final Vacuum(in Hg): -5
Receipt Vacuum(in Hg): -4.7
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: Grab

EPA TO-15

Sample Flags: RL-11

	ppbv				ug/m3			Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag**	**Results**	**RL**	**Dilution**	**Analyzed**	**Analyst**
2-Hexanone (MBK)	ND	1.0	0.26		ND	4.1	20	2/22/14 11:19	WSD
Isopropanol	ND	40	1.2		ND	98	20	2/22/14 11:19	WSD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.31		ND	3.6	20	2/22/14 11:19	WSD
Methylene Chloride	4.0	10	1.2	J	14	35	20	2/22/14 11:19	WSD
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.24		ND	4.1	20	2/22/14 11:19	WSD
Naphthalene	ND	1.0	0.54		ND	5.2	20	2/22/14 11:19	WSD
Propene	ND	40	3.1		ND	69	20	2/22/14 11:19	WSD
Styrene	ND	1.0	0.19		ND	4.3	20	2/22/14 11:19	WSD
1,1,2,2-Tetrachloroethane	ND	1.0	0.24	V-05	ND	6.9	20	2/22/14 11:19	WSD
Tetrachloroethylene	1400	2.0	0.57		9400	14	40	2/27/14 6:17	WSD
Tetrahydrofuran	ND	1.0	0.42		ND	2.9	20	2/22/14 11:19	WSD
Toluene	8.8	1.0	0.31		33	3.8	20	2/22/14 11:19	WSD
1,2,4-Trichlorobenzene	ND	1.0	0.38		ND	7.4	20	2/22/14 11:19	WSD
1,1,1-Trichloroethane	ND	1.0	0.18		ND	5.5	20	2/22/14 11:19	WSD
1,1,2-Trichloroethane	ND	1.0	0.30		ND	5.5	20	2/22/14 11:19	WSD
Trichloroethylene	4.2	1.0	0.30		23	5.4	20	2/22/14 11:19	WSD
Trichlorofluoromethane (Freon 11)	0.38	1.0	0.35	J	2.1	5.6	20	2/22/14 11:19	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.28		ND	7.7	20	2/22/14 11:19	WSD
1,2,4-Trimethylbenzene	0.36	1.0	0.25	J	1.8	4.9	20	2/22/14 11:19	WSD
1,3,5-Trimethylbenzene	ND	1.0	0.20		ND	4.9	20	2/22/14 11:19	WSD
Vinyl Acetate	ND	20	0.51		ND	70	20	2/22/14 11:19	WSD
Vinyl Chloride	ND	1.0	0.43		ND	2.6	20	2/22/14 11:19	WSD
m&p-Xylene	1.5	2.0	0.50	J	6.4	8.7	20	2/22/14 11:19	WSD
o-Xylene	0.68	1.0	0.29	J	3.0	4.3	20	2/22/14 11:19	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	109	70-130	2/22/14 11:19
4-Bromofluorobenzene (1)	127	70-130	2/27/14 6:17

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
14B0575-01RE1 [SVE-3D-021814]	B090946	1.5	1	N/A	1000	400	15	02/26/14

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
14B0575-01 [SVE-3D-021814]	B091084	1.5	1	N/A	1000	400	30	02/21/14

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B090946 - TO-15 Prep											
Blank (B090946-BLK1)					Prepared & Analyzed: 02/26/14						
Ethanol	ND	0.80									
Tetrachloroethylene	ND	0.020									
Surrogate: 4-Bromofluorobenzene (1)	*10.2*				*8.00*		*127*	*70-130*			
LCS (B090946-BS1)					Prepared & Analyzed: 02/26/14						
Ethanol	6.46				5.00		129	70-130			
Tetrachloroethylene	4.30				5.00		86.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*10.3*				*8.00*		*128*	*70-130*			
Batch B091084 - TO-15 Prep											
Blank (B091084-BLK1)					Prepared & Analyzed: 02/21/14						
Acetone	ND	1.0									
Benzene	ND	0.025									
Benzyl chloride	ND	0.025									
Bromodichloromethane	ND	0.025									
Bromoform	ND	0.025									
Bromomethane	ND	0.025									
1,3-Butadiene	ND	0.025									
2-Butanone (MEK)	ND	1.0									
Carbon Disulfide	ND	0.25									
Carbon Tetrachloride	ND	0.025									
Chlorobenzene	ND	0.025									
Chloroethane	ND	0.025									
Chloroform	ND	0.025									
Chloromethane	ND	0.050									
Cyclohexane	ND	0.025									
Dibromochloromethane	ND	0.025									
1,2-Dibromoethane (EDB)	ND	0.025									
1,2-Dichlorobenzene	ND	0.025									
1,3-Dichlorobenzene	ND	0.025									
1,4-Dichlorobenzene	ND	0.025									
Dichlorodifluoromethane (Freon 12)	ND	0.025									
1,1-Dichloroethane	ND	0.025									
1,2-Dichloroethane	ND	0.025									
1,1-Dichloroethylene	ND	0.025									
cis-1,2-Dichloroethylene	ND	0.025									
trans-1,2-Dichloroethylene	ND	0.025									
1,2-Dichloropropane	ND	0.025									L-05, V-05
cis-1,3-Dichloropropene	ND	0.025									
trans-1,3-Dichloropropene	ND	0.025									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.025									
1,4-Dioxane	ND	0.25									
Ethanol	ND	1.0									
Ethyl Acetate	ND	0.025									
Ethylbenzene	ND	0.025									

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B091084 - TO-15 Prep											
Blank (B091084-BLK1)					Prepared & Analyzed: 02/21/14						
4-Ethyltoluene	ND	0.025									
Heptane	ND	0.025									
Hexachlorobutadiene	ND	0.025									
Hexane	ND	1.0									
2-Hexanone (MBK)	ND	0.025									
Isopropanol	ND	1.0									
Methyl tert-Butyl Ether (MTBE)	ND	0.025									
Methylene Chloride	0.043	0.25									J
4-Methyl-2-pentanone (MIBK)	ND	0.025									
Naphthalene	ND	0.025									
Propene	ND	1.0									
Styrene	ND	0.025									
1,1,2,2-Tetrachloroethane	ND	0.025									V-05
Tetrachloroethylene	ND	0.025									
Tetrahydrofuran	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trichlorobenzene	ND	0.025									
1,1,1-Trichloroethane	ND	0.025									
1,1,2-Trichloroethane	ND	0.025									
Trichloroethylene	ND	0.025									
Trichlorofluoromethane (Freon 11)	ND	0.025									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
Surrogate: 4-Bromofluorobenzene (1)	*8.93*				*8.00*		*112*	*70-130*			

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC		%REC Limits	RPD	RPD Limit	Flag
Batch B091084 - TO-15 Prep												
LCS (B091084-BS1)					Prepared & Analyzed: 02/21/14							
Acetone	7.49				5.00		**150**	*	70-130			L-05, V-06
Benzene	3.78				5.00		75.5		70-130			
Benzyl chloride	6.76				5.00		**135**	*	70-130			L-05, V-06
Bromodichloromethane	4.59				5.00		91.7		70-130			
Bromoform	5.67				5.00		113		70-130			
Bromomethane	4.32				5.00		86.5		70-130			
1,3-Butadiene	4.71				5.00		94.3		70-130			
2-Butanone (MEK)	5.22				5.00		104		70-130			
Carbon Disulfide	3.86				5.00		77.3		70-130			
Carbon Tetrachloride	5.01				5.00		100		70-130			
Chlorobenzene	4.46				5.00		89.1		70-130			
Chloroethane	4.88				5.00		97.7		70-130			
Chloroform	4.68				5.00		93.6		70-130			
Chloromethane	3.71				5.00		74.1		70-130			
Cyclohexane	3.76				5.00		75.2		70-130			
Dibromochloromethane	5.11				5.00		102		70-130			
1,2-Dibromoethane (EDB)	4.46				5.00		89.1		70-130			
1,2-Dichlorobenzene	5.37				5.00		107		70-130			
1,3-Dichlorobenzene	5.31				5.00		106		70-130			
1,4-Dichlorobenzene	5.38				5.00		108		70-130			
Dichlorodifluoromethane (Freon 12)	5.01				5.00		100		70-130			
1,1-Dichloroethane	4.08				5.00		81.5		70-130			
1,2-Dichloroethane	5.35				5.00		107		70-130			
1,1-Dichloroethylene	4.38				5.00		87.6		70-130			
cis-1,2-Dichloroethylene	4.40				5.00		88.0		70-130			
trans-1,2-Dichloroethylene	4.26				5.00		85.2		70-130			
1,2-Dichloropropane	3.46				5.00		**69.2**	*	70-130			L-05, V-05
cis-1,3-Dichloropropene	4.46				5.00		89.1		70-130			
trans-1,3-Dichloropropene	5.07				5.00		101		70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.77				5.00		95.5		70-130			
1,4-Dioxane	4.04				5.00		80.8		70-130			
Ethanol	5.74				5.00		115		70-130			V-06
Ethyl Acetate	5.70				5.00		114		70-130			
Ethylbenzene	4.90				5.00		98.0		70-130			
4-Ethyltoluene	5.33				5.00		107		70-130			
Heptane	4.07				5.00		81.4		70-130			
Hexachlorobutadiene	5.52				5.00		110		70-130			
Hexane	5.04				5.00		101		70-130			
2-Hexanone (MBK)	4.11				5.00		82.3		70-130			
Isopropanol	6.34				5.00		127		70-130			
Methyl tert-Butyl Ether (MTBE)	5.43				5.00		109		70-130			
Methylene Chloride	4.08				5.00		81.6		70-130			
4-Methyl-2-pentanone (MIBK)	4.68				5.00		93.5		70-130			
Naphthalene	4.35				5.00		87.0		70-130			
Propene	4.37				5.00		87.4		70-130			
Styrene	5.07				5.00		101		70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B091084 - TO-15 Prep											
LCS (B091084-BS1)					Prepared & Analyzed: 02/21/14						
1,1,2,2-Tetrachloroethane	3.90				5.00		78.0	70-130			V-05
Tetrachloroethylene	5.21				5.00		104	70-130			
Tetrahydrofuran	4.77				5.00		95.5	70-130			
Toluene	4.57				5.00		91.4	70-130			
1,2,4-Trichlorobenzene	5.59				5.00		112	70-130			
1,1,1-Trichloroethane	4.89				5.00		97.8	70-130			
1,1,2-Trichloroethane	4.14				5.00		82.8	70-130			
Trichloroethylene	4.20				5.00		83.9	70-130			
Trichlorofluoromethane (Freon 11)	5.98				5.00		120	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.33				5.00		86.5	70-130			
1,2,4-Trimethylbenzene	5.38				5.00		108	70-130			
1,3,5-Trimethylbenzene	5.43				5.00		109	70-130			
Vinyl Acetate	4.68				5.00		93.5	70-130			
Vinyl Chloride	4.44				5.00		88.9	70-130			
m&p-Xylene	10.6				10.0		106	70-130			
o-Xylene	4.94				5.00		98.9	70-130			
Surrogate: 4-Bromofluorobenzene (1)	*9.26*				*8.00*		*116*	*70-130*			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-05	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S005498-CCV1)			Lab File ID: G022102.D			Analyzed: 02/21/14 15:23			
Bromochloromethane (1)	733675	8.768	504192	8.786	146	60 - 140	-0.0180	+/-0.50	
1,4-Difluorobenzene (1)	2269835	10.646	1391643	10.671	163	60 - 140	-0.0250	+/-0.50	
Chlorobenzene-d5 (1)	2024659	15.404	1251346	15.43	162	60 - 140	-0.0260	+/-0.50	
LCS (B091084-BS1)			Lab File ID: G022103.D			Analyzed: 02/21/14 16:01			
Bromochloromethane (1)	667730	8.777	733675	8.768	91	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	2046578	10.654	2269835	10.646	90	60 - 140	0.0080	+/-0.50	
Chlorobenzene-d5 (1)	1788503	15.413	2024659	15.404	88	60 - 140	0.0090	+/-0.50	
Blank (B091084-BLK1)			Lab File ID: G022105.D			Analyzed: 02/21/14 17:27			
Bromochloromethane (1)	743757	8.777	733675	8.768	101	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	2201790	10.646	2269835	10.646	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	1997325	15.404	2024659	15.404	99	60 - 140	0.0000	+/-0.50	
SVE-3D-021814 (14B0575-01)			Lab File ID: G022131.D			Analyzed: 02/22/14 11:19			
Bromochloromethane (1)	1001258	8.777	733675	8.768	136	60 - 140	0.0090	+/-0.50	
1,4-Difluorobenzene (1)	2864320	10.654	2269835	10.646	126	60 - 140	0.0080	+/-0.50	
Chlorobenzene-d5 (1)	2627066	15.413	2024659	15.404	130	60 - 140	0.0090	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S005499-CCV1)			Lab File ID: G022602.D			Analyzed: 02/26/14 14:40			
Bromochloromethane (1)	866576	8.76	504192	8.786	172	60 - 140	-0.0260	+/-0.50	
1,4-Difluorobenzene (1)	2384537	10.646	1391643	10.671	171	60 - 140	-0.0250	+/-0.50	
Chlorobenzene-d5 (1)	2206921	15.404	1251346	15.43	176	60 - 140	-0.0260	+/-0.50	
LCS (B090946-BS1)			Lab File ID: G022603.D			Analyzed: 02/26/14 15:18			
Bromochloromethane (1)	866509	8.768	866576	8.76	100	60 - 140	0.0080	+/-0.50	
1,4-Difluorobenzene (1)	2417439	10.646	2384537	10.646	101	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	2300124	15.413	2206921	15.404	104	60 - 140	0.0090	+/-0.50	
Blank (B090946-BLK1)			Lab File ID: G022607.D			Analyzed: 02/26/14 18:00			
Bromochloromethane (1)	800843	8.777	866576	8.76	92	60 - 140	0.0170	+/-0.50	
1,4-Difluorobenzene (1)	2106673	10.654	2384537	10.646	88	60 - 140	0.0080	+/-0.50	
Chlorobenzene-d5 (1)	1988677	15.413	2206921	15.404	90	60 - 140	0.0090	+/-0.50	
SVE-3D-021814 (14B0575-01RE1)			Lab File ID: G022626.D			Analyzed: 02/27/14 06:17			
Bromochloromethane (1)	903874	8.777	866576	8.76	104	60 - 140	0.0170	+/-0.50	
1,4-Difluorobenzene (1)	2506622	10.654	2384537	10.646	105	60 - 140	0.0080	+/-0.50	
Chlorobenzene-d5 (1)	2391353	15.413	2206921	15.404	108	60 - 140	0.0090	+/-0.50	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S005498-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	6.92	0.6517469	0.9014106		38.3	30 *
Benzene	A	5.00	3.79	0.8942447	0.6775287		-24.2	30
Benzyl chloride	A	5.00	5.09	0.7819351	0.7956603		1.8	30
Bromodichloromethane	A	5.00	4.48	0.6024274	0.539856		-10.4	30
Bromoform	A	5.00	5.02	0.5251071	0.5271691		0.4	30
Bromomethane	A	5.00	4.64	0.628712	0.5830374		-7.3	30
1,3-Butadiene	A	5.00	5.18	0.3792058	0.3932117		3.7	30
2-Butanone (MEK)	A	5.00	5.00	1.267082	1.266782		-0.02	30
Carbon Disulfide	A	5.00	3.88	2.143665	1.663413		-22.4	30
Carbon Tetrachloride	A	5.00	5.04	0.4914556	0.4949851		0.7	30
Chlorobenzene	A	5.00	3.98	0.884138	0.7031102		-20.5	30
Chloroethane	A	5.00	5.12	0.2819568	0.2889039		2.5	30
Chloroform	A	5.00	4.84	1.57814	1.526679		-3.3	30
Chloromethane	A	5.00	3.87	0.5481299	0.4245302		-22.5	30
Cyclohexane	A	5.00	3.74	0.3737589	0.2792746		-25.3	30
Dibromochloromethane	A	5.00	4.68	0.5874548	0.5496013		-6.4	30
1,2-Dibromoethane (EDB)	A	5.00	3.98	0.6051551	0.4822248		-20.3	30
1,2-Dichlorobenzene	A	5.00	4.22	0.7348896	0.6196749		-15.7	30
1,3-Dichlorobenzene	A	5.00	4.16	0.7874897	0.6544581		-16.9	30
1,4-Dichlorobenzene	A	5.00	4.16	0.7922155	0.6599503		-16.7	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.09	1.784229	1.81656		1.8	30
1,1-Dichloroethane	A	5.00	4.28	1.419752	1.215636		-14.4	30
1,2-Dichloroethane	A	5.00	5.44	1.008311	1.097794		8.9	30
1,1-Dichloroethylene	A	5.00	4.82	1.096519	1.057946		-3.5	30
cis-1,2-Dichloroethylene	A	5.00	4.56	1.067416	0.9731633		-8.8	30
trans-1,2-Dichloroethylene	A	5.00	4.45	1.077323	0.9586152		-11.0	30
1,2-Dichloropropane	A	5.00	3.36	0.3618054	0.2432304		-32.8	30 *
cis-1,3-Dichloropropene	A	5.00	4.40	0.437819	0.3853975		-12.0	30
trans-1,3-Dichloropropene	A	5.00	4.76	0.4163178	0.396463		-4.8	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1	A	5.00	4.26	1.762348	1.502937		-14.7	30
1,4-Dioxane	A	5.00	3.75	0.1837701	0.1378201		-25.0	30
Ethanol	A	5.00	7.63	0.1383791	0.2111365		52.6	30 *
Ethyl Acetate	A	5.00	4.23	0.2184979	0.1847815		-15.4	30
Ethylbenzene	A	5.00	4.36	1.335633	1.163659		-12.9	30
4-Ethyltoluene	A	5.00	4.55	1.327228	1.206886		-9.1	30
Heptane	A	5.00	4.03	0.2483239	0.2003472		-19.3	30
Hexachlorobutadiene	A	5.00	4.42	0.4770225	0.4217141		-11.6	30
Hexane	A	5.00	4.76	0.8138059	0.7749175		-4.8	30

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S005498-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT		
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
2-Hexanone (MBK)	A	5.00	4.00	0.6602144	0.5275492		-20.1	30	
Isopropanol	A	5.00	6.24	0.7469515	0.9315732		24.7	30	
Methyl tert-Butyl Ether (MTBE)	A	5.00	5.28	1.775522	1.875553		5.6	30	
Methylene Chloride	A	5.00	3.98	0.8989836	0.7163804		-20.3	30	
4-Methyl-2-pentanone (MIBK)	A	5.00	4.32	0.57191	0.4938086		-13.7	30	
Naphthalene	A	5.00	3.95	1.350914	1.066273		-21.1	30	
Propene	A	5.00	4.48	0.528133	0.4737444		-10.3	30	
Styrene	A	5.00	4.47	0.749994	0.6704797		-10.6	30	
1,1,2,2-Tetrachloroethane	A	5.00	3.30	0.9423023	0.6216229		-34.0	30	*
Tetrachloroethylene	A	5.00	4.67	0.459785	0.4291686		-6.7	30	
Tetrahydrofuran	A	5.00	4.46	0.3133766	0.2796421		-10.8	30	
Toluene	A	5.00	4.25	1.069888	0.9093593		-15.0	30	
1,2,4-Trichlorobenzene	A	5.00	4.09	0.530782	0.4341085		-18.2	30	
1,1,1-Trichloroethane	A	5.00	5.02	0.5060595	0.5083104		0.4	30	
1,1,2-Trichloroethane	A	5.00	3.76	0.4037585	0.3035304		-24.8	30	
Trichloroethylene	A	5.00	4.16	0.3767178	0.3134846		-16.8	30	
Trichlorofluoromethane (Freon 11)	A	5.00	6.17	1.469825	1.813448		23.4	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	A	5.00	4.77	1.348989	1.288132		-4.5	30	
1,2,4-Trimethylbenzene	A	5.00	4.40	1.145482	1.007741		-12.0	30	
1,3,5-Trimethylbenzene	A	5.00	4.63	1.124122	1.041014		-7.4	30	
Vinyl Acetate	A	5.00	6.15	1.840912	2.263446		23.0	30	
Vinyl Chloride	A	5.00	4.84	0.587916	0.5691828		-3.2	30	
m&p-Xylene	A	10.0	9.36	1.040292	0.9732025		-6.4	30	
o-Xylene	A	5.00	4.34	1.091483	0.9465408		-13.3	30	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

EPA TO-15

S005499-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethylene	A	5.00	4.44	0.459785	0.4079457		-11.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Acetone	AIHA,NY,ME
Benzene	AIHA,FL,NJ,NY,VA,ME
Benzyl chloride	AIHA,FL,NJ,NY,VA,ME
Bromodichloromethane	AIHA,NJ,NY,VA,ME
Bromoform	AIHA,NJ,NY,VA,ME
Bromomethane	AIHA,FL,NJ,NY,ME
1,3-Butadiene	AIHA,NJ,NY,VA,ME
2-Butanone (MEK)	AIHA,FL,NJ,NY,VA,ME
Carbon Disulfide	AIHA,NJ,NY,VA,ME
Carbon Tetrachloride	AIHA,FL,NJ,NY,VA,ME
Chlorobenzene	AIHA,FL,NJ,NY,VA,ME
Chloroethane	AIHA,FL,NJ,NY,VA,ME
Chloroform	AIHA,FL,NJ,NY,VA,ME
Chloromethane	AIHA,FL,NJ,NY,VA,ME
Cyclohexane	AIHA,NJ,NY,VA,ME
Dibromochloromethane	AIHA,NY,ME
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,VA,ME
1,3-Dichlorobenzene	AIHA,NJ,NY,ME
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,VA,ME
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME
1,1-Dichloroethane	AIHA,FL,NJ,NY,VA,ME
1,2-Dichloroethane	AIHA,FL,NJ,NY,VA,ME
1,1-Dichloroethylene	AIHA,FL,NJ,NY,VA,ME
cis-1,2-Dichloroethylene	AIHA,FL,NY,VA,ME
trans-1,2-Dichloroethylene	AIHA,NJ,NY,VA,ME
1,2-Dichloropropane	AIHA,FL,NJ,NY,VA,ME
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,VA,ME
trans-1,3-Dichloropropene	AIHA,NY,ME
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,VA,ME
1,4-Dioxane	AIHA,NJ,NY,VA,ME
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,VA,ME
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,VA,ME
Hexachlorobutadiene	AIHA,NJ,NY,VA,ME
Hexane	AIHA,FL,NJ,NY,VA,ME
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,VA,ME
Methylene Chloride	AIHA,FL,NJ,NY,VA,ME
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME
Naphthalene	NY,ME
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,VA,ME
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,VA,ME

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Tetrachloroethylene	AIHA,FL,NJ,NY,VA,ME
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,VA,ME
1,2,4-Trichlorobenzene	AIHA,NJ,NY,VA,ME
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,VA,ME
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,VA,ME
Trichloroethylene	AIHA,FL,NJ,NY,VA,ME
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,VA,ME
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME
Vinyl Acetate	AIHA,FL,NJ,NY,VA,ME
Vinyl Chloride	AIHA,FL,NJ,NY,VA,ME
m&p-Xylene	AIHA,FL,NJ,NY,VA,ME
o-Xylene	AIHA,FL,NJ,NY,VA,ME

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 SPRUCE ST
EAST LONGMEADOW, MA 01028

AIR SAMPLE CHAIN OF CUSTODY RECORD

14B0575

Company Name: ARCADIS-US, INC.
Address: 855 ROUTE 146 - SUITE 210
CLIFTON PARK, NY 12065
Attention: ELY MOSKAL
Project Location: PLAZA CLEANERS - PORT WASHINGTON, NY
Sampled By: CURT WHIPPLE

Telephone: (518) 250-7333
Project # 002666408.0000
Client PO # "

DATA DELIVERY (check one):
☐ FAX ☑ EMAIL ☐ WEBSITE CLIENT
Fax # :
Email: elias.moskal@arcadis-us.com
Format: ☐ EXCEL ☑ PDF ☐ GIS KEY ☐ OTHER EQuIS NYSDEC

Proposal Provided? (For Billing purposes)
☐ yes _____ proposal date

Field ID	Sample Description	Media	Lab #	Date Sampled Start Date Time	Date Sampled Stop Date Time	ONLY USE WHEN USING PUMPS: Total Minutes Sampled	Flow Rate M^3/Min. or L / Min.	Volume Liters or M^3	Matrix Code*	ANALYSIS REQUESTED: TO-15	" Hg: Initial pressure	" Hg: Final Pressure	" Hg: Lab Receipt Pressure	Summa Canister ID	Flow Controller ID
	SVE-3D-021814	S	-01	2/18/14 1715	2/18/14 1716	=1 MIN	—	—	SG	X	-28"	-5"		1331	400

Please fill out completely, sign, da and retain the yello copy for your recor

Summa canisters a flow controllers mu returned within 14 d of receipt or rental f will apply.

Summa canisters w retained for a minim of 14 days after sampling date prior cleaning.

Page 18 of 21 14B0575_2 contest_final_mdl 02 28 14 2204 02/28/14 22:04:42

Laboratory Comments:

CLIENT COMMENTS:
• SHIPMENT INCLUDES 2 CANISTERS UNUSED/DO NOT ANALYZE.

Relinquished by: (signature)	Date/Time: 2/20/14 8:20	
Received by: (signature)	Date/Time: 2/20/14 8:20	
Relinquished by: (signature)	Date/Time: 2/20/14 4:40	
Received by: (signature)	Date/Time: 2/20/14 1640	

Turnaround **
☐ 7-Day
☑ 10-Day (STD)
☐ Other ___
RUSH *
☐ *24-Hr ☐ *48-Hr
☐ *72-Hr ☐ *4-Day
*Approval Required

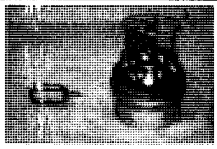
Special Requirements
Regulations: _____
Data Enhancement/RCP? ☐ Y ☑ N
Enhanced Data Package ☐ Y ☑ N
(Surchage Applies)
Required Detection Limits: _____
Other: NYSDEC ASP CAT. B

***Matrix Code:**
SG= SOIL GAS
IA= INDOOR AIR
AMB=AMBIENT
SS = SUB SLAB
D = DUP
BL = BLANK
O = other _____

****Media Codes:**
S=summa can
TB=tedlar bag
P=PUF
T=tube
F= filter
C=cassette
O = Other _____

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAC & WBE/DBE Certified



www.contestlabs.com

con-test® ANALYTICAL LABORATORY

AIR Only Receipt Checklist

39 Spruce St.
East Longmeadow, MA.
01028
P: 413-525-2332
F: 413-525-6405

CLIENT NAME: Arcadis **RECEIVED BY:** CEC **DATE:** 2/20/14

1) Was the chain(s) of custody relinquished and signed? (Yes) No

2) Does the chain agree with the samples? (Yes) No
If not, explain:

3) Are all the samples in good condition? (Yes) No
If not, explain:

4) Are there any samples "On Hold"? Yes (No) Stored where:

5) Are there any RUSH or SHORT HOLDING TIME samples? Yes (No)
Who was notified _____ Date _____ Time _____

6) Location where samples are stored: 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

7) Number of cans Individually Certified or Batch Certified? _____

Containers received at Con-Test

		# of Containers	Types (Size, Duration)
Summa Cans (TO-14/TO-15/APH)		1	6L
Tedlar Bags			
TO-17 Tubes			
Regulators		1	Grab
Restrictors			
Hg/Hopcalite Tube (NIOSH 6009)			
(TO-4A/ TO-10A/TO-13) PUFs			
PCB Florisil Tubes (NIOSH 5503)			
Air cassette			
PM 2.5/PM 10			
TO-11A Cartridges			
Other			

Unused Summas/PUF Media:

Unused Regulators:

1) Was all media (used & unused) checked into the WASP?

2) Were all returned summa cans, Restrictors & Regulators and PUF's documented as returned in the Air Lab Inbound/Outbound Excel Spreadsheet?

Laboratory Comments: 1331 | H002

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	NA	
4) Cooler Temperature is acceptable.	NA	
5) Cooler Temperature is recorded.	NA	
6) COC is filled out in ink and legible.	NA	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	NA	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Log-In Technician Initials: CFC **Date/Time:** 2/28/14 1610

Air Sampling Media Certificate of Analysis

Date Analyzed: 11/5/2014 **Batch #:** 14CC0539

Certification Type: *Batch Certified* ☑ *Individual Certified* ☐

Media Type: *Summa Canister* ☑ *Flow Controllers* ☐

Media IDs: BC1331

Note:Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.80	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1.3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.02	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.02	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.02	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.80	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: WSD 2/28/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

February 28, 2014

Elias Moskal
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: 00266408.0000 - Plaza Cleaners
Client Job Number:
Project Number: 00266408.0000
Laboratory Work Order Number: 14B0570

Enclosed are results of analyses for samples received by the laboratory on February 20, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Aaron L. Benoit
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Elias Moskal

REPORT DATE: 2/28/2014

PURCHASE ORDER NUMBER: 00266408.0000

PROJECT NUMBER: 00266408.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14B0570

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 00266408.0000 - Plaza Cleaners

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-3-021814	14B0570-01	Ground Water		SW-846 8260C	
AS-3-021814	14B0570-02	Ground Water		SW-846 8260C	
AS-4-021814	14B0570-03	Ground Water		SW-846 8260C	
AS-5-021814	14B0570-04	Ground Water		SM18-20 4500 CN E	
				SW-846 6010C	
				SW-846 7470A	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
FD-021814	14B0570-05	Ground Water		SW-846 8260C	
TB-021814	14B0570-06	Trip Blank Water		SW-846 8260C	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 6010C

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Antimony

14B0570-04[AS-5-021814], B090886-BS2, B090886-BSD2, B090886-DUP1

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Antimony

14B0570-04[AS-5-021814], B090886-MS2

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Calcium

14B0570-04[AS-5-021814], B090886-MS2

Duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result.

Analyte & Samples(s) Qualified:

Aluminum, Iron

14B0570-04[AS-5-021814], B090886-DUP1

Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).

Analyte & Samples(s) Qualified:

Silver

14B0570-04[AS-5-021814], B090886-DUP1

SW-846 8260C

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Methylene Chloride

B090708-BS1, B090708-BSD1, B090708-MS1, B090708-MSD1, S005471-CCV1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

4-Chlorotoluene, n-Propylbenzene

B090708-BS1

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possiblity of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Dichlorodifluoromethane (Freon 12)

14B0570-03[AS-4-021814], B090708-MS1, B090708-MSD1

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Tetrachloroethylene

14B0570-03[AS-4-021814], B090708-MS1, B090708-MSD1

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Chloroethane, Chloromethane, Methylene Chloride

B090708-MS1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

2-Butanone (MEK), 4-Methyl-2-pentanone (MIBK), trans-1,4-Dichloro-2-butene

14B0570-01[MW-3-021814], 14B0570-02[AS-3-021814], 14B0570-03[AS-4-021814], 14B0570-04[AS-5-021814], 14B0570-05[FD-021814], 14B0570-06[TB-021814], B090708-BLK1, B090708-BS1, B090708-BSD1, B090708-MS1, B090708-MSD1, S005471-CCV1

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Bromomethane

14B0570-03[AS-4-021814], B090708-MS1, B090708-MSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:

1,4-Dioxane, tert-Butyl Alcohol (TBA)

14B0570-01[MW-3-021814], 14B0570-02[AS-3-021814], 14B0570-03[AS-4-021814], 14B0570-04[AS-5-021814], 14B0570-05[FD-021814], 14B0570-06[TB-021814], B090708-BLK1, B090708-BS1, B090708-BSD1, B090708-MS1, B090708-MSD1, S005471-CCV1

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

1,4-Dioxane, 2-Butanone (MEK), Bromomethane, Chloromethane, Methylene Chloride, tert-Butyl Alcohol (TBA)

B090708-BS1, B090708-BSD1, B090708-MS1, B090708-MSD1, S005471-CCV1

SW-846 8270D

Qualifications:

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

N-Nitrosodimethylamine

B090718-BSD1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

Benzidine

B090718-BS1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

1,2-Diphenylhydrazine (as Azobenzene), 2,4-Dinitrotoluene, 3/4-Methylphenol, 4-Chloro-3-methylphenol, Benzidine, Bis(2-chloroisopropyl)ether, Isophorone, N-Nitrosodi-n-propylamine

14B0570-04[AS-5-021814], B090718-BLK1, B090718-BS1, B090718-BSD1

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol, p-Terphenyl-d14

14B0570-04[AS-5-021814], B090718-BLK1

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Benzidine, Bis(2-chloroisopropyl)ether, Di-n-octylphthalate, N-Nitrosodimethylamine

14B0570-04[AS-5-021814], B090718-BLK1, B090718-BS1, B090718-BSD1

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol, 4-Nitroaniline

B090718-BS1, B090718-BSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:

Pentachloronitrobenzene

14B0570-04[AS-5-021814], B090718-BLK1, B090718-BS1, B090718-BSD1

Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol

14B0570-04[AS-5-021814], B090718-BLK1, B090718-BS1, B090718-BSD1

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol, 4-Nitroaniline

14B0570-04[AS-5-021814], B090718-BLK1

---

con-test®
ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: MW-3-021814 Sampled: 2/18/2014 11:25

Sample ID: 14B0570-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	9.4	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Acrylonitrile	ND	10	1.2	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Benzene	ND	2.0	0.16	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Bromobenzene	ND	2.0	0.088	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Bromochloromethane	ND	2.0	0.45	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Bromodichloromethane	ND	1.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Bromoform	ND	2.0	0.42	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Bromomethane	ND	4.0	1.9	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
2-Butanone (MEK)	ND	40	4.7	µg/L	2	R-05	SW-846 8260C	2/21/14	2/21/14 17:01	EEH
tert-Butyl Alcohol (TBA)	ND	40	4.3	µg/L	2	V-16	SW-846 8260C	2/21/14	2/21/14 17:01	EEH
n-Butylbenzene	ND	2.0	0.11	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
sec-Butylbenzene	ND	2.0	0.17	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
tert-Butylbenzene	ND	2.0	0.19	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.15	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Carbon Disulfide	ND	8.0	2.0	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Carbon Tetrachloride	ND	10	0.20	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Chlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Chlorodibromomethane	ND	1.0	0.11	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Chloroethane	ND	4.0	0.32	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Chloroform	ND	4.0	0.29	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Chloromethane	ND	4.0	0.65	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
2-Chlorotoluene	ND	2.0	0.14	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
4-Chlorotoluene	ND	2.0	0.15	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	0.68	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Dibromomethane	ND	2.0	0.14	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2-Dichlorobenzene	ND	2.0	0.15	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,3-Dichlorobenzene	ND	2.0	0.16	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,4-Dichlorobenzene	ND	2.0	0.092	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	0.24	µg/L	2	R-05	SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1-Dichloroethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2-Dichloroethane	ND	2.0	0.39	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1-Dichloroethylene	ND	2.0	0.42	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
cis-1,2-Dichloroethylene	ND	2.0	0.29	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
trans-1,2-Dichloroethylene	ND	2.0	0.30	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2-Dichloropropane	ND	2.0	0.22	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,3-Dichloropropane	ND	1.0	0.20	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
2,2-Dichloropropane	ND	2.0	0.14	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1-Dichloropropene	ND	4.0	0.26	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
cis-1,3-Dichloropropene	ND	1.0	0.12	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
trans-1,3-Dichloropropene	ND	1.0	0.11	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: MW-3-021814 Sampled: 2/18/2014 11:25

Sample ID: 14B0570-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diethyl Ether	ND	4.0	0.44	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Diisopropyl Ether (DIPE)	ND	1.0	0.36	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,4-Dioxane	ND	100	53	µg/L	2	V-16	SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Ethylbenzene	ND	2.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Hexachlorobutadiene	ND	1.0	0.34	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
2-Hexanone (MBK)	ND	20	3.0	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.23	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	0.25	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Methylene Chloride	ND	10	6.4	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.9	µg/L	2	R-05	SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Naphthalene	ND	4.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
n-Propylbenzene	ND	2.0	0.19	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Styrene	ND	2.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Tetrachloroethylene	46	2.0	0.16	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Tetrahydrofuran	ND	20	2.1	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Toluene	ND	2.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2,3-Trichlorobenzene	ND	10	0.28	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,3,5-Trichlorobenzene	ND	2.0	0.28	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1,1-Trichloroethane	ND	2.0	0.19	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1,2-Trichloroethane	ND	2.0	0.23	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Trichloroethylene	ND	2.0	0.15	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.29	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2,3-Trichloropropane	ND	4.0	0.24	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.18	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,2,4-Trimethylbenzene	ND	2.0	0.36	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
1,3,5-Trimethylbenzene	ND	2.0	0.20	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
Vinyl Chloride	ND	4.0	0.27	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
m+p Xylene	ND	4.0	0.36	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH
o-Xylene	ND	2.0	0.22	µg/L	2		SW-846 8260C	2/21/14	2/21/14 17:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	82.7	70-130		2/21/14 17:01
Toluene-d8	114	70-130		2/21/14 17:01
4-Bromofluorobenzene	119	70-130		2/21/14 17:01

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-3-021814 Sampled: 2/18/2014 12:45

Sample ID: 14B0570-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 15:40	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 15:40	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-3-021814 Sampled: 2/18/2014 12:45

Sample ID: 14B0570-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Tetrachloroethylene	35	1.0	0.080	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Trichloroethylene	0.14	1.0	0.077	µg/L	1	J	SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:40	EEH

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	83.2	70-130		2/21/14 15:40
Toluene-d8	109	70-130		2/21/14 15:40
4-Bromofluorobenzene	100	70-130		2/21/14 15:40

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-4-021814 Sampled: 2/18/2014 14:30

Sample ID: 14B0570-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Bromomethane	ND	2.0	0.94	µg/L	1	R-06	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1	MS-07A	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners | Sample Description: | Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-4-021814 | Sampled: 2/18/2014 14:30

Sample ID: 14B0570-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Tetrachloroethylene	42	1.0	0.080	µg/L	1	MS-19	SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 14:47	EEH

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	82.6	70-130		2/21/14 14:47
Toluene-d8	108	70-130		2/21/14 14:47
4-Bromofluorobenzene	107	70-130		2/21/14 14:47

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 12:33	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 12:33	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners | Sample Description: | Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 | Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Tetrachloroethylene	7.1	1.0	0.080	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 12:33	EEH

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	85.1	70-130		2/21/14 12:33
Toluene-d8	104	70-130		2/21/14 12:33
4-Bromofluorobenzene	115	70-130		2/21/14 12:33

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	5.0	3.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Acenaphthylene	ND	5.0	3.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Acetophenone	ND	10	4.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Aniline	ND	5.0	4.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Anthracene	ND	5.0	2.7	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzidine	ND	20	16	µg/L	1	R-05, V-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzo(a)anthracene	ND	5.0	2.5	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzo(a)pyrene	ND	5.0	2.2	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzo(b)fluoranthene	ND	5.0	2.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzo(g,h,i)perylene	ND	5.0	3.5	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzo(k)fluoranthene	ND	5.0	3.0	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Benzoic Acid	ND	10	2.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Bis(2-chloroethoxy)methane	ND	10	4.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Bis(2-chloroethyl)ether	ND	10	5.7	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Bis(2-chloroisopropyl)ether	ND	10	7.3	µg/L	1	V-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Bis(2-Ethylhexyl)phthalate	5.7	10	4.3	µg/L	1	J	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4-Bromophenylphenylether	ND	10	3.3	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Butylbenzylphthalate	ND	10	3.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Carbazole	ND	10	4.2	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4-Chloroaniline	ND	10	3.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4-Chloro-3-methylphenol	ND	10	7.1	µg/L	1	R-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2-Chloronaphthalene	ND	10	4.0	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2-Chlorophenol	ND	10	4.0	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4-Chlorophenylphenylether	ND	10	4.5	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Chrysene	ND	5.0	2.7	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Dibenz(a,h)anthracene	ND	5.0	4.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Dibenzofuran	ND	5.0	3.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Di-n-butylphthalate	ND	10	4.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1,2-Dichlorobenzene	ND	5.0	3.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1,3-Dichlorobenzene	ND	5.0	3.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1,4-Dichlorobenzene	ND	5.0	3.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
3,3-Dichlorobenzidine	ND	10	3.7	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,4-Dichlorophenol	ND	10	4.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Diethylphthalate	ND	10	5.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,4-Dimethylphenol	ND	10	5.0	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Dimethylphthalate	ND	10	3.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4,6-Dinitro-2-methylphenol	ND	10	7.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,4-Dinitrophenol	ND	10	4.6	µg/L	1	V-19, V-20	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,4-Dinitrotoluene	ND	10	6.8	µg/L	1	R-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,6-Dinitrotoluene	ND	10	4.7	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Di-n-octylphthalate	ND	10	4.3	µg/L	1	V-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	3.9	µg/L	1	R-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Fluoranthene	ND	5.0	4.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Fluorene	ND	5.0	4.3	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Hexachlorobenzene	ND	10	3.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Hexachlorobutadiene	ND	10	3.3	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Hexachlorocyclopentadiene	ND	10	5.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Hexachloroethane	ND	10	4.2	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Indeno(1,2,3-cd)pyrene	ND	5.0	4.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Isophorone	ND	10	4.4	µg/L	1	R-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1-Methylnaphthalene	ND	5.0	4.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2-Methylnaphthalene	ND	5.0	4.1	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2-Methylphenol	ND	10	5.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
3/4-Methylphenol	ND	10	4.8	µg/L	1	R-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Naphthalene	ND	5.0	3.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2-Nitroaniline	ND	10	8.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
3-Nitroaniline	ND	10	5.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4-Nitroaniline	ND	10	7.4	µg/L	1	V-20	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Nitrobenzene	ND	10	4.6	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2-Nitrophenol	ND	10	3.8	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
4-Nitrophenol	ND	10	4.3	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
N-Nitrosodimethylamine	ND	10	8.6	µg/L	1	V-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
N-Nitrosodiphenylamine	ND	10	4.0	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
N-Nitrosodi-n-propylamine	ND	10	5.8	µg/L	1	R-05	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Pentachloronitrobenzene	ND	10	3.6	µg/L	1	V-16	SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Pentachlorophenol	ND	10	3.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Phenanthrene	ND	5.0	2.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Phenol	ND	10	2.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Pyrene	ND	5.0	3.9	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
Pyridine	ND	5.0	4.2	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1,2,4,5-Tetrachlorobenzene	ND	10	3.1	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
1,2,4-Trichlorobenzene	ND	5.0	3.1	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,4,5-Trichlorophenol	ND	10	4.7	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR
2,4,6-Trichlorophenol	ND	10	4.4	µg/L	1		SW-846 8270D	2/21/14	2/22/14 14:53	CMR

Surrogates	% Recovery		Recovery Limits	Flag	
2-Fluorophenol	51.1		15-110		2/22/14 14:53
Phenol-d6	40.0		15-110		2/22/14 14:53
Nitrobenzene-d5	83.3		30-130		2/22/14 14:53
2-Fluorobiphenyl	75.4		30-130		2/22/14 14:53
2,4,6-Tribromophenol	**134**	*	15-110	S-07	2/22/14 14:53
p-Terphenyl-d14	126		30-130		2/22/14 14:53

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners | Sample Description: | Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 | Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [1]	ND	0.20	0.044	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Aldrin [1]	ND	0.050	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
alpha-BHC [1]	ND	0.050	0.0030	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
beta-BHC [1]	ND	0.050	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
delta-BHC [1]	ND	0.050	0.0050	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
gamma-BHC (Lindane) [1]	ND	0.030	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Chlordane [1]	ND	0.20	0.11	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
4,4'-DDD [1]	ND	0.040	0.010	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
4,4'-DDE [1]	ND	0.040	0.0050	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
4,4'-DDT [1]	0.052	0.040	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Dieldrin [1]	ND	0.0020	0.0020	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Endosulfan I [1]	ND	0.050	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Endosulfan II [1]	ND	0.080	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Endosulfan sulfate [1]	ND	0.080	0.011	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Endrin [1]	ND	0.080	0.0050	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Endrin aldehyde [1]	ND	0.080	0.013	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Endrin ketone [1]	ND	0.080	0.0040	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Heptachlor [1]	ND	0.050	0.0050	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Heptachlor epoxide [1]	ND	0.050	0.0030	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Hexachlorobenzene [1]	ND	0.050	0.0050	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Methoxychlor [1]	ND	0.50	0.015	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB
Toxaphene [1]	ND	1.0	0.51	µg/L	1		SW-846 8081B	2/25/14	2/27/14 0:51	JMB

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	66.8	30-150		2/27/14 0:51
Decachlorobiphenyl [2]	64.1	30-150		2/27/14 0:51
Tetrachloro-m-xylene [1]	70.4	30-150		2/27/14 0:51
Tetrachloro-m-xylene [2]	64.5	30-150		2/27/14 0:51

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	0.099	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1221 [1]	ND	0.20	0.17	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1232 [1]	ND	0.20	0.10	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1242 [1]	ND	0.20	0.069	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1248 [1]	ND	0.20	0.093	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1254 [1]	ND	0.20	0.11	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1260 [1]	ND	0.20	0.079	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1262 [1]	ND	0.20	0.12	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL
Aroclor-1268 [1]	ND	0.20	0.082	µg/L	1		SW-846 8082A	2/25/14	2/26/14 18:28	KAL

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	91.4	30-150		2/26/14 18:28
Decachlorobiphenyl [2]	91.1	30-150		2/26/14 18:28
Tetrachloro-m-xylene [1]	82.8	30-150		2/26/14 18:28
Tetrachloro-m-xylene [2]	88.5	30-150		2/26/14 18:28

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.78	0.050	0.026	mg/L	1	R-01	SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Antimony	ND	0.050	0.030	mg/L	1	L-02, MS-11	SW-846 6010C	2/25/14	2/28/14 14:57	OP
Arsenic	ND	0.010	0.0086	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Barium	0.071	0.050	0.015	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Beryllium	ND	0.0040	0.0010	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Cadmium	ND	0.0040	0.0018	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Calcium	39	0.15	0.088	mg/L	1	MS-19	SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Chromium	0.0051	0.010	0.0034	mg/L	1	J	SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Cobalt	ND	0.050	0.0075	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Copper	0.013	0.010	0.0050	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Iron	1.6	0.050	0.026	mg/L	1	R-01	SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Lead	0.017	0.010	0.0027	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Magnesium	12	0.15	0.037	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Manganese	0.023	0.010	0.0020	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Mercury	ND	0.00010	0.000048	mg/L	1		SW-846 7470A	2/25/14	2/27/14 12:10	AMP
Nickel	ND	0.010	0.0017	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Potassium	2.7	2.0	0.46	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Selenium	ND	0.050	0.016	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Silver	0.0083	0.0050	0.0040	mg/L	1	R-04	SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Sodium	66	2.0	1.9	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Thallium	ND	0.050	0.020	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Vanadium	ND	0.010	0.0040	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH
Zinc	0.045	0.020	0.0071	mg/L	1		SW-846 6010C	2/25/14	2/26/14 13:19	KSH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: AS-5-021814 Sampled: 2/18/2014 16:00

Sample ID: 14B0570-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyanide	ND	0.010	0.0080	mg/L	1		SM18-20 4500 CN E	2/24/14	2/25/14 11:00	VLA

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners | Sample Description: | Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: FD-021814 | Sampled: 2/18/2014 12:45

Sample ID: 14B0570-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 15:14	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 15:14	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners Sample Description: Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: FD-021814 Sampled: 2/18/2014 12:45

Sample ID: 14B0570-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Tetrachloroethylene	32	1.0	0.080	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 15:14	EEH

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	83.5	70-130		2/21/14 15:14
Toluene-d8	102	70-130		2/21/14 15:14
4-Bromofluorobenzene	95.4	70-130		2/21/14 15:14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners | Sample Description: | Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: TB-021814 | Sampled: 2/18/2014 00:00

Sample ID: 14B0570-06

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	5.0	50	4.7	µg/L	1	J	SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 11:40	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 11:40	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 00266408.0000 - Plaza Cleaners | Sample Description: | Work Order: 14B0570

Date Received: 2/20/2014

Field Sample #: TB-021814 | Sampled: 2/18/2014 00:00

Sample ID: 14B0570-06

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1	R-05	SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	2/21/14	2/21/14 11:40	EEH

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	84.7	70-130		2/21/14 11:40
Toluene-d8	115	70-130		2/21/14 11:40
4-Bromofluorobenzene	108	70-130		2/21/14 11:40

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

SM18-20 4500 CN E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-04 [AS-5-021814]	B090844	50.0	50.0	02/24/14

Prep Method: SW-846 3005A-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-04 [AS-5-021814]	B090886	50.0	50.0	02/25/14

Prep Method: SW-846 7470A Prep-SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-04 [AS-5-021814]	B090875	6.00	6.00	02/25/14

Prep Method: SW-846 3510C-SW-846 8081B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-04 [AS-5-021814]	B090835	1000	10.0	02/25/14

Prep Method: SW-846 3510C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-04 [AS-5-021814]	B090836	1000	10.0	02/25/14

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-01 [MW-3-021814]	B090708	2.5	5.00	02/21/14
14B0570-02 [AS-3-021814]	B090708	5	5.00	02/21/14
14B0570-03 [AS-4-021814]	B090708	5	5.00	02/21/14
14B0570-04 [AS-5-021814]	B090708	5	5.00	02/21/14
14B0570-05 [FD-021814]	B090708	5	5.00	02/21/14
14B0570-06 [TB-021814]	B090708	5	5.00	02/21/14

Prep Method: SW-846 3510C-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14B0570-04 [AS-5-021814]	B090718	1000	1.00	02/21/14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090708 - SW-846 5030B										
Blank (B090708-BLK1)				Prepared & Analyzed: 02/21/14						
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							R-05
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-16
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							R-05
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B090708 - SW-846 5030B											
Blank (B090708-BLK1)				Prepared & Analyzed: 02/21/14							
Methylene Chloride	ND	5.0	µg/L								
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							R-05	
Naphthalene	ND	2.0	µg/L								
n-Propylbenzene	ND	1.0	µg/L								
Styrene	ND	1.0	µg/L								
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L								
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L								
Tetrachloroethylene	ND	1.0	µg/L								
Tetrahydrofuran	ND	10	µg/L								
Toluene	ND	1.0	µg/L								
1,2,3-Trichlorobenzene	ND	5.0	µg/L								
1,2,4-Trichlorobenzene	ND	1.0	µg/L								
1,3,5-Trichlorobenzene	ND	1.0	µg/L								
1,1,1-Trichloroethane	ND	1.0	µg/L								
1,1,2-Trichloroethane	ND	1.0	µg/L								
Trichloroethylene	ND	1.0	µg/L								
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*20.8*		µg/L	25.0		83.0	70-130				
Surrogate: Toluene-d8	*27.3*		µg/L	25.0		109	70-130				
Surrogate: 4-Bromofluorobenzene	*26.9*		µg/L	25.0		108	70-130				
LCS (B090708-BS1)				Prepared & Analyzed: 02/21/14							
Acetone	109	50	µg/L	100		109	70-160				†
Acrylonitrile	11.1	5.0	µg/L	10.0		111	70-130				
tert-Amyl Methyl Ether (TAME)	8.19	0.50	µg/L	10.0		81.9	70-130				
Benzene	8.65	1.0	µg/L	10.0		86.5	70-130				
Bromobenzene	12.8	1.0	µg/L	10.0		128	70-130				
Bromochloromethane	9.27	1.0	µg/L	10.0		92.7	70-130				
Bromodichloromethane	9.64	0.50	µg/L	10.0		96.4	70-130				
Bromoform	12.0	1.0	µg/L	10.0		120	70-130				
Bromomethane	12.9	2.0	µg/L	10.0		129	40-160			V-20	†
2-Butanone (MEK)	100	20	µg/L	100		100	40-160			R-05, V-20	†
tert-Butyl Alcohol (TBA)	126	20	µg/L	100		126	40-160			V-16, V-20	†
n-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130				
sec-Butylbenzene	9.68	1.0	µg/L	10.0		96.8	70-130				
tert-Butylbenzene	9.51	1.0	µg/L	10.0		95.1	70-130				
tert-Butyl Ethyl Ether (TBEE)	8.60	0.50	µg/L	10.0		86.0	70-130				
Carbon Disulfide	9.68	4.0	µg/L	10.0		96.8	70-130				
Carbon Tetrachloride	10.1	5.0	µg/L	10.0		101	70-130				
Chlorobenzene	9.70	1.0	µg/L	10.0		97.0	70-130				
Chlorodibromomethane	11.2	0.50	µg/L	10.0		112	70-130				
Chloroethane	12.8	2.0	µg/L	10.0		128	70-130				
Chloroform	9.43	2.0	µg/L	10.0		94.3	70-130				
Chloromethane	10.8	2.0	µg/L	10.0		108	40-160			V-20	†
2-Chlorotoluene	13.0	1.0	µg/L	10.0		130	70-130				

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B090708 - SW-846 5030B												
LCS (B090708-BS1)				Prepared & Analyzed: 02/21/14								
4-Chlorotoluene	13.4	1.0	µg/L	10.0		**134**	*	70-130			L-07	
1,2-Dibromo-3-chloropropane (DBCP)	10.2	5.0	µg/L	10.0		102		70-130				
1,2-Dibromoethane (EDB)	9.59	0.50	µg/L	10.0		95.9		70-130				
Dibromomethane	9.39	1.0	µg/L	10.0		93.9		70-130				
1,2-Dichlorobenzene	9.20	1.0	µg/L	10.0		92.0		70-130				
1,3-Dichlorobenzene	9.41	1.0	µg/L	10.0		94.1		70-130				
1,4-Dichlorobenzene	9.80	1.0	µg/L	10.0		98.0		70-130				
trans-1,4-Dichloro-2-butene	10.0	2.0	µg/L	10.0		100		70-130			R-05	
Dichlorodifluoromethane (Freon 12)	4.17	2.0	µg/L	10.0		41.7		40-160				†
1,1-Dichloroethane	8.87	1.0	µg/L	10.0		88.7		70-130				
1,2-Dichloroethane	9.45	1.0	µg/L	10.0		94.5		70-130				
1,1-Dichloroethylene	11.2	1.0	µg/L	10.0		112		70-130				
cis-1,2-Dichloroethylene	9.85	1.0	µg/L	10.0		98.5		70-130				
trans-1,2-Dichloroethylene	8.62	1.0	µg/L	10.0		86.2		70-130				
1,2-Dichloropropane	9.25	1.0	µg/L	10.0		92.5		70-130				
1,3-Dichloropropane	10.1	0.50	µg/L	10.0		101		70-130				
2,2-Dichloropropane	9.54	1.0	µg/L	10.0		95.4		40-130				†
1,1-Dichloropropene	9.36	2.0	µg/L	10.0		93.6		70-130				
cis-1,3-Dichloropropene	11.3	0.50	µg/L	10.0		113		70-130				
trans-1,3-Dichloropropene	10.7	0.50	µg/L	10.0		107		70-130				
Diethyl Ether	10.3	2.0	µg/L	10.0		103		70-130				
Diisopropyl Ether (DIPE)	9.96	0.50	µg/L	10.0		99.6		70-130				
1,4-Dioxane	112	50	µg/L	100		112		40-130			V-16, V-20	†
Ethylbenzene	10.0	1.0	µg/L	10.0		100		70-130				
Hexachlorobutadiene	8.00	0.50	µg/L	10.0		80.0		70-130				
2-Hexanone (MBK)	94.8	10	µg/L	100		94.8		70-160				†
Isopropylbenzene (Cumene)	11.1	1.0	µg/L	10.0		111		70-130				
p-Isopropyltoluene (p-Cymene)	9.67	1.0	µg/L	10.0		96.7		70-130				
Methyl tert-Butyl Ether (MTBE)	8.19	1.0	µg/L	10.0		81.9		70-130				
Methylene Chloride	16.4	5.0	µg/L	10.0		**164**	*	70-130			L-02, V-20	
4-Methyl-2-pentanone (MIBK)	115	10	µg/L	100		115		70-160			R-05	†
Naphthalene	7.05	2.0	µg/L	10.0		70.5		40-130				†
n-Propylbenzene	13.9	1.0	µg/L	10.0		**139**	*	70-130			L-07	
Styrene	10.0	1.0	µg/L	10.0		100		70-130				
1,1,1,2-Tetrachloroethane	10.8	1.0	µg/L	10.0		108		70-130				
1,1,2,2-Tetrachloroethane	11.6	0.50	µg/L	10.0		116		70-130				
Tetrachloroethylene	9.84	1.0	µg/L	10.0		98.4		70-130				
Tetrahydrofuran	10.4	10	µg/L	10.0		104		70-130				
Toluene	9.79	1.0	µg/L	10.0		97.9		70-130				
1,2,3-Trichlorobenzene	7.38	5.0	µg/L	10.0		73.8		70-130				
1,2,4-Trichlorobenzene	7.37	1.0	µg/L	10.0		73.7		70-130				
1,3,5-Trichlorobenzene	8.16	1.0	µg/L	10.0		81.6		70-130				
1,1,1-Trichloroethane	9.47	1.0	µg/L	10.0		94.7		70-130				
1,1,2-Trichloroethane	11.7	1.0	µg/L	10.0		117		70-130				
Trichloroethylene	9.55	1.0	µg/L	10.0		95.5		70-130				
Trichlorofluoromethane (Freon 11)	11.4	2.0	µg/L	10.0		114		70-130				
1,2,3-Trichloropropane	11.1	2.0	µg/L	10.0		111		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0		103		70-130				
1,2,4-Trimethylbenzene	9.28	1.0	µg/L	10.0		92.8		70-130				
1,3,5-Trimethylbenzene	12.8	1.0	µg/L	10.0		128		70-130				
Vinyl Chloride	7.77	2.0	µg/L	10.0		77.7		40-160				†

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes	
Batch B090708 - SW-846 5030B												
LCS (B090708-BS1)				Prepared & Analyzed: 02/21/14								
m+p Xylene	19.7	2.0	µg/L	20.0		98.4	70-130					
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130					
Surrogate: 1,2-Dichloroethane-d4	*22.8*		µg/L	25.0		91.0	70-130					
Surrogate: Toluene-d8	*28.8*		µg/L	25.0		115	70-130					
Surrogate: 4-Bromofluorobenzene	*28.1*		µg/L	25.0		112	70-130					
LCS Dup (B090708-BSD1)				Prepared & Analyzed: 02/21/14								
Acetone	95.3	50	µg/L	100		95.3	70-160	13.0		25		†
Acrylonitrile	10.7	5.0	µg/L	10.0		107	70-130	3.39		25		
tert-Amyl Methyl Ether (TAME)	7.83	0.50	µg/L	10.0		78.3	70-130	4.49		25		
Benzene	8.40	1.0	µg/L	10.0		84.0	70-130	2.93		25		
Bromobenzene	12.2	1.0	µg/L	10.0		122	70-130	5.27		25		
Bromochloromethane	9.75	1.0	µg/L	10.0		97.5	70-130	5.05		25		
Bromodichloromethane	10.6	0.50	µg/L	10.0		106	70-130	9.58		25		
Bromoform	10.4	1.0	µg/L	10.0		104	70-130	14.5		25		
Bromomethane	16.0	2.0	µg/L	10.0		160	40-160	21.5		25	V-20	†
2-Butanone (MEK)	74.8	20	µg/L	100		74.8	40-160	**29.0**	*	25	R-05, V-20	†
tert-Butyl Alcohol (TBA)	108	20	µg/L	100		108	40-160	15.0		25	V-16, V-20	†
n-Butylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130	4.60		25		
sec-Butylbenzene	9.39	1.0	µg/L	10.0		93.9	70-130	3.04		25		
tert-Butylbenzene	9.64	1.0	µg/L	10.0		96.4	70-130	1.36		25		
tert-Butyl Ethyl Ether (TBEE)	8.52	0.50	µg/L	10.0		85.2	70-130	0.935		25		
Carbon Disulfide	10.1	4.0	µg/L	10.0		101	70-130	3.85		25		
Carbon Tetrachloride	9.58	5.0	µg/L	10.0		95.8	70-130	5.38		25		
Chlorobenzene	9.49	1.0	µg/L	10.0		94.9	70-130	2.19		25		
Chlorodibromomethane	12.1	0.50	µg/L	10.0		121	70-130	8.33		25		
Chloroethane	13.0	2.0	µg/L	10.0		130	70-130	1.16		25		
Chloroform	9.74	2.0	µg/L	10.0		97.4	70-130	3.23		25		
Chloromethane	12.7	2.0	µg/L	10.0		127	40-160	16.9		25	V-20	†
2-Chlorotoluene	11.7	1.0	µg/L	10.0		117	70-130	10.8		25		
4-Chlorotoluene	11.3	1.0	µg/L	10.0		113	70-130	17.4		25		
1,2-Dibromo-3-chloropropane (DBCP)	8.26	5.0	µg/L	10.0		82.6	70-130	21.1		25		
1,2-Dibromoethane (EDB)	10.5	0.50	µg/L	10.0		105	70-130	8.96		25		
Dibromomethane	10.3	1.0	µg/L	10.0		103	70-130	9.53		25		
1,2-Dichlorobenzene	9.60	1.0	µg/L	10.0		96.0	70-130	4.26		25		
1,3-Dichlorobenzene	9.36	1.0	µg/L	10.0		93.6	70-130	0.533		25		
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	7.75		25		
trans-1,4-Dichloro-2-butene	7.29	2.0	µg/L	10.0		72.9	70-130	**31.4**	*	25	R-05	
Dichlorodifluoromethane (Freon 12)	4.59	2.0	µg/L	10.0		45.9	40-160	9.59		25		†
1,1-Dichloroethane	9.39	1.0	µg/L	10.0		93.9	70-130	5.70		25		
1,2-Dichloroethane	9.43	1.0	µg/L	10.0		94.3	70-130	0.212		25		
1,1-Dichloroethylene	11.7	1.0	µg/L	10.0		117	70-130	4.47		25		
cis-1,2-Dichloroethylene	9.09	1.0	µg/L	10.0		90.9	70-130	8.03		25		
trans-1,2-Dichloroethylene	8.90	1.0	µg/L	10.0		89.0	70-130	3.20		25		
1,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	70-130	14.3		25		
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130	6.52		25		
2,2-Dichloropropane	10.2	1.0	µg/L	10.0		102	40-130	6.69		25		†
1,1-Dichloropropene	9.11	2.0	µg/L	10.0		91.1	70-130	2.71		25		
cis-1,3-Dichloropropene	9.71	0.50	µg/L	10.0		97.1	70-130	15.5		25		
trans-1,3-Dichloropropene	12.1	0.50	µg/L	10.0		121	70-130	12.9		25		
Diethyl Ether	10.4	2.0	µg/L	10.0		104	70-130	1.06		25		
Diisopropyl Ether (DIPE)	9.44	0.50	µg/L	10.0		94.4	70-130	5.36		25		

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes	
Batch B090708 - SW-846 5030B													
LCS Dup (B090708-BSD1)				Prepared & Analyzed: 02/21/14									
1,4-Dioxane	93.9	50	µg/L	100		93.9		40-130	17.1		50	V-16, V-20	† ‡
Ethylbenzene	9.46	1.0	µg/L	10.0		94.6		70-130	5.55		25		
Hexachlorobutadiene	9.44	0.50	µg/L	10.0		94.4		70-130	16.5		25		
2-Hexanone (MBK)	85.5	10	µg/L	100		85.5		70-160	10.3		25		†
Isopropylbenzene (Cumene)	10.9	1.0	µg/L	10.0		109		70-130	1.09		25		
p-Isopropyltoluene (p-Cymene)	9.67	1.0	µg/L	10.0		96.7		70-130	0.00		25		
Methyl tert-Butyl Ether (MTBE)	7.81	1.0	µg/L	10.0		78.1		70-130	4.75		25		
Methylene Chloride	18.5	5.0	µg/L	10.0		**185**	*	70-130	12.2		25	L-02, V-20	
4-Methyl-2-pentanone (MIBK)	87.6	10	µg/L	100		87.6		70-160	**27.0**	*	25	R-05	†
Naphthalene	7.24	2.0	µg/L	10.0		72.4		40-130	2.66		25		†
n-Propylbenzene	12.9	1.0	µg/L	10.0		129		70-130	7.68		25		
Styrene	9.68	1.0	µg/L	10.0		96.8		70-130	3.65		25		
1,1,1,2-Tetrachloroethane	10.8	1.0	µg/L	10.0		108		70-130	0.186		25		
1,1,2,2-Tetrachloroethane	9.49	0.50	µg/L	10.0		94.9		70-130	19.8		25		
Tetrachloroethylene	11.3	1.0	µg/L	10.0		113		70-130	13.5		25		
Tetrahydrofuran	9.75	10	µg/L	10.0		97.5		70-130	6.36		25	J	
Toluene	10.4	1.0	µg/L	10.0		104		70-130	6.14		25		
1,2,3-Trichlorobenzene	7.46	5.0	µg/L	10.0		74.6		70-130	1.08		25		
1,2,4-Trichlorobenzene	8.80	1.0	µg/L	10.0		88.0		70-130	17.7		25		
1,3,5-Trichlorobenzene	8.43	1.0	µg/L	10.0		84.3		70-130	3.25		25		
1,1,1-Trichloroethane	9.40	1.0	µg/L	10.0		94.0		70-130	0.742		25		
1,1,2-Trichloroethane	11.7	1.0	µg/L	10.0		117		70-130	0.684		25		
Trichloroethylene	11.5	1.0	µg/L	10.0		115		70-130	18.7		25		
Trichlorofluoromethane (Freon 11)	12.0	2.0	µg/L	10.0		120		70-130	4.80		25		
1,2,3-Trichloropropane	9.53	2.0	µg/L	10.0		95.3		70-130	15.6		25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.0	1.0	µg/L	10.0		110		70-130	6.77		25		
1,2,4-Trimethylbenzene	9.61	1.0	µg/L	10.0		96.1		70-130	3.49		25		
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.0		107		70-130	17.5		25		
Vinyl Chloride	7.98	2.0	µg/L	10.0		79.8		40-160	2.67		25		†
m+p Xylene	19.2	2.0	µg/L	20.0		95.8		70-130	2.57		25		
o-Xylene	9.63	1.0	µg/L	10.0		96.3		70-130	7.40		25		
Surrogate: 1,2-Dichloroethane-d4	*22.0*		µg/L	25.0		88.0		70-130					
Surrogate: Toluene-d8	*28.8*		µg/L	25.0		115		70-130					
Surrogate: 4-Bromofluorobenzene	*27.4*		µg/L	25.0		110		70-130					
Matrix Spike (B090708-MS1)		**Source: 14B0570-03**		Prepared & Analyzed: 02/21/14									
Acetone	156	50	µg/L	150	ND	104		70-130					
Acrylonitrile	15.9	5.0	µg/L	15.0	ND	106		70-130					
tert-Amyl Methyl Ether (TAME)	14.0	0.50	µg/L	15.0	ND	93.5		70-130					
Benzene	13.6	1.0	µg/L	15.0	ND	90.5		70-130					
Bromobenzene	16.5	1.0	µg/L	15.0	ND	110		70-130					
Bromochloromethane	14.5	1.0	µg/L	15.0	ND	96.9		70-130					
Bromodichloromethane	15.8	0.50	µg/L	15.0	ND	105		70-130					
Bromoform	18.4	1.0	µg/L	15.0	ND	122		70-130					
Bromomethane	29.4	2.0	µg/L	15.0	ND	**196**	*	70-130				R-06, V-20	
2-Butanone (MEK)	141	20	µg/L	150	ND	93.9		70-130				R-05, V-20	
tert-Butyl Alcohol (TBA)	180	20	µg/L	150	ND	120		70-130				V-16, V-20	
n-Butylbenzene	15.4	1.0	µg/L	15.0	ND	103		70-130					
sec-Butylbenzene	15.7	1.0	µg/L	15.0	ND	105		70-130					
tert-Butylbenzene	15.6	1.0	µg/L	15.0	ND	104		70-130					
tert-Butyl Ethyl Ether (TBEE)	14.1	0.50	µg/L	15.0	ND	93.9		70-130					
Carbon Disulfide	19.0	4.0	µg/L	15.0	ND	127		70-130					

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B090708 - SW-846 5030B											
Matrix Spike (B090708-MS1)		**Source: 14B0570-03**		Prepared & Analyzed: 02/21/14							
Carbon Tetrachloride	16.0	5.0	µg/L	15.0	ND	106		70-130			
Chlorobenzene	16.0	1.0	µg/L	15.0	ND	107		70-130			
Chlorodibromomethane	15.8	0.50	µg/L	15.0	ND	106		70-130			
Chloroethane	22.1	2.0	µg/L	15.0	ND	**148**	*	70-130			MS-22
Chloroform	15.8	2.0	µg/L	15.0	ND	106		70-130			
Chloromethane	21.4	2.0	µg/L	15.0	ND	**142**	*	70-130			MS-22, V-20
2-Chlorotoluene	15.3	1.0	µg/L	15.0	ND	102		70-130			
4-Chlorotoluene	15.3	1.0	µg/L	15.0	ND	102		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	13.0	5.0	µg/L	15.0	ND	86.4		70-130			
1,2-Dibromoethane (EDB)	14.7	0.50	µg/L	15.0	ND	98.1		70-130			
Dibromomethane	14.8	1.0	µg/L	15.0	ND	98.9		70-130			
1,2-Dichlorobenzene	14.4	1.0	µg/L	15.0	ND	95.7		70-130			
1,3-Dichlorobenzene	15.0	1.0	µg/L	15.0	ND	100		70-130			
1,4-Dichlorobenzene	15.1	1.0	µg/L	15.0	ND	101		70-130			
trans-1,4-Dichloro-2-butene	13.5	2.0	µg/L	15.0	ND	89.9		70-130			R-05
Dichlorodifluoromethane (Freon 12)	9.78	2.0	µg/L	15.0	ND	**65.2**	*	70-130			MS-07A
1,1-Dichloroethane	16.6	1.0	µg/L	15.0	ND	111		70-130			
1,2-Dichloroethane	15.2	1.0	µg/L	15.0	ND	101		70-130			
1,1-Dichloroethylene	19.4	1.0	µg/L	15.0	ND	129		70-130			
cis-1,2-Dichloroethylene	15.1	1.0	µg/L	15.0	ND	100		70-130			
trans-1,2-Dichloroethylene	17.2	1.0	µg/L	15.0	ND	115		70-130			
1,2-Dichloropropane	15.5	1.0	µg/L	15.0	ND	103		70-130			
1,3-Dichloropropane	14.3	0.50	µg/L	15.0	ND	95.1		70-130			
2,2-Dichloropropane	15.1	1.0	µg/L	15.0	ND	100		70-130			
1,1-Dichloropropene	14.8	2.0	µg/L	15.0	ND	98.3		70-130			
cis-1,3-Dichloropropene	14.4	0.50	µg/L	15.0	ND	95.7		70-130			
trans-1,3-Dichloropropene	14.9	0.50	µg/L	15.0	ND	99.1		70-130			
Diethyl Ether	16.8	2.0	µg/L	15.0	ND	112		70-130			
Diisopropyl Ether (DIPE)	14.8	0.50	µg/L	15.0	ND	98.9		70-130			
1,4-Dioxane	140	50	µg/L	150	ND	93.3		70-130			V-16, V-20
Ethylbenzene	17.5	1.0	µg/L	15.0	ND	117		70-130			
Hexachlorobutadiene	19.1	0.50	µg/L	15.0	ND	127		70-130			
2-Hexanone (MBK)	131	10	µg/L	150	ND	87.4		70-130			
Isopropylbenzene (Cumene)	18.5	1.0	µg/L	15.0	ND	124		70-130			
p-Isopropyltoluene (p-Cymene)	15.3	1.0	µg/L	15.0	ND	102		70-130			
Methyl tert-Butyl Ether (MTBE)	15.3	1.0	µg/L	15.0	ND	102		70-130			
Methylene Chloride	24.0	5.0	µg/L	15.0	ND	**160**	*	70-130			L-02, MS-22, V-20
4-Methyl-2-pentanone (MIBK)	140	10	µg/L	150	ND	93.4		70-130			R-05
Naphthalene	14.6	2.0	µg/L	15.0	ND	97.4		70-130			
n-Propylbenzene	17.8	1.0	µg/L	15.0	ND	119		70-130			
Styrene	17.6	1.0	µg/L	15.0	ND	118		70-130			
1,1,1,2-Tetrachloroethane	17.8	1.0	µg/L	15.0	ND	119		70-130			
1,1,2,2-Tetrachloroethane	18.7	0.50	µg/L	15.0	ND	125		70-130			
Tetrachloroethylene	51.3	1.0	µg/L	15.0	41.9	**62.9**	*	70-130			MS-19
Tetrahydrofuran	15.8	10	µg/L	15.0	ND	106		70-130			
Toluene	13.9	1.0	µg/L	15.0	ND	92.5		70-130			
1,2,3-Trichlorobenzene	16.3	5.0	µg/L	15.0	ND	109		70-130			
1,2,4-Trichlorobenzene	16.1	1.0	µg/L	15.0	ND	107		70-130			
1,3,5-Trichlorobenzene	15.6	1.0	µg/L	15.0	ND	104		70-130			
1,1,1-Trichloroethane	15.2	1.0	µg/L	15.0	ND	102		70-130			
1,1,2-Trichloroethane	14.1	1.0	µg/L	15.0	ND	93.9		70-130			
Trichloroethylene	16.5	1.0	µg/L	15.0	ND	110		70-130			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B090708 - SW-846 5030B												
Matrix Spike (B090708-MS1)		**Source: 14B0570-03**		Prepared & Analyzed: 02/21/14								
Trichlorofluoromethane (Freon 11)	19.4	2.0	µg/L	15.0	ND	129		70-130				
1,2,3-Trichloropropane	15.3	2.0	µg/L	15.0	ND	102		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	19.2	1.0	µg/L	15.0	ND	128		70-130				
1,2,4-Trimethylbenzene	14.7	1.0	µg/L	15.0	ND	97.8		70-130				
1,3,5-Trimethylbenzene	14.5	1.0	µg/L	15.0	ND	96.9		70-130				
Vinyl Chloride	15.4	2.0	µg/L	15.0	ND	103		70-130				
m+p Xylene	32.8	2.0	µg/L	30.0	ND	109		70-130				
o-Xylene	16.8	1.0	µg/L	15.0	ND	112		70-130				
Surrogate: 1,2-Dichloroethane-d4	*21.4*		µg/L	25.0		85.4		70-130				
Surrogate: Toluene-d8	*23.6*		µg/L	25.0		94.6		70-130				
Surrogate: 4-Bromofluorobenzene	*29.3*		µg/L	25.0		117		70-130				
Matrix Spike Dup (B090708-MSD1)		**Source: 14B0570-03**		Prepared & Analyzed: 02/21/14								
Acetone	128	50	µg/L	150	ND	85.5		70-130	19.6		30	
Acrylonitrile	13.8	5.0	µg/L	15.0	ND	91.7		70-130	14.5		30	
tert-Amyl Methyl Ether (TAME)	13.6	0.50	µg/L	15.0	ND	90.5		70-130	3.26		30	
Benzene	13.7	1.0	µg/L	15.0	ND	91.3		70-130	0.880		30	
Bromobenzene	14.3	1.0	µg/L	15.0	ND	95.1		70-130	14.6		30	
Bromochloromethane	14.3	1.0	µg/L	15.0	ND	95.2		70-130	1.74		30	
Bromodichloromethane	15.6	0.50	µg/L	15.0	ND	104		70-130	1.21		30	
Bromoform	17.7	1.0	µg/L	15.0	ND	118		70-130	3.71		30	
Bromomethane	21.5	2.0	µg/L	15.0	ND	**143**	*	70-130	**31.0**	*	30	R-06, V-20
2-Butanone (MEK)	151	20	µg/L	150	ND	101		70-130	6.95		30	R-05, V-20
tert-Butyl Alcohol (TBA)	171	20	µg/L	150	ND	114		70-130	5.27		30	V-16, V-20
n-Butylbenzene	14.3	1.0	µg/L	15.0	ND	95.4		70-130	7.40		30	
sec-Butylbenzene	14.5	1.0	µg/L	15.0	ND	96.7		70-130	7.94		30	
tert-Butylbenzene	14.5	1.0	µg/L	15.0	ND	96.9		70-130	7.17		30	
tert-Butyl Ethyl Ether (TBEE)	12.9	0.50	µg/L	15.0	ND	86.1		70-130	8.66		30	
Carbon Disulfide	14.6	4.0	µg/L	15.0	ND	97.7		70-130	25.9		30	
Carbon Tetrachloride	15.7	5.0	µg/L	15.0	ND	105		70-130	1.45		30	
Chlorobenzene	15.0	1.0	µg/L	15.0	ND	100		70-130	6.19		30	
Chlorodibromomethane	13.1	0.50	µg/L	15.0	ND	87.5		70-130	18.8		30	
Chloroethane	17.4	2.0	µg/L	15.0	ND	116		70-130	24.2		30	
Chloroform	15.2	2.0	µg/L	15.0	ND	101		70-130	4.19		30	
Chloromethane	16.1	2.0	µg/L	15.0	ND	107		70-130	28.3		30	V-20
2-Chlorotoluene	15.0	1.0	µg/L	15.0	ND	99.7		70-130	2.05		30	
4-Chlorotoluene	14.6	1.0	µg/L	15.0	ND	97.7		70-130	4.47		30	
1,2-Dibromo-3-chloropropane (DBCP)	15.9	5.0	µg/L	15.0	ND	106		70-130	20.1		30	
1,2-Dibromoethane (EDB)	12.0	0.50	µg/L	15.0	ND	80.1		70-130	20.2		30	
Dibromomethane	15.3	1.0	µg/L	15.0	ND	102		70-130	3.25		30	
1,2-Dichlorobenzene	13.9	1.0	µg/L	15.0	ND	92.6		70-130	3.26		30	
1,3-Dichlorobenzene	13.9	1.0	µg/L	15.0	ND	92.7		70-130	7.75		30	
1,4-Dichlorobenzene	14.3	1.0	µg/L	15.0	ND	95.4		70-130	5.37		30	
trans-1,4-Dichloro-2-butene	11.4	2.0	µg/L	15.0	ND	76.2		70-130	16.5		30	R-05
Dichlorodifluoromethane (Freon 12)	7.62	2.0	µg/L	15.0	ND	**50.8**	*	70-130	24.8		30	MS-07A
1,1-Dichloroethane	15.3	1.0	µg/L	15.0	ND	102		70-130	8.08		30	
1,2-Dichloroethane	15.3	1.0	µg/L	15.0	ND	102		70-130	0.920		30	
1,1-Dichloroethylene	14.7	1.0	µg/L	15.0	ND	97.9		70-130	27.7		30	
cis-1,2-Dichloroethylene	14.7	1.0	µg/L	15.0	ND	98.1		70-130	2.35		30	
trans-1,2-Dichloroethylene	14.9	1.0	µg/L	15.0	ND	99.1		70-130	14.8		30	
1,2-Dichloropropane	15.2	1.0	µg/L	15.0	ND	101		70-130	2.35		30	
1,3-Dichloropropane	11.8	0.50	µg/L	15.0	ND	78.6		70-130	19.0		30	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B090708 - SW-846 5030B											
Matrix Spike Dup (B090708-MSD1)	**Source: 14B0570-03**			Prepared & Analyzed: 02/21/14							
2,2-Dichloropropane	14.2	1.0	µg/L	15.0	ND	94.9		70-130	5.60	30	
1,1-Dichloropropene	15.5	2.0	µg/L	15.0	ND	103		70-130	5.02	30	
cis-1,3-Dichloropropene	12.8	0.50	µg/L	15.0	ND	85.7		70-130	11.1	30	
trans-1,3-Dichloropropene	11.3	0.50	µg/L	15.0	ND	75.5		70-130	27.0	30	
Diethyl Ether	13.4	2.0	µg/L	15.0	ND	89.3		70-130	22.6	30	
Diisopropyl Ether (DIPE)	15.1	0.50	µg/L	15.0	ND	101		70-130	1.67	30	
1,4-Dioxane	166	50	µg/L	150	ND	111		70-130	16.9	30	V-16, V-20
Ethylbenzene	15.3	1.0	µg/L	15.0	ND	102		70-130	13.7	30	
Hexachlorobutadiene	15.2	0.50	µg/L	15.0	ND	101		70-130	22.6	30	
2-Hexanone (MBK)	116	10	µg/L	150	ND	77.1		70-130	12.5	30	
Isopropylbenzene (Cumene)	15.6	1.0	µg/L	15.0	ND	104		70-130	17.4	30	
p-Isopropyltoluene (p-Cymene)	14.4	1.0	µg/L	15.0	ND	96.1		70-130	5.66	30	
Methyl tert-Butyl Ether (MTBE)	14.0	1.0	µg/L	15.0	ND	93.5		70-130	8.79	30	
Methylene Chloride	18.1	5.0	µg/L	15.0	ND	121		70-130	28.0	30	L-02, V-20
4-Methyl-2-pentanone (MIBK)	131	10	µg/L	150	ND	87.2		70-130	6.85	30	R-05
Naphthalene	14.0	2.0	µg/L	15.0	ND	93.3		70-130	4.34	30	
n-Propylbenzene	15.6	1.0	µg/L	15.0	ND	104		70-130	13.0	30	
Styrene	15.1	1.0	µg/L	15.0	ND	101		70-130	15.3	30	
1,1,1,2-Tetrachloroethane	17.7	1.0	µg/L	15.0	ND	118		70-130	0.901	30	
1,1,2,2-Tetrachloroethane	17.2	0.50	µg/L	15.0	ND	114		70-130	8.54	30	
Tetrachloroethylene	43.9	1.0	µg/L	15.0	41.9	**13.5**	*	70-130	15.6	30	MS-19
Tetrahydrofuran	15.7	10	µg/L	15.0	ND	104		70-130	1.14	30	
Toluene	11.3	1.0	µg/L	15.0	ND	75.4		70-130	20.4	30	
1,2,3-Trichlorobenzene	13.8	5.0	µg/L	15.0	ND	91.7		70-130	16.9	30	
1,2,4-Trichlorobenzene	14.0	1.0	µg/L	15.0	ND	93.1		70-130	14.2	30	
1,3,5-Trichlorobenzene	13.5	1.0	µg/L	15.0	ND	90.1		70-130	14.1	30	
1,1,1-Trichloroethane	15.2	1.0	µg/L	15.0	ND	102		70-130	0.0656	30	
1,1,2-Trichloroethane	11.6	1.0	µg/L	15.0	ND	77.5		70-130	19.1	30	
Trichloroethylene	15.5	1.0	µg/L	15.0	ND	103		70-130	6.06	30	
Trichlorofluoromethane (Freon 11)	15.7	2.0	µg/L	15.0	ND	105		70-130	21.2	30	
1,2,3-Trichloropropane	15.7	2.0	µg/L	15.0	ND	105		70-130	2.65	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	15.3	1.0	µg/L	15.0	ND	102		70-130	22.7	30	
1,2,4-Trimethylbenzene	13.7	1.0	µg/L	15.0	ND	91.1		70-130	7.13	30	
1,3,5-Trimethylbenzene	15.5	1.0	µg/L	15.0	ND	103		70-130	6.33	30	
Vinyl Chloride	11.5	2.0	µg/L	15.0	ND	76.5		70-130	29.4	30	
m+p Xylene	30.7	2.0	µg/L	30.0	ND	102		70-130	6.52	20	
o-Xylene	15.0	1.0	µg/L	15.0	ND	100		70-130	10.9	30	
Surrogate: 1,2-Dichloroethane-d4	*21.8*		µg/L	25.0		87.0		70-130			
Surrogate: Toluene-d8	*18.9*		µg/L	25.0		75.5		70-130			
Surrogate: 4-Bromofluorobenzene	*24.7*		µg/L	25.0		98.9		70-130			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090718 - SW-846 3510C										
Blank (B090718-BLK1)				Prepared: 02/21/14 Analyzed: 02/22/14						
Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	5.0	µg/L							
Anthracene	ND	5.0	µg/L							
Benzidine	ND	20	µg/L							R-05, V-05
Benzo(a)anthracene	ND	5.0	µg/L							
Benzo(a)pyrene	ND	5.0	µg/L							
Benzo(b)fluoranthene	ND	5.0	µg/L							
Benzo(g,h,i)perylene	ND	5.0	µg/L							
Benzo(k)fluoranthene	ND	5.0	µg/L							
Benzoic Acid	ND	10	µg/L							
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
Bis(2-chloroisopropyl)ether	ND	10	µg/L							R-05, V-05
Bis(2-Ethylhexyl)phthalate	4.9	10	µg/L							J
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
Carbazole	ND	10	µg/L							
4-Chloroaniline	ND	10	µg/L							
4-Chloro-3-methylphenol	ND	10	µg/L							R-05
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
4-Chlorophenylphenylether	ND	10	µg/L							
Chrysene	ND	5.0	µg/L							
Dibenz(a,h)anthracene	ND	5.0	µg/L							
Dibenzofuran	ND	5.0	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
1,2-Dichlorobenzene	ND	5.0	µg/L							
1,3-Dichlorobenzene	ND	5.0	µg/L							
1,4-Dichlorobenzene	ND	5.0	µg/L							
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							V-20, V-19
2,4-Dinitrotoluene	ND	10	µg/L							R-05
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							V-05
1,2-Diphenylhydrazine (as Azobenzene)	ND	10	µg/L							R-05
Fluoranthene	ND	5.0	µg/L							
Fluorene	ND	5.0	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							
Hexachlorocyclopentadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L							
Isophorone	ND	10	µg/L							R-05
1-Methylnaphthalene	ND	5.0	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B090718 - SW-846 3510C											
Blank (B090718-BLK1)				Prepared: 02/21/14 Analyzed: 02/22/14							
2-Methylphenol	ND	10	µg/L								
3/4-Methylphenol	ND	10	µg/L								R-05
Naphthalene	ND	5.0	µg/L								
2-Nitroaniline	ND	10	µg/L								
3-Nitroaniline	ND	10	µg/L								
4-Nitroaniline	ND	10	µg/L								V-20
Nitrobenzene	ND	10	µg/L								
2-Nitrophenol	ND	10	µg/L								
4-Nitrophenol	ND	10	µg/L								
N-Nitrosodimethylamine	ND	10	µg/L								V-05
N-Nitrosodiphenylamine	ND	10	µg/L								
N-Nitrosodi-n-propylamine	ND	10	µg/L								R-05
Pentachloronitrobenzene	ND	10	µg/L								V-16
Pentachlorophenol	ND	10	µg/L								
Phenanthrene	ND	5.0	µg/L								
Phenol	ND	10	µg/L								
Pyrene	ND	5.0	µg/L								
Pyridine	ND	5.0	µg/L								
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L								
1,2,4-Trichlorobenzene	ND	5.0	µg/L								
2,4,5-Trichlorophenol	ND	10	µg/L								
2,4,6-Trichlorophenol	ND	10	µg/L								
Surrogate: 2-Fluorophenol	*98.8*		µg/L	200		49.4		15-110			
Surrogate: Phenol-d6	*72.3*		µg/L	200		36.2		15-110			
Surrogate: Nitrobenzene-d5	*83.7*		µg/L	100		83.7		30-130			
Surrogate: 2-Fluorobiphenyl	*79.2*		µg/L	100		79.2		30-130			
Surrogate: 2,4,6-Tribromophenol	*281*		µg/L	200		**141**	*	15-110			S-07
Surrogate: p-Terphenyl-d14	*170*		µg/L	100		**170**	*	30-130			S-07
LCS (B090718-BS1)				Prepared: 02/21/14 Analyzed: 02/22/14							
Acenaphthene	84.7	5.0	µg/L	100		84.7		40-140			
Acenaphthylene	82.7	5.0	µg/L	100		82.7		40-140			
Acetophenone	94.3	10	µg/L	100		94.3		40-140			
Aniline	66.5	5.0	µg/L	100		66.5		40-140			
Anthracene	95.0	5.0	µg/L	100		95.0		40-140			
Benzidine	149	20	µg/L	100		**149**	*	40-140			L-07A, R-05, V-05
Benzo(a)anthracene	105	5.0	µg/L	100		105		40-140			
Benzo(a)pyrene	103	5.0	µg/L	100		103		40-140			
Benzo(b)fluoranthene	114	5.0	µg/L	100		114		40-140			
Benzo(g,h,i)perylene	76.2	5.0	µg/L	100		76.2		40-140			
Benzo(k)fluoranthene	105	5.0	µg/L	100		105		40-140			
Benzoic Acid	25.9	10	µg/L	100		25.9		10-130			†
Bis(2-chloroethoxy)methane	86.7	10	µg/L	100		86.7		40-140			
Bis(2-chloroethyl)ether	86.0	10	µg/L	100		86.0		40-140			
Bis(2-chloroisopropyl)ether	65.8	10	µg/L	100		65.8		40-140			R-05, V-05
Bis(2-Ethylhexyl)phthalate	114	10	µg/L	100		114		40-140			
4-Bromophenylphenylether	100	10	µg/L	100		100		40-140			
Butylbenzylphthalate	113	10	µg/L	100		113		40-140			
Carbazole	111	10	µg/L	100		111		40-140			
4-Chloroaniline	79.8	10	µg/L	100		79.8		40-140			
4-Chloro-3-methylphenol	93.9	10	µg/L	100		93.9		30-130			R-05
2-Chloronaphthalene	81.8	10	µg/L	100		81.8		40-140			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B090718 - SW-846 3510C											
LCS (B090718-BS1)				Prepared: 02/21/14 Analyzed: 02/22/14							
2-Chlorophenol	80.2	10	µg/L	100		80.2	30-130				
4-Chlorophenylphenylether	86.8	10	µg/L	100		86.8	40-140				
Chrysene	97.6	5.0	µg/L	100		97.6	40-140				
Dibenz(a,h)anthracene	83.7	5.0	µg/L	100		83.7	40-140				
Dibenzofuran	83.8	5.0	µg/L	100		83.8	40-140				
Di-n-butylphthalate	104	10	µg/L	100		104	40-140				
1,2-Dichlorobenzene	62.5	5.0	µg/L	100		62.5	40-140				
1,3-Dichlorobenzene	57.1	5.0	µg/L	100		57.1	40-140				
1,4-Dichlorobenzene	58.7	5.0	µg/L	100		58.7	40-140				
3,3-Dichlorobenzidine	99.6	10	µg/L	100		99.6	40-140				
2,4-Dichlorophenol	91.6	10	µg/L	100		91.6	30-130				
Diethylphthalate	84.3	10	µg/L	100		84.3	40-140				
2,4-Dimethylphenol	88.3	10	µg/L	100		88.3	30-130				
Dimethylphthalate	87.7	10	µg/L	100		87.7	40-140				
4,6-Dinitro-2-methylphenol	107	10	µg/L	100		107	30-130				
2,4-Dinitrophenol	103	10	µg/L	100		103	30-130			V-06, V-19	
2,4-Dinitrotoluene	88.7	10	µg/L	100		88.7	40-140			R-05	
2,6-Dinitrotoluene	93.4	10	µg/L	100		93.4	40-140				
Di-n-octylphthalate	125	10	µg/L	100		125	40-140			V-05	
1,2-Diphenylhydrazine (as Azobenzene)	95.0	10	µg/L	100		95.0	40-140			R-05	
Fluoranthene	112	5.0	µg/L	100		112	40-140				
Fluorene	77.7	5.0	µg/L	100		77.7	40-140				
Hexachlorobenzene	94.5	10	µg/L	100		94.5	40-140				
Hexachlorobutadiene	66.0	10	µg/L	100		66.0	40-140				
Hexachlorocyclopentadiene	79.4	10	µg/L	100		79.4	30-140				†
Hexachloroethane	57.1	10	µg/L	100		57.1	40-140				
Indeno(1,2,3-cd)pyrene	84.4	5.0	µg/L	100		84.4	40-140				
Isophorone	92.2	10	µg/L	100		92.2	40-140			R-05	
1-Methylnaphthalene	79.4	5.0	µg/L	100		79.4	40-140				
2-Methylnaphthalene	80.6	5.0	µg/L	100		80.6	40-140				
2-Methylphenol	92.6	10	µg/L	100		92.6	30-130				
3/4-Methylphenol	77.8	10	µg/L	100		77.8	30-130			R-05	
Naphthalene	71.1	5.0	µg/L	100		71.1	40-140				
2-Nitroaniline	87.5	10	µg/L	100		87.5	40-140				
3-Nitroaniline	94.7	10	µg/L	100		94.7	40-140				
4-Nitroaniline	109	10	µg/L	100		109	40-140			V-06	
Nitrobenzene	76.7	10	µg/L	100		76.7	40-140				
2-Nitrophenol	85.2	10	µg/L	100		85.2	30-130				
4-Nitrophenol	65.2	10	µg/L	100		65.2	10-130				†
N-Nitrosodimethylamine	41.1	10	µg/L	100		41.1	40-140			V-05	
N-Nitrosodiphenylamine	115	10	µg/L	100		115	40-140				
N-Nitrosodi-n-propylamine	83.9	10	µg/L	100		83.9	40-140			R-05	
Pentachloronitrobenzene	98.2	10	µg/L	100		98.2	40-140			V-16	
Pentachlorophenol	102	10	µg/L	100		102	30-130				
Phenanthrene	91.8	5.0	µg/L	100		91.8	40-140				
Phenol	44.6	10	µg/L	100		44.6	20-130				†
Pyrene	67.6	5.0	µg/L	100		67.6	40-140				
Pyridine	28.2	5.0	µg/L	100		28.2	10-140				†
1,2,4,5-Tetrachlorobenzene	85.6	10	µg/L	100		85.6	40-140				
1,2,4-Trichlorobenzene	70.0	5.0	µg/L	100		70.0	40-140				
2,4,5-Trichlorophenol	92.9	10	µg/L	100		92.9	30-130				
2,4,6-Trichlorophenol	98.4	10	µg/L	100		98.4	30-130				

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes	
Batch B090718 - SW-846 3510C												
LCS (B090718-BS1)				Prepared: 02/21/14 Analyzed: 02/22/14								
Surrogate: 2-Fluorophenol	*110*		µg/L	200		54.8	15-110					
Surrogate: Phenol-d6	*90.8*		µg/L	200		45.4	15-110					
Surrogate: Nitrobenzene-d5	*84.4*		µg/L	100		84.4	30-130					
Surrogate: 2-Fluorobiphenyl	*94.0*		µg/L	100		94.0	30-130					
Surrogate: 2,4,6-Tribromophenol	*201*		µg/L	200		101	15-110					
Surrogate: p-Terphenyl-d14	*93.0*		µg/L	100		93.0	30-130					
LCS Dup (B090718-BSD1)				Prepared: 02/21/14 Analyzed: 02/22/14								
Acenaphthene	74.5	5.0	µg/L	100		74.5	40-140	12.8		20		
Acenaphthylene	85.5	5.0	µg/L	100		85.5	40-140	3.33		20		
Acetophenone	78.1	10	µg/L	100		78.1	40-140	18.8		20		
Aniline	48.8	5.0	µg/L	100		48.8	40-140	30.6		50		‡
Anthracene	90.7	5.0	µg/L	100		90.7	40-140	4.53		20		
Benzidine	77.6	20	µg/L	100		77.6	40-140	**62.9**	*	20	R-05, V-05	
Benzo(a)anthracene	102	5.0	µg/L	100		102	40-140	2.96		20		
Benzo(a)pyrene	99.2	5.0	µg/L	100		99.2	40-140	3.77		20		
Benzo(b)fluoranthene	111	5.0	µg/L	100		111	40-140	2.34		20		
Benzo(g,h,i)perylene	77.0	5.0	µg/L	100		77.0	40-140	1.07		20		
Benzo(k)fluoranthene	103	5.0	µg/L	100		103	40-140	2.31		20		
Benzoic Acid	34.0	10	µg/L	100		34.0	10-130	27.3		50		† ‡
Bis(2-chloroethoxy)methane	73.9	10	µg/L	100		73.9	40-140	16.0		20		
Bis(2-chloroethyl)ether	72.9	10	µg/L	100		72.9	40-140	16.5		20		
Bis(2-chloroisopropyl)ether	43.6	10	µg/L	100		43.6	40-140	**40.7**	*	20	R-05, V-05	
Bis(2-Ethylhexyl)phthalate	98.6	10	µg/L	100		98.6	40-140	14.7		20		
4-Bromophenylphenylether	106	10	µg/L	100		106	40-140	5.23		20		
Butylbenzylphthalate	104	10	µg/L	100		104	40-140	8.56		20		
Carbazole	108	10	µg/L	100		108	40-140	2.44		20		
4-Chloroaniline	65.5	10	µg/L	100		65.5	40-140	19.7		20		
4-Chloro-3-methylphenol	69.7	10	µg/L	100		69.7	30-130	**29.6**	*	20	R-05	
2-Chloronaphthalene	85.5	10	µg/L	100		85.5	40-140	4.51		20		
2-Chlorophenol	74.2	10	µg/L	100		74.2	30-130	7.81		20		
4-Chlorophenylphenylether	92.5	10	µg/L	100		92.5	40-140	6.37		20		
Chrysene	93.5	5.0	µg/L	100		93.5	40-140	4.29		20		
Dibenz(a,h)anthracene	83.5	5.0	µg/L	100		83.5	40-140	0.239		20		
Dibenzofuran	73.2	5.0	µg/L	100		73.2	40-140	13.5		20		
Di-n-butylphthalate	101	10	µg/L	100		101	40-140	2.79		20		
1,2-Dichlorobenzene	57.8	5.0	µg/L	100		57.8	40-140	7.70		20		
1,3-Dichlorobenzene	55.8	5.0	µg/L	100		55.8	40-140	2.43		20		
1,4-Dichlorobenzene	56.0	5.0	µg/L	100		56.0	40-140	4.71		20		
3,3-Dichlorobenzidine	89.5	10	µg/L	100		89.5	40-140	10.6		20		
2,4-Dichlorophenol	81.8	10	µg/L	100		81.8	30-130	11.3		20		
Diethylphthalate	80.3	10	µg/L	100		80.3	40-140	4.81		20		
2,4-Dimethylphenol	73.1	10	µg/L	100		73.1	30-130	18.9		20		
Dimethylphthalate	91.2	10	µg/L	100		91.2	40-140	3.92		50		‡
4,6-Dinitro-2-methylphenol	102	10	µg/L	100		102	30-130	4.43		50		‡
2,4-Dinitrophenol	84.1	10	µg/L	100		84.1	30-130	19.8		50	V-06, V-19	‡
2,4-Dinitrotoluene	68.6	10	µg/L	100		68.6	40-140	**25.6**	*	20	R-05	
2,6-Dinitrotoluene	95.4	10	µg/L	100		95.4	40-140	2.17		20		
Di-n-octylphthalate	108	10	µg/L	100		108	40-140	14.7		20	V-05	
1,2-Diphenylhydrazine (as Azobenzene)	77.6	10	µg/L	100		77.6	40-140	**20.2**	*	20	R-05	
Fluoranthene	130	5.0	µg/L	100		130	40-140	14.5		20		
Fluorene	78.0	5.0	µg/L	100		78.0	40-140	0.462		20		

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes	
Batch B090718 - SW-846 3510C													
LCS Dup (B090718-BSD1)				Prepared: 02/21/14 Analyzed: 02/22/14									
Hexachlorobenzene	101	10	µg/L	100		101		40-140	6.95		20		
Hexachlorobutadiene	72.0	10	µg/L	100		72.0		40-140	8.65		20		
Hexachlorocyclopentadiene	101	10	µg/L	100		101		30-140	24.0		50		† ‡
Hexachloroethane	52.3	10	µg/L	100		52.3		40-140	8.74		50		‡
Indeno(1,2,3-cd)pyrene	83.8	5.0	µg/L	100		83.8		40-140	0.725		50		‡
Isophorone	72.8	10	µg/L	100		72.8		40-140	**23.6**	*	20	R-05	
1-Methylnaphthalene	69.4	5.0	µg/L	100		69.4		40-140	13.4		20		
2-Methylnaphthalene	70.8	5.0	µg/L	100		70.8		40-140	12.9		20		
2-Methylphenol	76.6	10	µg/L	100		76.6		30-130	18.9		20		
3/4-Methylphenol	63.5	10	µg/L	100		63.5		30-130	**20.3**	*	20	R-05	
Naphthalene	64.8	5.0	µg/L	100		64.8		40-140	9.31		20		
2-Nitroaniline	74.5	10	µg/L	100		74.5		40-140	16.0		20		
3-Nitroaniline	80.5	10	µg/L	100		80.5		40-140	16.1		20		
4-Nitroaniline	92.8	10	µg/L	100		92.8		40-140	16.1		20	V-06	
Nitrobenzene	64.8	10	µg/L	100		64.8		40-140	16.7		20		
2-Nitrophenol	80.9	10	µg/L	100		80.9		30-130	5.24		20		
4-Nitrophenol	44.2	10	µg/L	100		44.2		10-130	38.5		50		† ‡
N-Nitrosodimethylamine	34.2	10	µg/L	100		**34.2**	*	40-140	18.4		20	L-07, V-05	
N-Nitrosodiphenylamine	111	10	µg/L	100		111		40-140	3.23		20		
N-Nitrosodi-n-propylamine	55.6	10	µg/L	100		55.6		40-140	**40.5**	*	20	R-05	
Pentachloronitrobenzene	103	10	µg/L	100		103		40-140	4.56		20	V-16	
Pentachlorophenol	105	10	µg/L	100		105		30-130	3.11		50		‡
Phenanthrene	86.9	5.0	µg/L	100		86.9		40-140	5.43		20		
Phenol	38.9	10	µg/L	100		38.9		20-130	13.6		20		†
Pyrene	68.4	5.0	µg/L	100		68.4		40-140	1.16		20		
Pyridine	19.2	5.0	µg/L	100		19.2		10-140	37.7		50		† ‡
1,2,4,5-Tetrachlorobenzene	101	10	µg/L	100		101		40-140	16.6		20		
1,2,4-Trichlorobenzene	71.4	5.0	µg/L	100		71.4		40-140	1.97		20		
2,4,5-Trichlorophenol	102	10	µg/L	100		102		30-130	8.94		20		
2,4,6-Trichlorophenol	105	10	µg/L	100		105		30-130	6.51		50		‡
Surrogate: 2-Fluorophenol	*102*		µg/L	200		51.0		15-110					
Surrogate: Phenol-d6	*75.7*		µg/L	200		37.9		15-110					
Surrogate: Nitrobenzene-d5	*72.3*		µg/L	100		72.3		30-130					
Surrogate: 2-Fluorobiphenyl	*104*		µg/L	100		104		30-130					
Surrogate: 2,4,6-Tribromophenol	*218*		µg/L	200		109		15-110					
Surrogate: p-Terphenyl-d14	*102*		µg/L	100		102		30-130					

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090835 - SW-846 3510C										
Blank (B090835-BLK1)				Prepared: 02/25/14 Analyzed: 02/26/14						
alpha-Chlordane	ND	0.050	µg/L							
alpha-Chlordane [2C]	ND	0.050	µg/L							
gamma-Chlordane	ND	0.050	µg/L							
gamma-Chlordane [2C]	ND	0.050	µg/L							
Alachlor	ND	0.20	µg/L							
Alachlor [2C]	ND	0.20	µg/L							
Aldrin	ND	0.050	µg/L							
Aldrin [2C]	ND	0.050	µg/L							
alpha-BHC	ND	0.050	µg/L							
alpha-BHC [2C]	ND	0.050	µg/L							
beta-BHC	ND	0.050	µg/L							
beta-BHC [2C]	ND	0.050	µg/L							
delta-BHC	ND	0.050	µg/L							
delta-BHC [2C]	ND	0.050	µg/L							
gamma-BHC (Lindane)	ND	0.030	µg/L							
gamma-BHC (Lindane) [2C]	ND	0.030	µg/L							
Chlordane	ND	0.20	µg/L							
Chlordane [2C]	ND	0.20	µg/L							
4,4'-DDD	ND	0.040	µg/L							
4,4'-DDD [2C]	ND	0.040	µg/L							
4,4'-DDE	ND	0.040	µg/L							
4,4'-DDE [2C]	ND	0.040	µg/L							
4,4'-DDT	ND	0.040	µg/L							
4,4'-DDT [2C]	ND	0.040	µg/L							
Dieldrin	ND	0.0020	µg/L							
Dieldrin [2C]	ND	0.0020	µg/L							
Endosulfan I	ND	0.050	µg/L							
Endosulfan I [2C]	ND	0.050	µg/L							
Endosulfan II	ND	0.080	µg/L							
Endosulfan II [2C]	ND	0.080	µg/L							
Endosulfan Sulfate	ND	0.080	µg/L							
Endosulfan Sulfate [2C]	ND	0.080	µg/L							
Endrin	ND	0.080	µg/L							
Endrin [2C]	ND	0.080	µg/L							
Endrin Aldehyde	ND	0.080	µg/L							
Endrin Aldehyde [2C]	ND	0.080	µg/L							
Endrin Ketone	ND	0.080	µg/L							
Endrin Ketone [2C]	ND	0.080	µg/L							
Heptachlor	ND	0.050	µg/L							
Heptachlor [2C]	ND	0.050	µg/L							
Heptachlor Epoxide	ND	0.050	µg/L							
Heptachlor Epoxide [2C]	ND	0.050	µg/L							
Hexachlorobenzene	ND	0.050	µg/L							
Hexachlorobenzene [2C]	ND	0.050	µg/L							
Methoxychlor	ND	0.50	µg/L							
Methoxychlor [2C]	ND	0.50	µg/L							
Toxaphene	ND	1.0	µg/L							
Toxaphene [2C]	ND	1.0	µg/L							
Surrogate: Decachlorobiphenyl	*1.47*		µg/L	2.00		73.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.26*		µg/L	2.00		63.0	30-150			
Surrogate: Tetrachloro-m-xylene	*1.45*		µg/L	2.00		72.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.35*		µg/L	2.00		67.5	30-150			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090835 - SW-846 3510C										
LCS (B090835-BS1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Alachlor	0.24	0.20	µg/L	0.200		120	40-140			
Alachlor [2C]	0.21	0.20	µg/L	0.200		103	40-140			
Aldrin	0.19	0.050	µg/L	0.200		95.3	40-140			
Aldrin [2C]	0.18	0.050	µg/L	0.200		90.9	40-140			
alpha-BHC	0.19	0.050	µg/L	0.200		95.1	40-140			
alpha-BHC [2C]	0.17	0.050	µg/L	0.200		86.7	40-140			
beta-BHC	0.23	0.050	µg/L	0.200		114	40-140			
beta-BHC [2C]	0.18	0.050	µg/L	0.200		91.7	40-140			
delta-BHC	0.16	0.050	µg/L	0.200		80.5	40-140			
delta-BHC [2C]	0.15	0.050	µg/L	0.200		72.7	40-140			
gamma-BHC (Lindane)	0.19	0.030	µg/L	0.200		92.9	40-140			
gamma-BHC (Lindane) [2C]	0.19	0.030	µg/L	0.200		96.0	40-140			
4,4'-DDD	0.21	0.040	µg/L	0.200		107	40-140			
4,4'-DDD [2C]	0.20	0.040	µg/L	0.200		102	40-140			
4,4'-DDE	0.20	0.040	µg/L	0.200		101	40-140			
4,4'-DDE [2C]	0.20	0.040	µg/L	0.200		99.0	40-140			
4,4'-DDT	0.21	0.040	µg/L	0.200		103	40-140			
4,4'-DDT [2C]	0.20	0.040	µg/L	0.200		99.3	40-140			
Dieldrin	0.21	0.0020	µg/L	0.200		106	40-140			
Dieldrin [2C]	0.21	0.0020	µg/L	0.200		104	40-140			
Endosulfan I	0.20	0.050	µg/L	0.200		102	40-140			
Endosulfan I [2C]	0.20	0.050	µg/L	0.200		98.5	40-140			
Endosulfan II	0.22	0.080	µg/L	0.200		108	40-140			
Endosulfan II [2C]	0.21	0.080	µg/L	0.200		104	40-140			
Endosulfan Sulfate	0.20	0.080	µg/L	0.200		100	40-140			
Endosulfan Sulfate [2C]	0.20	0.080	µg/L	0.200		101	40-140			
Endrin	0.20	0.080	µg/L	0.200		102	40-140			
Endrin [2C]	0.20	0.080	µg/L	0.200		101	40-140			
Endrin Aldehyde	0.24	0.080	µg/L	0.200		118	40-140			
Endrin Aldehyde [2C]	0.19	0.080	µg/L	0.200		92.9	40-140			
Endrin Ketone	0.24	0.080	µg/L	0.200		121	40-140			
Endrin Ketone [2C]	0.21	0.080	µg/L	0.200		103	40-140			
Heptachlor	0.18	0.050	µg/L	0.200		91.8	40-140			
Heptachlor [2C]	0.18	0.050	µg/L	0.200		87.8	40-140			
Heptachlor Epoxide	0.20	0.050	µg/L	0.200		100	40-140			
Heptachlor Epoxide [2C]	0.20	0.050	µg/L	0.200		98.6	40-140			
Hexachlorobenzene	0.19	0.050	µg/L	0.200		93.9	40-140			
Hexachlorobenzene [2C]	0.18	0.050	µg/L	0.200		90.4	40-140			
Methoxychlor	0.20	0.50	µg/L	0.200		101	40-140			J
Methoxychlor [2C]	0.20	0.50	µg/L	0.200		102	40-140			J
Surrogate: Decachlorobiphenyl	*1.65*		µg/L	2.00		82.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.65*		µg/L	2.00		82.3	30-150			
Surrogate: Tetrachloro-m-xylene	*1.60*		µg/L	2.00		79.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.45*		µg/L	2.00		72.7	30-150			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090835 - SW-846 3510C										
LCS Dup (B090835-BSD1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Alachlor	0.22	0.20	µg/L	0.200		111	40-140	7.78	20	
Alachlor [2C]	0.21	0.20	µg/L	0.200		107	40-140	3.86	20	
Aldrin	0.18	0.050	µg/L	0.200		90.7	40-140	4.93	20	
Aldrin [2C]	0.19	0.050	µg/L	0.200		92.7	40-140	1.97	20	
alpha-BHC	0.18	0.050	µg/L	0.200		89.3	40-140	6.29	20	
alpha-BHC [2C]	0.18	0.050	µg/L	0.200		89.8	40-140	3.60	20	
beta-BHC	0.21	0.050	µg/L	0.200		106	40-140	7.49	20	
beta-BHC [2C]	0.19	0.050	µg/L	0.200		93.9	40-140	2.37	20	
delta-BHC	0.16	0.050	µg/L	0.200		78.1	40-140	2.99	20	
delta-BHC [2C]	0.15	0.050	µg/L	0.200		73.9	40-140	1.72	20	
gamma-BHC (Lindane)	0.18	0.030	µg/L	0.200		90.0	40-140	3.25	20	
gamma-BHC (Lindane) [2C]	0.19	0.030	µg/L	0.200		95.8	40-140	0.266	20	
4,4'-DDD	0.20	0.040	µg/L	0.200		102	40-140	5.17	20	
4,4'-DDD [2C]	0.20	0.040	µg/L	0.200		102	40-140	0.171	20	
4,4'-DDE	0.20	0.040	µg/L	0.200		97.9	40-140	3.57	20	
4,4'-DDE [2C]	0.20	0.040	µg/L	0.200		97.8	40-140	1.32	20	
4,4'-DDT	0.20	0.040	µg/L	0.200		99.1	40-140	3.47	20	
4,4'-DDT [2C]	0.21	0.040	µg/L	0.200		105	40-140	5.99	20	
Dieldrin	0.20	0.0020	µg/L	0.200		102	40-140	4.18	20	
Dieldrin [2C]	0.20	0.0020	µg/L	0.200		100	40-140	3.69	20	
Endosulfan I	0.20	0.050	µg/L	0.200		97.8	40-140	4.62	20	
Endosulfan I [2C]	0.19	0.050	µg/L	0.200		95.6	40-140	2.98	20	
Endosulfan II	0.20	0.080	µg/L	0.200		102	40-140	4.97	20	
Endosulfan II [2C]	0.21	0.080	µg/L	0.200		103	40-140	1.31	20	
Endosulfan Sulfate	0.19	0.080	µg/L	0.200		97.1	40-140	2.93	20	
Endosulfan Sulfate [2C]	0.22	0.080	µg/L	0.200		109	40-140	7.05	20	
Endrin	0.20	0.080	µg/L	0.200		98.5	40-140	3.98	20	
Endrin [2C]	0.20	0.080	µg/L	0.200		101	40-140	0.0248	20	
Endrin Aldehyde	0.23	0.080	µg/L	0.200		114	40-140	3.49	20	
Endrin Aldehyde [2C]	0.19	0.080	µg/L	0.200		94.8	40-140	1.98	20	
Endrin Ketone	0.23	0.080	µg/L	0.200		116	40-140	4.02	20	
Endrin Ketone [2C]	0.22	0.080	µg/L	0.200		109	40-140	5.83	20	
Heptachlor	0.18	0.050	µg/L	0.200		88.3	40-140	3.98	20	
Heptachlor [2C]	0.18	0.050	µg/L	0.200		90.3	40-140	2.81	20	
Heptachlor Epoxide	0.19	0.050	µg/L	0.200		96.1	40-140	3.93	20	
Heptachlor Epoxide [2C]	0.20	0.050	µg/L	0.200		99.7	40-140	1.11	20	
Hexachlorobenzene	0.18	0.050	µg/L	0.200		88.2	40-140	6.33	20	
Hexachlorobenzene [2C]	0.17	0.050	µg/L	0.200		85.1	40-140	6.00	20	
Methoxychlor	0.20	0.50	µg/L	0.200		97.7	40-140	3.00	20	J
Methoxychlor [2C]	0.21	0.50	µg/L	0.200		104	40-140	2.67	20	J
Surrogate: Decachlorobiphenyl	*1.54*		µg/L	2.00		77.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.34*		µg/L	2.00		66.9	30-150			
Surrogate: Tetrachloro-m-xylene	*1.46*		µg/L	2.00		72.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.36*		µg/L	2.00		68.1	30-150			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090836 - SW-846 3510C										
Blank (B090836-BLK1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	*1.96*		µg/L	2.00		98.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.90*		µg/L	2.00		95.1	30-150			
Surrogate: Tetrachloro-m-xylene	*1.74*		µg/L	2.00		86.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.83*		µg/L	2.00		91.3	30-150			
LCS (B090836-BS1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Aroclor-1016	0.49	0.20	µg/L	0.500		98.7	40-140			
Aroclor-1016 [2C]	0.48	0.20	µg/L	0.500		96.5	40-140			
Aroclor-1260	0.42	0.20	µg/L	0.500		84.6	40-140			
Aroclor-1260 [2C]	0.41	0.20	µg/L	0.500		82.1	40-140			
Surrogate: Decachlorobiphenyl	*1.75*		µg/L	2.00		87.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.70*		µg/L	2.00		85.1	30-150			
Surrogate: Tetrachloro-m-xylene	*1.50*		µg/L	2.00		74.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.57*		µg/L	2.00		78.4	30-150			
LCS Dup (B090836-BSD1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Aroclor-1016	0.47	0.20	µg/L	0.500		94.3	40-140	4.49	20	
Aroclor-1016 [2C]	0.48	0.20	µg/L	0.500		96.1	40-140	0.444	20	
Aroclor-1260	0.45	0.20	µg/L	0.500		90.7	40-140	7.00	20	
Aroclor-1260 [2C]	0.44	0.20	µg/L	0.500		87.4	40-140	6.28	20	
Surrogate: Decachlorobiphenyl	*1.86*		µg/L	2.00		93.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.83*		µg/L	2.00		91.6	30-150			
Surrogate: Tetrachloro-m-xylene	*1.69*		µg/L	2.00		84.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.79*		µg/L	2.00		89.3	30-150			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090875 - SW-846 7470A Prep										
Blank (B090875-BLK1)				Prepared: 02/25/14 Analyzed: 02/27/14						
Mercury	ND	0.00010	mg/L							
LCS (B090875-BS1)				Prepared: 02/25/14 Analyzed: 02/27/14						
Mercury	0.00212	0.00010	mg/L	0.00200		106	80-120			
LCS Dup (B090875-BSD1)				Prepared: 02/25/14 Analyzed: 02/27/14						
Mercury	0.00216	0.00010	mg/L	0.00200		108	80-120	1.89	20	
Batch B090886 - SW-846 3005A										
Blank (B090886-BLK1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Aluminum	0.033	0.050	mg/L							J
Antimony	ND	0.050	mg/L							
Arsenic	ND	0.010	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.15	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.050	mg/L							
Copper	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Lead	0.0074	0.010	mg/L							J
Magnesium	ND	0.15	mg/L							
Manganese	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.0050	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	0.010	0.020	mg/L							J
LCS (B090886-BS1)				Prepared: 02/25/14 Analyzed: 02/26/14						
Silver	0.508	0.0050	mg/L	0.500		102	80-120			
LCS (B090886-BS2)				Prepared: 02/25/14 Analyzed: 02/26/14						
Aluminum	2.17	0.050	mg/L	2.00		108	80-120			
Antimony	2.46	0.050	mg/L	2.00		**123** *	80-120			L-02
Arsenic	2.12	0.010	mg/L	2.00		106	80-120			
Barium	2.14	0.050	mg/L	2.00		107	80-120			
Beryllium	2.12	0.0040	mg/L	2.00		106	80-120			
Cadmium	2.16	0.0040	mg/L	2.00		108	80-120			
Calcium	2.04	0.15	mg/L	2.00		102	80-120			
Chromium	2.12	0.010	mg/L	2.00		106	80-120			
Cobalt	2.09	0.050	mg/L	2.00		105	80-120			
Copper	2.17	0.010	mg/L	2.00		109	80-120			
Iron	2.11	0.050	mg/L	2.00		106	80-120			
Lead	2.14	0.010	mg/L	2.00		107	80-120			
Magnesium	2.15	0.15	mg/L	2.00		107	80-120			
Manganese	2.09	0.010	mg/L	2.00		105	80-120			
Nickel	2.10	0.010	mg/L	2.00		105	80-120			
Potassium	20.8	2.0	mg/L	20.0		104	80-120			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B090886 - SW-846 3005A												
LCS (B090886-BS2)				Prepared: 02/25/14 Analyzed: 02/26/14								
Selenium	2.06	0.050	mg/L	2.00		103		80-120				
Sodium	2.38	2.0	mg/L	2.00		119		80-120				
Thallium	2.07	0.050	mg/L	2.00		104		80-120				
Vanadium	2.11	0.010	mg/L	2.00		105		80-120				
Zinc	2.17	0.020	mg/L	2.00		108		80-120				
LCS Dup (B090886-BSD1)				Prepared: 02/25/14 Analyzed: 02/26/14								
Silver	0.505	0.0050	mg/L	0.500		101		80-120	0.482		20	
LCS Dup (B090886-BSD2)				Prepared: 02/25/14 Analyzed: 02/26/14								
Aluminum	2.20	0.050	mg/L	2.00		110		80-120	1.50		20	
Antimony	2.46	0.050	mg/L	2.00		**123**	*	80-120	0.0641		20	L-02
Arsenic	2.13	0.010	mg/L	2.00		107		80-120	0.639		20	
Barium	2.13	0.050	mg/L	2.00		107		80-120	0.0995		20	
Beryllium	2.12	0.0040	mg/L	2.00		106		80-120	0.0470		20	
Cadmium	2.16	0.0040	mg/L	2.00		108		80-120	0.0768		20	
Calcium	2.11	0.15	mg/L	2.00		105		80-120	3.16		20	
Chromium	2.14	0.010	mg/L	2.00		107		80-120	0.978		20	
Cobalt	2.11	0.050	mg/L	2.00		106		80-120	0.963		20	
Copper	2.17	0.010	mg/L	2.00		108		80-120	0.154		20	
Iron	2.15	0.050	mg/L	2.00		108		80-120	1.99		20	
Lead	2.16	0.010	mg/L	2.00		108		80-120	0.879		20	
Magnesium	2.18	0.15	mg/L	2.00		109		80-120	1.55		20	
Manganese	2.14	0.010	mg/L	2.00		107		80-120	2.33		20	
Nickel	2.12	0.010	mg/L	2.00		106		80-120	0.988		20	
Potassium	20.7	2.0	mg/L	20.0		104		80-120	0.411		20	
Selenium	2.07	0.050	mg/L	2.00		103		80-120	0.483		20	
Sodium	2.37	2.0	mg/L	2.00		119		80-120	0.107		20	
Thallium	2.09	0.050	mg/L	2.00		105		80-120	0.872		20	
Vanadium	2.11	0.010	mg/L	2.00		105		80-120	0.0748		20	
Zinc	2.18	0.020	mg/L	2.00		109		80-120	0.687		20	
Duplicate (B090886-DUP1)	**Source: 14B0570-04**			Prepared: 02/25/14 Analyzed: 02/26/14								
Aluminum	0.581	0.050	mg/L		0.781				**29.4**	*	20	R-01
Antimony	ND	0.050	mg/L		ND				NC		20	L-02
Arsenic	ND	0.010	mg/L		ND				NC		20	
Barium	0.0687	0.050	mg/L		0.0710				3.23		20	
Beryllium	ND	0.0040	mg/L		ND				NC		20	
Cadmium	ND	0.0040	mg/L		ND				NC		20	
Calcium	37.8	0.15	mg/L		38.7				2.17		20	
Chromium	0.00470	0.010	mg/L		0.00507				7.51		20	J
Cobalt	ND	0.050	mg/L		ND				NC		20	
Copper	0.0111	0.010	mg/L		0.0127				14.1		20	
Iron	1.29	0.050	mg/L		1.62				**22.5**	*	20	R-01
Lead	0.0166	0.010	mg/L		0.0175				5.06		20	
Magnesium	12.4	0.15	mg/L		12.5				0.334		20	
Manganese	0.0212	0.010	mg/L		0.0231				8.81		20	
Nickel	0.00173	0.010	mg/L		ND				NC		20	J
Potassium	2.57	2.0	mg/L		2.65				3.11		20	
Selenium	ND	0.050	mg/L		ND				NC		20	
Silver	0.0186	0.0050	mg/L		0.00834				**76.1**	*	20	R-04
Sodium	66.4	2.0	mg/L		65.9				0.775		20	
Thallium	ND	0.050	mg/L		ND				NC		20	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B090886 - SW-846 3005A											
Duplicate (B090886-DUP1)	**Source: 14B0570-04**			Prepared: 02/25/14 Analyzed: 02/26/14							
Vanadium	ND	0.010	mg/L		ND				NC	20	
Zinc	0.0423	0.020	mg/L		0.0455				7.09	20	
Matrix Spike (B090886-MS1)	**Source: 14B0570-04**			Prepared: 02/25/14 Analyzed: 02/26/14							
Silver	0.454	0.0050	mg/L	0.500	0.00834	89.1		75-125			
Matrix Spike (B090886-MS2)	**Source: 14B0570-04**			Prepared: 02/25/14 Analyzed: 02/26/14							
Aluminum	3.06	0.050	mg/L	2.00	0.781	114		75-125			
Antimony	2.56	0.050	mg/L	2.00	ND	**128**	*	75-125			MS-11
Arsenic	2.17	0.010	mg/L	2.00	ND	108		75-125			
Barium	2.17	0.050	mg/L	2.00	0.0710	105		75-125			
Beryllium	2.15	0.0040	mg/L	2.00	ND	107		75-125			
Cadmium	2.15	0.0040	mg/L	2.00	ND	107		75-125			
Calcium	40.1	0.15	mg/L	2.00	38.7	**74.1**	*	75-125			MS-19
Chromium	2.12	0.010	mg/L	2.00	0.00507	106		75-125			
Cobalt	2.06	0.050	mg/L	2.00	ND	103		75-125			
Copper	2.12	0.010	mg/L	2.00	0.0127	105		75-125			
Iron	3.57	0.050	mg/L	2.00	1.62	97.7		75-125			
Lead	2.07	0.010	mg/L	2.00	0.0175	103		75-125			
Magnesium	14.6	0.15	mg/L	2.00	12.5	107		75-125			
Manganese	2.12	0.010	mg/L	2.00	0.0231	105		75-125			
Nickel	2.04	0.010	mg/L	2.00	ND	102		75-125			
Potassium	23.3	2.0	mg/L	20.0	2.65	103		75-125			
Selenium	2.08	0.050	mg/L	2.00	ND	104		75-125			
Sodium	68.0	2.0	mg/L	2.00	65.9	106		75-125			
Thallium	2.11	0.050	mg/L	2.00	ND	105		75-125			
Vanadium	2.11	0.010	mg/L	2.00	ND	106		75-125			
Zinc	2.13	0.020	mg/L	2.00	0.0455	104		75-125			

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B090844 - SM18-20 4500 CN E										
Blank (B090844-BLK1)				Prepared: 02/24/14 Analyzed: 02/25/14						
Cyanide	ND	0.010	mg/L							
LCS (B090844-BS1)				Prepared: 02/24/14 Analyzed: 02/25/14						
Cyanide	0.61	0.010	mg/L	0.648		94.3	69.9-121			
LCS Dup (B090844-BSD1)				Prepared: 02/24/14 Analyzed: 02/25/14						
Cyanide	0.59	0.010	mg/L	0.648		91.8	69.9-121	2.66	17	
Matrix Spike (B090844-MS1)	**Source: 14B0570-04**			Prepared: 02/24/14 Analyzed: 02/25/14						
Cyanide	0.30	0.010	mg/L	0.364	ND	81.2	29.1-155			
Matrix Spike Dup (B090844-MSD1)	**Source: 14B0570-04**			Prepared: 02/24/14 Analyzed: 02/25/14						
Cyanide	0.35	0.010	mg/L	0.364	ND	95.2	29.1-155	15.8	20	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

BREAKDOWN REPORT

Lab Sample ID:	S005496-PEM1	Analyzed:	02/26/2014

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	0.34
Endrin [1]	2.42

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	0.57
Endrin [2]	1.70

BREAKDOWN REPORT

Lab Sample ID:	S005496-PEM2	Analyzed:	02/27/2014

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	0.63
Endrin [1]	2.35

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	0.75
Endrin [2]	1.47

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possiblity of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-11	Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
R-01	Duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result.
R-04	Duplicate relative percent difference (RPD) is a less useful indicator of sample precision for sample results that are <5 times the reporting limit (RL).
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-19	Initial calibration did not meet method specifications. Compound was calibrated using linear regression with correlation coefficient <0.99.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

SW-846 8260C

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S005471-CCV1)			Lab File ID: ve052003.D			Analyzed: 02/21/14 08:06			
Pentafluorobenzene	267952	4.205	388479	4.205	69	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	396733	4.967	570012	4.969	70	50 - 200	-0.0020	+/-0.50	
Chlorobenzene-d5	186855	7.847	283835	7.847	66	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	197636	10.114	270612	10.117	73	50 - 200	-0.0030	+/-0.50	
LCS (B090708-BS1)			Lab File ID: ve052005.D			Analyzed: 02/21/14 08:59			
Pentafluorobenzene	227676	4.205	267952	4.205	85	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	323417	4.97	396733	4.967	82	50 - 200	0.0030	+/-0.50	
Chlorobenzene-d5	145091	7.847	186855	7.847	78	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	200487	10.117	197636	10.114	101	50 - 200	0.0030	+/-0.50	
LCS Dup (B090708-BSD1)			Lab File ID: ve052006.D			Analyzed: 02/21/14 09:26			
Pentafluorobenzene	208160	4.205	267952	4.205	78	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	284993	4.969	396733	4.967	72	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	145944	7.847	186855	7.847	78	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	162247	10.117	197636	10.114	82	50 - 200	0.0030	+/-0.50	
Blank (B090708-BLK1)			Lab File ID: ve052009.D			Analyzed: 02/21/14 10:46			
Pentafluorobenzene	216400	4.205	267952	4.205	81	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	322996	4.97	396733	4.967	81	50 - 200	0.0030	+/-0.50	
Chlorobenzene-d5	150813	7.847	186855	7.847	81	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	174120	10.12	197636	10.114	88	50 - 200	0.0060	+/-0.50	
TB-021814 (14B0570-06)			Lab File ID: ve052011.D			Analyzed: 02/21/14 11:40			
Pentafluorobenzene	212893	4.205	267952	4.205	79	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	313365	4.966	396733	4.967	79	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	157115	7.847	186855	7.847	84	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	171062	10.117	197636	10.114	87	50 - 200	0.0030	+/-0.50	
AS-5-021814 (14B0570-04)			Lab File ID: ve052013.D			Analyzed: 02/21/14 12:33			
Pentafluorobenzene	212173	4.205	267952	4.205	79	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	297881	4.966	396733	4.967	75	50 - 200	-0.0010	+/-0.50	
Chlorobenzene-d5	146997	7.844	186855	7.847	79	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	155727	10.117	197636	10.114	79	50 - 200	0.0030	+/-0.50	
AS-4-021814 (14B0570-03)			Lab File ID: ve052018.D			Analyzed: 02/21/14 14:47			
Pentafluorobenzene	233555	4.202	267952	4.205	87	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	292083	4.967	396733	4.967	74	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	142117	7.847	186855	7.847	76	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	147322	10.117	197636	10.114	75	50 - 200	0.0030	+/-0.50	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

SW-846 8260C

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
FD-021814 (14B0570-05)			Lab File ID: ve052019.D			Analyzed: 02/21/14 15:14			
Pentafluorobenzene	207065	4.205	267952	4.205	77	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	298979	4.969	396733	4.967	75	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	167079	7.847	186855	7.847	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	158177	10.117	197636	10.114	80	50 - 200	0.0030	+/-0.50	
AS-3-021814 (14B0570-02)			Lab File ID: ve052020.D			Analyzed: 02/21/14 15:40			
Pentafluorobenzene	219687	4.205	267952	4.205	82	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	292958	4.969	396733	4.967	74	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	141403	7.844	186855	7.847	76	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	159916	10.12	197636	10.114	81	50 - 200	0.0060	+/-0.50	
MW-3-021814 (14B0570-01)			Lab File ID: ve052023.D			Analyzed: 02/21/14 17:01			
Pentafluorobenzene	202885	4.208	267952	4.205	76	50 - 200	0.0030	+/-0.50	
1,4-Difluorobenzene	303297	4.969	396733	4.967	76	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	142571	7.847	186855	7.847	76	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	180160	10.117	197636	10.114	91	50 - 200	0.0030	+/-0.50	
Matrix Spike (B090708-MS1)			Lab File ID: ve052028.D			Analyzed: 02/21/14 19:15			
Pentafluorobenzene	224547	4.202	267952	4.205	84	50 - 200	-0.0030	+/-0.50	
1,4-Difluorobenzene	334518	4.967	396733	4.967	84	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	158015	7.844	186855	7.847	85	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	152564	10.117	197636	10.114	77	50 - 200	0.0030	+/-0.50	
Matrix Spike Dup (B090708-MSD1)			Lab File ID: ve052029.D			Analyzed: 02/21/14 19:41			
Pentafluorobenzene	292676	4.205	267952	4.205	109	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	411481	4.969	396733	4.967	104	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	151309	7.844	186855	7.847	81	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	162631	10.117	197636	10.114	82	50 - 200	0.0030	+/-0.50	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

SW-846 8260C

S005471-CCV1

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	100	119	7.723801E-02	9.205268E-02		19.2	20
Acrylonitrile	A	10.0	11.8	0.1062387	0.1258434		18.5	20
tert-Amyl Methyl Ether (TAME)	A	10.0	9.86	0.7315853	0.7215621		-1.4	20
Benzene	A	10.0	9.40	1.2664	1.190933		-6.0	20
Bromobenzene	A	10.0	9.62	0.7581131	0.7289556		-3.8	20
Bromochloromethane	A	10.0	9.11	0.2604581	0.2373224		-8.9	20
Bromodichloromethane	A	10.0	10.5	0.2494217	0.2619848		5.0	20
Bromoform	A	10.0	11.9	0.2451651	0.2906639		18.6	20
Bromomethane	A	10.0	21.7	0.1253612	0.2718173		117	20 *
2-Butanone (MEK)	A	100	130	0.1038126	0.135238		30.3	20 *
tert-Butyl Alcohol (TBA)	A	100	143	2.006466E-02	0.0286249		42.7	20 *
n-Butylbenzene	A	10.0	10.4	1.597146	1.667611		4.4	20
sec-Butylbenzene	A	10.0	10.3	2.196088	2.259244		2.9	20
tert-Butylbenzene	A	10.0	9.88	1.432181	1.415451		-1.2	20
tert-Butyl Ethyl Ether (TBEE)	A	10.0	9.58	0.8035603	0.7697162		-4.2	20
Carbon Disulfide	A	100	119	0.9085495	1.08115		19.0	20
Carbon Tetrachloride	A	10.0	10.2	0.3433799	0.3496522		1.8	20
Chlorobenzene	A	10.0	10.1	1.18378	1.19194		0.7	20
Chlorodibromomethane	A	10.0	11.6	0.1798401	0.2080392		15.7	20
Chloroethane	A	10.0	11.8	0.1585419	0.1872313		18.1	20
Chloroform	L	10.0	9.48	0.5948762	0.5049524		-5.2	20
Chloromethane	A	10.0	20.1	0.1665396	0.3349406		101	20 *
2-Chlorotoluene	A	10.0	10.6	1.343355	1.424099		6.0	20
4-Chlorotoluene	A	10.0	10.3	1.416879	1.465297		3.4	20
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	10.5	6.749737E-02	7.096379E-02		5.1	20
1,2-Dibromoethane (EDB)	A	10.0	10.4	0.1861541	0.192651		3.5	20
Dibromomethane	A	10.0	10.3	0.1280771	0.1315444		2.7	20
1,2-Dichlorobenzene	A	10.0	9.65	0.915864	0.8834878		-3.5	20
1,3-Dichlorobenzene	A	10.0	9.79	0.9969468	0.9756724		-2.1	20
1,4-Dichlorobenzene	A	10.0	9.53	0.9760457	0.9297395		-4.7	20
trans-1,4-Dichloro-2-butene	A	10.0	9.07	0.1246282	0.1130128		-9.3	20
Dichlorodifluoromethane (Freon 12)	A	10.0	11.0	0.3008557	0.3312235		10.1	20
1,1-Dichloroethane	A	10.0	9.94	0.5189202	0.5157677		-0.6	20
1,2-Dichloroethane	L	10.0	9.26	0.2749201	0.2223989		-7.4	20
1,1-Dichloroethylene	A	10.0	9.82	0.4401012	0.4320774		-1.8	20
cis-1,2-Dichloroethylene	A	10.0	10.0	0.4089552	0.4087896		-0.04	20
trans-1,2-Dichloroethylene	A	10.0	10.0	0.4196568	0.4215083		0.4	20
1,2-Dichloropropane	A	10.0	9.96	0.2156093	0.2147767		-0.4	20

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CONTINUING CALIBRATION CHECK

SW-846 8260C

S005471-CCV1

COMPOUND	TYPE	CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1,3-Dichloropropane	A	10.0	9.89	0.2917307	0.2884509		-1.1	20	
2,2-Dichloropropane	A	10.0	9.87	0.3848764	0.3799375		-1.3	20	
1,1-Dichloropropene	A	10.0	9.98	0.403549	0.402643		-0.2	20	
cis-1,3-Dichloropropene	A	10.0	10.1	0.3114729	0.3151137		1.2	20	
trans-1,3-Dichloropropene	A	10.0	10.4	0.2457388	0.2542491		3.5	20	
Diethyl Ether	A	10.0	9.21	0.2466718	0.2271899		-7.9	20	
Diisopropyl Ether (DIPE)	A	10.0	10.4	0.8491249	0.8785641		3.5	20	
1,4-Dioxane	A	100	136	1.965536E-03	2.667789E-03		35.7	20	*
Ethylbenzene	A	10.0	9.66	2.017674	1.949169		-3.4	20	
Hexachlorobutadiene	A	10.0	9.80	0.278452	0.2729867		-2.0	20	
2-Hexanone (MBK)	A	100	118	0.1249737	0.1469462		17.6	20	
Isopropylbenzene (Cumene)	A	10.0	10.4	2.013297	2.087838		3.7	20	
p-Isopropyltoluene (p-Cymene)	A	10.0	9.32	1.773047	1.652341		-6.8	20	
Methyl tert-Butyl Ether (MTBE)	A	10.0	10.3	0.7183054	0.74092		3.1	20	
Methylene Chloride	L	10.0	15.6	0.5409491	0.500989		56.4	20	*
4-Methyl-2-pentanone (MIBK)	A	100	117	0.1738435	0.2032942		16.9	20	
Naphthalene	A	10.0	9.87	1.179696	1.164307		-1.3	20	
n-Propylbenzene	A	10.0	10.6	2.355825	2.508148		6.5	20	
Styrene	A	10.0	9.97	1.203274	1.19955		-0.3	20	
1,1,1,2-Tetrachloroethane	A	10.0	10.6	0.3487717	0.3690776		5.8	20	
1,1,2,2-Tetrachloroethane	A	10.0	11.5	0.4775144	0.5500522		15.2	20	
Tetrachloroethylene	A	10.0	10.0	0.2332254	0.2335601		0.1	20	
Tetrahydrofuran	A	10.0	11.0	7.651842E-02	8.393668E-02		9.7	20	
Toluene	A	10.0	9.20	0.9037848	0.8318315		-8.0	20	
1,2,3-Trichlorobenzene	A	10.0	9.91	0.4370168	0.4332358		-0.9	20	
1,2,4-Trichlorobenzene	A	10.0	9.84	0.5270264	0.518529		-1.6	20	
1,3,5-Trichlorobenzene	A	10.0	9.76	0.6524585	0.6367008		-2.4	20	
1,1,1-Trichloroethane	A	10.0	9.79	0.4215236	0.4126299		-2.1	20	
1,1,2-Trichloroethane	A	10.0	10.2	0.1747089	0.1780568		1.9	20	
Trichloroethylene	A	10.0	9.88	0.2118413	0.20937		-1.2	20	
Trichlorofluoromethane (Freon 11)	A	10.0	10.2	0.4088341	0.4159215		1.7	20	
1,2,3-Trichloropropane	A	10.0	10.4	0.361188	0.3769286		4.4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	A	10.0	10.9	0.2841792	0.3091897		8.8	20	
1,2,4-Trimethylbenzene	A	10.0	9.31	1.641948	1.527991		-6.9	20	
1,3,5-Trimethylbenzene	A	10.0	10.1	1.622866	1.636285		0.8	20	
Vinyl Chloride	A	10.0	10.3	0.3775201	0.3892302		3.1	20	
m+p Xylene	A	20.0	20.2	1.570047	1.583102		0.8	20	
o-Xylene	A	10.0	10.0	1.583141	1.583897		0.05	20	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SM18-20 4500 CN E in Water	
Cyanide	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SW-846 6010C in Water	
Aluminum	CT,NH,NY,ME,VA,NC,NJ
Antimony	CT,NH,NY,ME,NC,VA,NJ
Arsenic	CT,NH,NY,ME,NC,VA,RI
Barium	CT,NH,NY,ME,NC,VA,NJ
Beryllium	CT,NH,NY,ME,NC,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Calcium	CT,NH,NY,ME,NC,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
Cobalt	CT,NH,NY,ME,NC,VA,NJ
Copper	CT,NH,NY,ME,NC,VA,NJ
Iron	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,NC,ME,VA,NJ
Magnesium	CT,NH,NY,ME,NC,VA,NJ
Manganese	CT,NH,NY,ME,NC,VA,NJ
Nickel	CT,NH,NY,ME,NC,VA,NJ
Potassium	CT,NH,NY,ME,NC,VA,NJ
Selenium	CT,NH,NY,ME,NC,VA,NJ
Silver	CT,NH,NY,ME,NC,VA,NJ
Sodium	CT,NH,NY,ME,NC,VA,NJ
Thallium	CT,NH,NY,NC,VA,NJ
Vanadium	CT,NH,NY,ME,NC,VA,NJ
Zinc	CT,NH,NY,ME,NC,VA,NJ
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA,NJ
SW-846 8081B in Water	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA,NJ
Aldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
beta-BHC	CT,NH,NY,ME,NC,VA,NJ
beta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
delta-BHC	CT,NH,NY,ME,NC,VA,NJ
delta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA,NJ
Chlordane	CT,NH,NY,ME,NC,VA,NJ
Chlordane [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT	CT,NH,NY,ME,NC,VA,NJ

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8081B in Water	
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA,NJ
Dieldrin	CT,NH,NY,ME,NC,VA,NJ
Dieldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin	CT,NH,NY,ME,NC,VA,NJ
Endrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA,NJ
Heptachlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA,NJ
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA,NJ
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Toxaphene	CT,NH,NY,ME,NC,VA,NJ
Toxaphene [2C]	CT,NH,NY,ME,NC,VA,NJ
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
SW-846 8260C in Water	
Acetone	CT,NY,ME,NH,VA,NJ

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
Acrylonitrile	CT,NY,ME,NH,VA,NJ
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA,NJ
Benzene	CT,NY,ME,NH,VA,NJ
Bromochloromethane	NY,ME,NH,VA,NJ
Bromodichloromethane	CT,NY,ME,NH,VA,NJ
Bromoform	CT,NY,ME,NH,VA,NJ
Bromomethane	CT,NY,ME,NH,VA,NJ
2-Butanone (MEK)	CT,NY,ME,NH,VA,NJ
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA,NJ
n-Butylbenzene	NY,ME,VA,NJ
sec-Butylbenzene	NY,ME,VA,NJ
tert-Butylbenzene	NY,ME,VA,NJ
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA,NJ
Carbon Disulfide	CT,NY,ME,NH,VA,NJ
Carbon Tetrachloride	CT,NY,ME,NH,VA,NJ
Chlorobenzene	CT,NY,ME,NH,VA,NJ
Chlorodibromomethane	CT,NY,ME,NH,VA,NJ
Chloroethane	CT,NY,ME,NH,VA,NJ
Chloroform	CT,NY,ME,NH,VA,NJ
Chloromethane	CT,NY,ME,NH,VA,NJ
2-Chlorotoluene	NY,ME,NH,VA,NJ
4-Chlorotoluene	NY,ME,NH,VA,NJ
Dibromomethane	NY,ME,NH,VA,NJ
1,2-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,4-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA,NJ
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA,NJ
1,1-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,2-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,1-Dichloroethylene	CT,NY,ME,NH,VA,NJ
cis-1,2-Dichloroethylene	NY,ME,NJ
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA,NJ
1,2-Dichloropropane	CT,NY,ME,NH,VA,NJ
1,3-Dichloropropane	NY,ME,VA,NJ
2,2-Dichloropropane	NY,ME,NH,VA,NJ
1,1-Dichloropropene	NY,ME,NH,VA,NJ
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
Diisopropyl Ether (DIPE)	NY,ME,NH,VA,NJ
Ethylbenzene	CT,NY,ME,NH,VA,NJ
Hexachlorobutadiene	CT,NY,ME,NH,VA,NJ
2-Hexanone (MBK)	CT,NY,ME,NH,VA,NJ
Isopropylbenzene (Cumene)	NY,ME,VA,NJ
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA,NJ
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA,NJ
Methylene Chloride	CT,NY,ME,NH,VA,NJ

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA,NJ
Naphthalene	NY,ME,NH,VA,NJ
n-Propylbenzene	CT,NY,ME,NH,VA,NJ
Styrene	CT,NY,ME,NH,VA,NJ
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
Tetrachloroethylene	CT,NY,ME,NH,VA,NJ
Toluene	CT,NY,ME,NH,VA,NJ
1,2,3-Trichlorobenzene	NY,ME,NH,VA,NJ
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA,NJ
1,1,2-Trichloroethane	CT,NY,ME,NH,VA,NJ
Trichloroethylene	CT,NY,ME,NH,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA,NJ
1,2,3-Trichloropropane	NY,ME,NH,VA,NJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA,NJ
1,2,4-Trimethylbenzene	NY,ME,VA,NJ
1,3,5-Trimethylbenzene	NY,ME,VA,NJ
Vinyl Chloride	CT,NY,ME,NH,VA,NJ
m+p Xylene	CT,NY,ME,NH,VA
o-Xylene	CT,NY,ME,NH,VA
SW-846 8270D in Water	
Acenaphthene	CT,NY,NC,ME,NH,VA,NJ
Acenaphthylene	CT,NY,NC,ME,NH,VA,NJ
Acetophenone	NC
Aniline	CT,NY,NC,ME,VA,NJ
Anthracene	CT,NY,NC,ME,NH,VA,NJ
Benzidine	CT,NY,NC,ME,NH,VA,NJ
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA,NJ
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA,NJ
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA,NJ
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA,NJ
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA,NJ
Benzoic Acid	NY,NC,ME,NH,VA,NJ
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA,NJ
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA,NJ
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA,NJ
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA,NJ
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA,NJ
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA,NJ
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA,NJ
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA,NJ
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA,NJ
2-Chlorophenol	CT,NY,NC,ME,NH,VA,NJ

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D in Water	
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA,NJ
Chrysene	CT,NY,NC,ME,NH,VA,NJ
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA,NJ
Dibenzofuran	CT,NY,NC,ME,NH,VA,NJ
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA,NJ
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA,NJ
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA,NJ
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA,NJ
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA,NJ
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA,NJ
Diethylphthalate	CT,NY,NC,ME,NH,VA,NJ
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA,NJ
Dimethylphthalate	CT,NY,NC,ME,NH,VA,NJ
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA,NJ
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA,NJ
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA,NJ
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA,NJ
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA,NJ
1,2-Diphenylhydrazine (as Azobenzene)	NC
Fluoranthene	CT,NY,NC,ME,NH,VA,NJ
Fluorene	NY,NC,ME,NH,VA,NJ
Hexachlorobenzene	CT,NY,NC,ME,NH,VA,NJ
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA,NJ
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA,NJ
Hexachloroethane	CT,NY,NC,ME,NH,VA,NJ
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA,NJ
Isophorone	CT,NY,NC,ME,NH,VA,NJ
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA,NJ
2-Methylphenol	CT,NY,NC,NH,VA,NJ
3/4-Methylphenol	CT,NY,NC,NH,VA,NJ
Naphthalene	CT,NY,NC,ME,NH,VA,NJ
2-Nitroaniline	CT,NY,NC,ME,NH,VA,NJ
3-Nitroaniline	CT,NY,NC,ME,NH,VA,NJ
4-Nitroaniline	CT,NY,NC,ME,NH,VA,NJ
Nitrobenzene	CT,NY,NC,ME,NH,VA,NJ
2-Nitrophenol	CT,NY,NC,ME,NH,VA,NJ
4-Nitrophenol	CT,NY,NC,ME,NH,VA,NJ
N-Nitrosodimethylamine	CT,NY,NC,ME,NH,VA,NJ
N-Nitrosodiphenylamine	CT,NY,NC,ME,NH,VA,NJ
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA,NJ
Pentachloronitrobenzene	NC
Pentachlorophenol	CT,NY,NC,ME,NH,VA,NJ
Phenanthrene	CT,NY,NC,ME,NH,VA,NJ
Phenol	CT,NY,NC,ME,NH,VA,NJ
Pyrene	CT,NY,NC,ME,NH,VA,NJ
Pyridine	CT,NY,NC,ME,NH,VA,NJ

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D in Water	
1,2,4,5-Tetrachlorobenzene	NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA,NJ
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA,NJ
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA,NJ
2-Fluorophenol	NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

CHAIN OF CUSTODY RECORD

14B0570

Rev 04.05.12

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: ARCADIS-US, INC. Telephone: 518-250-7333

Address: 855 ROUTE 146 - SUITE 210 Project # 00266408.0000

CLIFTON PARK, NY 12065 Client PO# "

Attention: ELY MOSKAL

Project Location: PLAZA CLEANERS - PORT WASHINGTON, NY

Sampled By: CURT WHIPPLE

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

DATA DELIVERY (check all that apply)
○ FAX ☑ EMAIL ○ WEBSITE
Fax #
Email: ELIAS.MOSKAL@arcadis-us.com
Format: ☑ PDF ☑ EXCEL ○ GIS
☑ OTHER EQUIS (NYSDEC)
○ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	VOCs (8260)	TAL/TCL METALS	CYANIDE (TOTAL)	SVOCs (8270)	PESTICIDES	PCBs	# of Containers	** Preservation	***Container Code
								ANALYSIS REQUESTED						3	H	V
														1	N	P
														1	X	P
														2	I	A
														2	I	A
01	MW-3-021814	2/18/14	1125			GW	L	X								
02	AS-3-021814		1245				U	X								
03	AS-4-021814 *		1430				U	X								
04	AS-5-021814		1600				U	X	X	X	X	X	X			
05	FD-021814		1245				U	X								
06	TB-021814		—			~~GW~~	V	X								

Dissolved Metal
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V=vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfa
X = Na hydroxide
T = Na thiosulfate
O = Other

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other

Comments: * 2 ADDITIONAL VOLUMES (6 VIALS) PROVIDED FROM "AS-4-021814" FOR SITE-SPECIFIC MS/MSD.

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Turnaround ††
☐ 7-Day
☑ 10-Day/STD.
☐ Other
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: NYSDEC ASP CAT. B

Is your project MCP or RCP?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

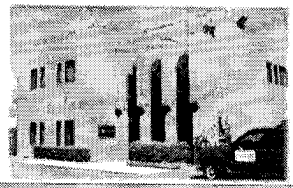
†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Page 61 of 63 14B0570_2 contest_final_mdl 02 28 14 2231 02/28/14 22:32:07

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: Arcadis - U.S., Inc. **RECEIVED BY:** CC **DATE:** 2-20-14

1) **Was the chain(s) of custody relinquished and signed?** (Yes) No No CoC Included
2) **Does the chain agree with the samples?** (Yes) No
   If not, explain:
3) **Are all the samples in good condition?** (Yes) No
   If not, explain:
4) **How were the samples received:**

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank 4.9°C Temperature °C by Temp gun _____

5) **Are there Dissolved samples for the lab to filter?** Yes (No)
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** Yes (No)
   Who was notified _____ Date _____ Time _____
7) **Location where samples are stored:** 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** (Yes) No N/A _____
9) **Do all samples have the proper Base pH:** (Yes) No N/A _____
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No (N/A)

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	6	8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic	2	Non-ConTest Container	
40 mL Vial - type listed below	24	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl 24 # Methanol _____ **Time and Date Frozen:**
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	T	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** CC **Date/Time:** 2.20.14 16:40

Report Date:
12-Jul-13 12:41

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

ARCADIS U.S., Inc.
855 Route 146, Suite 210
Clifton Park, NY 12065

Work Order: M1032
Project : NYSDEC Former Plaza Cleaners
Project #: 00266408.0000

Attn: Elias Moskal

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1032-01	PC-01	Soil	21-Jun-13 09:30	22-Jun-13 09:09
M1032-02	PC-02	Soil	21-Jun-13 09:55	22-Jun-13 09:09

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

All applicable NELAC or USEPA CLP requirments have been meet.

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

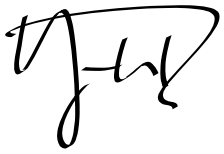
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1032

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
PC-01	M1032-01	SW8260_LOW_S	SW8270_S			
PC-01	M1032-01	SW8260_MED_S				
PC-02	M1032-02	SW8260_LOW_S	SW8270_S			

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1032

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_LOW_S					
M1032-01B	SL	6/21/2013	6/22/2013	NA	6/29/2013
M1032-02B	SL	6/21/2013	6/22/2013	NA	6/28/2013
SW8260_MED_S					
M1032-01B	SL	6/21/2013	6/22/2013	7/1/2013	7/1/2013

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1032

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_S					
M1032-01A	SL	6/21/2013	6/22/2013	7/5/2013	7/10/2013
M1032-02A	SL	6/21/2013	6/22/2013	7/5/2013	7/10/2013

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1032

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_LOW_S					
M1032-01B	SL	SW8260_LOW_S	NA	LOW	1
M1032-02B	SL	SW8260_LOW_S	NA	LOW	1
SW8260_MED_S					
M1032-01B	SL	SW8260_MED_S	Methanol	MED	1

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

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

Project Name : NYSDEC Former Plaza Cleaners -- 00266408.0000 **SDG :** M1032

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_S					
M1032-01A	SL	SW8270_S	3550B	NA	1
M1032-02A	SL	SW8270_S	3550B	NA	1

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

WorkOrder: M1032

Client ID: MALCOLM_LATHAM
Project: NYSDEC Former Plaza Cleaners
WO Name: NYSDEC Former Plaza Cleaners
Location: ARCADIS_PLAZA_CLEANERS, 00266408.0000
Comments: N/A

Case:
SDG:
PO: 13018

HC Due: 07/11/13
Fax Due:
Fax Report: ☐

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

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M1032-01A	PC-01	06/21/2013 09:30	06/22/2013	Soil	PMoist	/					A1
M1032-01A	PC-01	06/21/2013 09:30	06/22/2013	Soil	SW8270_S	/					A1
M1032-01B	PC-01	06/21/2013 09:30	06/22/2013	Soil	SW8260_LOW_S	/					VOA
M1032-01B	PC-01	06/21/2013 09:30	06/22/2013	Soil	SW8260_MED_S	/					VOA
M1032-02A	PC-02	06/21/2013 09:55	06/22/2013	Soil	PMoist	/					A1
M1032-02A	PC-02	06/21/2013 09:55	06/22/2013	Soil	SW8270_S	/					A1
M1032-02B	PC-02	06/21/2013 09:55	06/22/2013	Soil	SW8260_LOW_S	/					VOA
M1032-02B	PC-02	06/21/2013 09:55	06/22/2013	Soil	SW8260_MED_S	/		Y			VOA

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Huntley

Sample Transmittal Documentation

M1032

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page _____ of _____

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

Report To: ELY MOSKAL
855 ROUTE 146, SUITE 210
CLIFTON PARK, NY 12065
ARCADIS-US
Telephone #: 518-250-7333
Project Mgr. DAN LANG

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 13018
Site Name: PLAZA CLEANERS
Location: PORT WASHINGTON State: NY
Sampler(s): KEVIN PANESE

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= ICE 12= _____

List preservative code below: 11 11

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: 8260B	8270
M1032-01	PC-01	6/21/13	0930	G	SO		2			X	X
M1032-02	PC-02	6/21/13	0955	G	SO		2			X	X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State-specific reporting standards: _____

Relinquished by:	Received by:	Date:	Time:	Temp°C
KMP				
		6/22/13	9:09	2.6

☐ EDD Format _____
☐ E-mail to _____

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: VEb	Page 01 of 00
Reviewed By: AED	Log-in Date 06/22/2013
Work Order: M1032	Client Name: EA Engineering, Science & Technology, Inc.
Project Name/Event: NYSDEC Former Plaza Cleaners / 00266408.0000	

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 1ZW09R214101660081
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	2.6 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	06/22/2013
12. Time Received	09:09

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

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
M1032-01						US	
M1032-02						US	

IR Temp Gun ID:MT-74

CoolantCondition: ICE

Preservative Name/Lot No:

VOA Matrix Key:

US = Unpreserved Soil	A= Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO4	F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : ARCADIS U.S., Inc.

Project: NYSDEC Former Plaza Cleaners

Laboratory Workorder / SDG #: M1032

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

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

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW5030B
Soil Samples were prepared following procedures in laboratory test code: SW5035

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1
Instrument Type: GCMS-VOA
Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

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

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

PC-01 (M1032-01B), recovery is above criteria for Bromofluorobenzene at 121% with criteria of (85-120).

(MB-72542), recovery is above criteria for 1,2-Dichloroethane-d4 at 113% with criteria of (88-110).

D. Spikes:

1. Laboratory Control Spikes (LCS):

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

LCS-72542 in batch 72542, recovery is above criteria for Bromochloromethane at 128% with criteria of (70-125).

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:

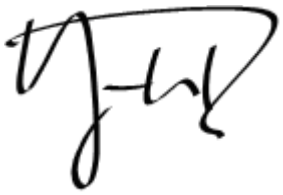
· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integration was performed on the following:

VSTD0016B 1,2-Dibromo-3-chloropropane , Bromomethane due to M3

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and

for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.



Signed:_____ _____

Date:_____7/11/2013_____

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

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-72527	100	100	98	95				0
02	MB-72527	103	99	101	98				0
03	PC-02	106	107	98	97				0
04	PC-01	102	100	105	121 *				1

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.06.03.A

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Level: (LOW/MED) MED

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-72542	106	107	98	101				0
02	MB-72542	113	113 *	96	103				1
03	PC-01ME	94	104	97	102				0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.06.03.A

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCS-72527 LCS Lot No.:

Date Extracted: 06/28/2013 Date Analyzed (1): 06/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	38.2964	77		35 - 135
Chloromethane	50.0000	0.0000	44.3370	89		50 - 130
Vinyl chloride	50.0000	0.0000	42.9626	86		60 - 125
Bromomethane	50.0000	0.0000	43.6612	87		30 - 160
Chloroethane	50.0000	0.0000	41.9058	84		40 - 155
Trichlorofluoromethane	50.0000	0.0000	43.5769	87		25 - 185
1,1-Dichloroethene	50.0000	0.0000	43.5412	87		65 - 135
Acetone	50.0000	0.0000	49.9233	100		20 - 160
Iodomethane	50.0000	0.0000	40.1990	80		70 - 126
Carbon disulfide	50.0000	0.0000	44.2552	89		45 - 160
Methylene chloride	50.0000	0.0000	42.8648	86		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	44.4824	89		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	47.3182	95		75 - 126
1,1-Dichloroethane	50.0000	0.0000	44.4858	89		75 - 125
Vinyl acetate	50.0000	0.0000	41.1757	82		65 - 138
2-Butanone	50.0000	0.0000	52.0694	104		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	44.6065	89		65 - 125
2,2-Dichloropropane	50.0000	0.0000	44.5277	89		65 - 135
Bromochloromethane	50.0000	0.0000	47.8505	96		70 - 125
Chloroform	50.0000	0.0000	45.3136	91		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	43.5242	87		70 - 135
1,1-Dichloropropene	50.0000	0.0000	44.4625	89		70 - 135
Carbon tetrachloride	50.0000	0.0000	44.0179	88		65 - 135
1,2-Dichloroethane	50.0000	0.0000	46.6254	93		70 - 135
Benzene	50.0000	0.0000	44.8857	90		75 - 125
Trichloroethene	50.0000	0.0000	45.8701	92		75 - 125
1,2-Dichloropropane	50.0000	0.0000	44.4548	89		70 - 120
Dibromomethane	50.0000	0.0000	45.2338	90		75 - 130
Bromodichloromethane	50.0000	0.0000	45.4708	91		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	46.4356	93		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	49.6117	99		45 - 145
Toluene	50.0000	0.0000	43.8505	88		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	46.9739	94		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	44.8967	90		60 - 125
1,3-Dichloropropane	50.0000	0.0000	46.1641	92		75 - 125
Tetrachloroethene	50.0000	0.0000	58.6294	117		65 - 140
2-Hexanone	50.0000	0.0000	50.4212	101		45 - 145
Dibromochloromethane	50.0000	0.0000	45.6604	91		65 - 130
1,2-Dibromoethane	50.0000	0.0000	46.1312	92		70 - 125
Chlorobenzene	50.0000	0.0000	44.8144	90		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	44.5849	89		75 - 125
Ethylbenzene	50.0000	0.0000	44.1397	88		75 - 125
m,p-Xylene	100.0000	0.0000	86.8345	87		80 - 125
o-Xylene	50.0000	0.0000	43.3075	87		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCS-72527 LCS Lot No.:

Date Extracted: 06/28/2013 Date Analyzed (1): 06/28/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	130.1420	87		83 - 125
Styrene	50.0000	0.0000	44.0751	88		75 - 125
Bromoform	50.0000	0.0000	46.3922	93		55 - 135
Isopropylbenzene	50.0000	0.0000	42.9149	86		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	45.3445	91		55 - 130
Bromobenzene	50.0000	0.0000	45.4623	91		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	48.1271	96		65 - 130
n-Propylbenzene	50.0000	0.0000	44.5549	89		65 - 135
2-Chlorotoluene	50.0000	0.0000	45.1853	90		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	45.7480	91		65 - 135
4-Chlorotoluene	50.0000	0.0000	45.2456	90		75 - 125
tert-Butylbenzene	50.0000	0.0000	41.5772	83		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	44.8532	90		65 - 135
sec-Butylbenzene	50.0000	0.0000	44.2259	88		65 - 130
4-Isopropyltoluene	50.0000	0.0000	44.9085	90		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	44.7125	89		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	44.9990	90		70 - 125
n-Butylbenzene	50.0000	0.0000	44.5978	89		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	45.2436	90		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	51.3323	103		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	46.1071	92		65 - 130
Hexachlorobutadiene	50.0000	0.0000	46.1384	92		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.2758	97		60 - 135
Naphthalene	50.0000	0.0000	47.8353	96		40 - 125

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCS-72542 LCS Lot No.:

Date Extracted: 07/01/2013 Date Analyzed (1): 07/01/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2500.0000	0.0000	3103.8108	124		35 - 135
Chloromethane	2500.0000	0.0000	2709.1045	108		50 - 130
Vinyl chloride	2500.0000	0.0000	3098.8764	124		60 - 125
Bromomethane	2500.0000	0.0000	1884.7447	75		30 - 160
Chloroethane	2500.0000	0.0000	2978.1309	119		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2982.2464	119		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2982.1528	119		65 - 135
Acetone	2500.0000	0.0000	3370.1291	135		20 - 160
Iodomethane	2500.0000	0.0000	1813.0088	73		70 - 126
Carbon disulfide	2500.0000	0.0000	2400.2985	96		45 - 160
Methylene chloride	2500.0000	0.0000	2897.0246	116		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2873.5468	115		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2430.0262	97		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2597.8617	104		75 - 125
Vinyl acetate	2500.0000	0.0000	2369.4875	95		65 - 138
2-Butanone	2500.0000	0.0000	2394.7046	96		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2913.6198	117		65 - 125
2,2-Dichloropropane	2500.0000	0.0000	2936.1817	117		65 - 135
Bromochloromethane	2500.0000	0.0000	3195.6014	128	*	70 - 125
Chloroform	2500.0000	0.0000	2862.2832	114		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2896.9549	116		70 - 135
1,1-Dichloropropene	2500.0000	0.0000	2915.7369	117		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2942.5473	118		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2757.2537	110		70 - 135
Benzene	2500.0000	0.0000	2898.3871	116		75 - 125
Trichloroethene	2500.0000	0.0000	2893.9109	116		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2838.6122	114		70 - 120
Dibromomethane	2500.0000	0.0000	2819.1716	113		75 - 130
Bromodichloromethane	2500.0000	0.0000	2808.7904	112		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2863.7134	115		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2163.6579	87		45 - 145
Toluene	2500.0000	0.0000	2920.2832	117		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2867.1082	115		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2726.9317	109		60 - 125
1,3-Dichloropropane	2500.0000	0.0000	2536.7781	101		75 - 125
Tetrachloroethene	2500.0000	0.0000	2724.3459	109		65 - 140
2-Hexanone	2500.0000	0.0000	2078.2254	83		45 - 145
Dibromochloromethane	2500.0000	0.0000	2675.5366	107		65 - 130
1,2-Dibromoethane	2500.0000	0.0000	2530.3277	101		70 - 125
Chlorobenzene	2500.0000	0.0000	2782.2376	111		75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	0.0000	2650.8952	106		75 - 125
Ethylbenzene	2500.0000	0.0000	2758.3815	110		75 - 125
m,p-Xylene	5000.0000	0.0000	5409.6412	108		80 - 125
o-Xylene	2500.0000	0.0000	2774.0774	111		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCS-72542 LCS Lot No.:

Date Extracted: 07/01/2013 Date Analyzed (1): 07/01/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	7500.0000	0.0000	8183.7187	109		75 - 125
Styrene	2500.0000	0.0000	2801.7506	112		75 - 125
Bromoform	2500.0000	0.0000	2680.1467	107		55 - 135
Isopropylbenzene	2500.0000	0.0000	2690.9408	108		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2382.7293	95		55 - 130
Bromobenzene	2500.0000	0.0000	2663.6811	107		65 - 120
1,2,3-Trichloropropane	2500.0000	0.0000	2430.8531	97		65 - 130
n-Propylbenzene	2500.0000	0.0000	2663.5254	107		65 - 135
2-Chlorotoluene	2500.0000	0.0000	2701.8934	108		70 - 130
1,3,5-Trimethylbenzene	2500.0000	0.0000	2635.3327	105		65 - 135
4-Chlorotoluene	2500.0000	0.0000	2670.3768	107		75 - 125
tert-Butylbenzene	2500.0000	0.0000	2657.2520	106		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2644.2043	106		65 - 135
sec-Butylbenzene	2500.0000	0.0000	2719.3248	109		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2676.3099	107		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2720.6605	109		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2697.1476	108		70 - 125
n-Butylbenzene	2500.0000	0.0000	2729.6585	109		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2706.6504	108		75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	0.0000	2014.0822	81		40 - 135
1,2,4-Trichlorobenzene	2500.0000	0.0000	2706.5667	108		65 - 130
Hexachlorobutadiene	2500.0000	0.0000	2474.5063	99		55 - 140
1,2,3-Trichlorobenzene	2500.0000	0.0000	2647.5796	106		60 - 135
Naphthalene	2500.0000	0.0000	2493.5715	100		40 - 125

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-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: V1M2631.D Lab Sample ID: MB-72527

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 06/28/2013

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:39

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-72527	LCS-72527	V1M2629.D	16:49
02	PC-02	M1032-02B	V1M2642.D	22:20
03	PC-01	M1032-01B	V1M2650.D	1:43

COMMENTS:

som13.06.03.A

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: V6I1695.D Lab Sample ID: MB-72542

Instrument ID: V6

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 07/01/2013

Level: (TRACE or LOW/MED) MED Time Analyzed: 10:28

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-72542	LCS-72542	V6I1693.D	9:41
02	PC-01ME	M1032-01B	V6I1702.D	13:15

COMMENTS:

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

EPA SAMPLE NO.
BFBB1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: V1M2620.D BFB Injection Date: 06/28/2013

Instrument ID: V1 BFB Injection Time: 12:35

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	40.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	78.2
175	5.0 - 9.0% of mass 174	5.7 (7.2)1
176	95.0 - 101.0% of mass 174	75.8 (97.0)1
177	5.0 - 9.0% of mass 176	5.2 (6.8)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005B1	VSTD005B1	V1M2621.D	06/28/2013	13:25
02	VSTD020B1	VSTD020B1	V1M2622.D	06/28/2013	13:51
03	VSTD050B1	VSTD050B1	V1M2623.D	06/28/2013	14:16
04	VSTD100B1	VSTD100B1	V1M2624.D	06/28/2013	14:42
05	VSTD200B1	VSTD200B1	V1M2625.D	06/28/2013	15:07

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

EPA SAMPLE NO.
BFBC1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: V1M2627.D BFB Injection Date: 06/28/2013

Instrument ID: V1 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	18.5
75	30.0 - 60.0% of mass 95	38.7
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	Greater than 50.0% of mass 95	75.4
175	5.0 - 9.0% of mass 174	5.3 (7.0)1
176	95.0 - 101.0% of mass 174	75.4 (99.9)1
177	5.0 - 9.0% of mass 176	4.4 (5.8)2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050C1	VSTD050C1	V1M2628.D	06/28/2013	15:58
02	LCS-72527	LCS-72527	V1M2629.D	06/28/2013	16:49
03	MB-72527	MB-72527	V1M2631.D	06/28/2013	17:39
04	PC-02	M1032-02B	V1M2642.D	06/28/2013	22:20
05	PC-01	M1032-01B	V1M2650.D	06/29/2013	1:43

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

EPA SAMPLE NO.
BFB6B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: V6I1521.D BFB Injection Date: 06/20/2013

Instrument ID: V6 BFB Injection Time: 16:04

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.6
75	30.0 - 60.0% of mass 95	43.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3 (0.3)1
174	Greater than 50.0% of mass 95	85.0
175	5.0 - 9.0% of mass 174	6.4 (7.6)1
176	95.0 - 101.0% of mass 174	84.0 (98.9)1
177	5.0 - 9.0% of mass 176	5.4 (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	VSTD0506B	VSTD0506B	V6I1522.D	06/20/2013	16:28
02	VSTD0206B	VSTD0206B	V6I1523.D	06/20/2013	16:52
03	VSTD0056B	VSTD0056B	V6I1524.D	06/20/2013	17:16
04	VSTD0016B	VSTD0016B	V6I1526.D	06/20/2013	18:05
05	VSTD2006B	VSTD2006B	V6I1527.D	06/20/2013	18:29
06	VSTD1006B	VSTD1006B	V6I1528.D	06/20/2013	18:53

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

EPA SAMPLE NO.
BFB6I

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: V6I1690.D BFB Injection Date: 07/01/2013

Instrument ID: V6 BFB Injection Time: 8:02

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.0
75	30.0 - 60.0% of mass 95	45.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	85.0
175	5.0 - 9.0% of mass 174	7.0 (8.2)1
176	95.0 - 101.0% of mass 174	83.2 (97.9)1
177	5.0 - 9.0% of mass 176	6.1 (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	VSTD0506I	VSTD0506I	V6I1691.D	07/01/2013	8:18
02	LCS-72542	LCS-72542	V6I1693.D	07/01/2013	9:41
03	MB-72542	MB-72542	V6I1695.D	07/01/2013	10:28
04	PC-01ME	M1032-01B	V6I1702.D	07/01/2013	13:15

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/28/2013 06/28/2013

EPA Sample No.(VSTD#####): VSTD050C1 Date Analyzed: 06/28/2013

Lab File ID (Standard): V1M2628.D Time Analyzed: 15:58

Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	325481		4.612		228463		7.508		100228		10.059	
	UPPER LIMIT	650962		5.112		456926		8.008		200456		10.559	
	LOWER LIMIT	162741		4.112		114232		7.008		50114		9.559	
	EPA SAMPLE NO.												
01	LCS-72527	341572		4.616		237128		7.502		102689		10.063	
02	MB-72527	337855		4.631		232709		7.507		100464		10.058	
03	PC-02	304908		4.621		215746		7.507		96442		10.058	
04	PC-01	345605		4.632		234119		7.517		106240		10.069	

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.: M1032 Mod. Ref No.: SDG No.: SM1032

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/20/2013 06/20/2013

EPA Sample No.(VSTD#####): VSTD0506I Date Analyzed: 07/01/2013

Lab File ID (Standard): V6I1691.D Time Analyzed: 8:18

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	365501		5.65		294236		8.702		161316		11.152	
	UPPER LIMIT	731002		6.15		588472		9.202		322632		11.652	
	LOWER LIMIT	182751		5.15		147118		8.202		80658		10.652	
	EPA SAMPLE NO.												
01	LCS-72542	435895		5.646		360072		8.699		193489		11.148	
02	MB-72542	380883		5.646		324304		8.699		180446		11.149	
03	PC-01ME	457743		5.636		358737		8.701		205518		11.150	

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.

PC-01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-01B

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M2650.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/22/2013

% Moisture: not dec. 4.5 Date Analyzed: 06/29/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	8.5	
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	8.7	
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.

PC-01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-01B

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M2650.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/22/2013

% Moisture: not dec. 4.5 Date Analyzed: 06/29/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	21	
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	17	
179601-23-1	m,p-Xylene	150	
95-47-6	o-Xylene	120	
1330-20-7	Xylene (Total)	260	
100-42-5	Styrene	3.5	J
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	15	
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	170	
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	390	E
135-98-8	sec-Butylbenzene	24	
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	67	
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	210	E

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D
Report Date: 02-Jul-2013 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628A.B\V1M2650.D
Lab Smp Id: M1032-01B Client Smp ID: PC-01
Inj Date : 29-JUN-2013 01:43
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,M1032-01B,,72527
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628A.B\v18260GH.m
Meth Date : 30-Jun-2013 11:23 V1.i Quant Type: ISTD
Cal Date : 28-JUN-2013 13:25 Cal File: V1M2621.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/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	11 Acetone	58	2.425	2.415	(0.524)	2820	8.42921	8(Q)
$	32 Dibromofluoromethane	113	4.060	4.050	(0.877)	86043	50.8705	49
$	37 1,2-Dichloroethane-d4	102	4.345	4.326	(0.938)	23569	49.9271	48
*	41 Fluorobenzene	96	4.631	4.611	(1.000)	345605	50.0000	
	43 Methylcyclohexane	83	5.133	5.114	(1.108)	62055	17.5801	17
$	51 Toluene-d8	98	6.059	6.049	(0.806)	312134	52.2947	50
	52 Toluene	91	6.128	6.109	(1.323)	70217	8.68582	8
	55 Tetrachloroethene	164	6.670	6.660	(0.887)	37378	20.5537	20
*	60 Chlorobenzene-d5	117	7.517	7.507	(1.000)	234119	50.0000	
	64 Ethylbenzene	106	7.675	7.655	(1.021)	46491	17.0135	16
	65 m,p-Xylene	106	7.803	7.793	(1.038)	514448	145.353	140
	66 o-Xylene	106	8.236	8.216	(1.096)	400693	115.639	110
	67 Styrene	104	8.236	8.236	(1.096)	20347	3.43379	3(aQ)
	69 Isopropylbenzene	105	8.650	8.640	(1.151)	124470	14.4352	14
$	70 Bromofluorobenzene	95	8.807	8.797	(1.172)	130557	60.2666	58(R)
	76 1,3,5-Trimethylbenzene	105	9.329	9.310	(0.927)	1198430	172.524	160
	79 1,2,4-Trimethylbenzene	105	9.733	9.714	(0.967)	2763177	385.951	370(A)
M	81 Xylene (Total)	106				915141	260.991	250
	80 sec-Butylbenzene	105	9.910	9.901	(0.984)	232734	24.1471	23(H)
*	84 1,4-Dichlorobenzene-d4	152	10.068	10.058	(1.000)	106240	50.0000	(Q)
	86 n-Butylbenzene	91	10.472	10.462	(1.040)	462129	66.8903	64(Q)

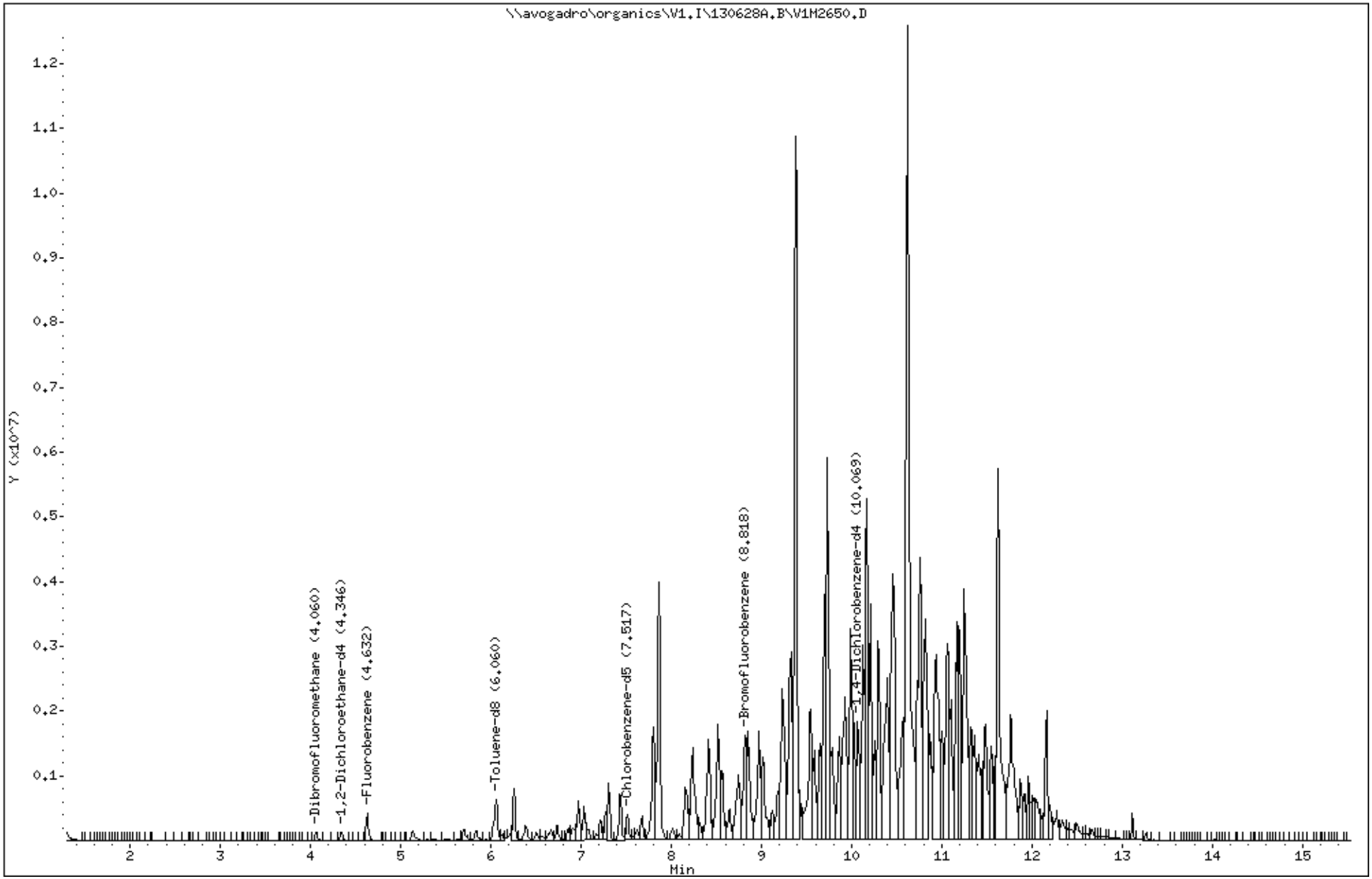
Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D
Report Date: 02-Jul-2013 10:53

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
91 Naphthalene	128	12.166	12.156	(1.208)	1202218	210.882	200(A)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D
Date : 29-JUN-2013 01:43
Client ID: PC-01
Instrument: V1.i
Sample Info: 5G,M1032-01B,,72527
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

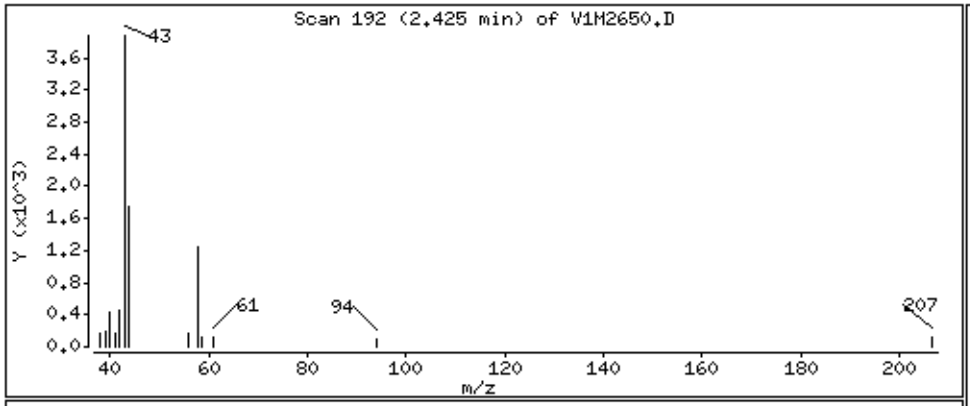
Client ID: PC-01 Instrument: V1.i

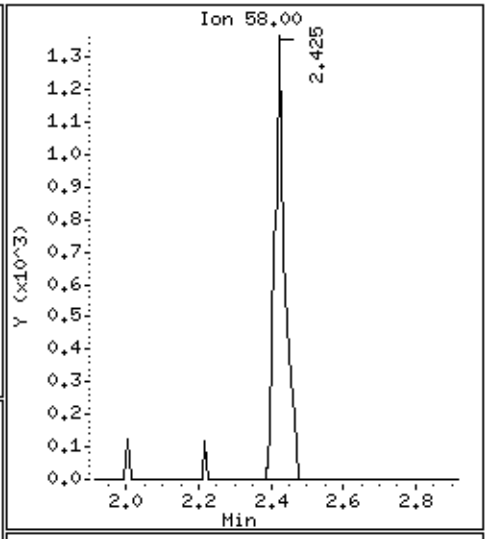
Sample Info: 5G,M1032-01B,,72527

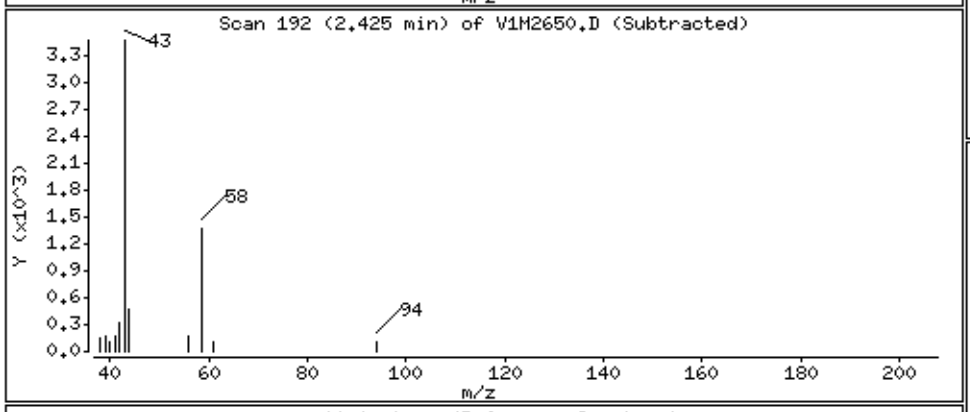
Operator: WL SRC: LIMS

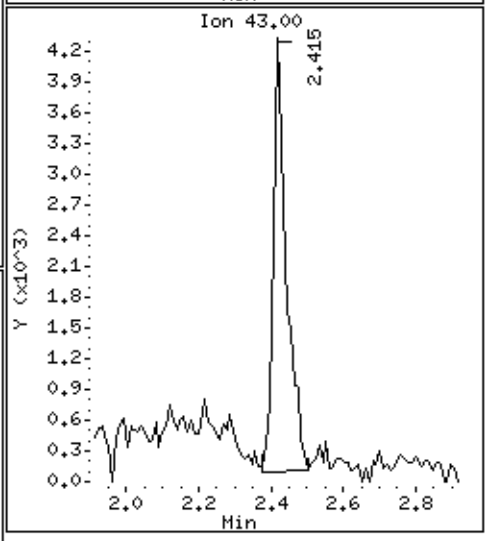
Column phase: DB-624 Column diameter: 0.25

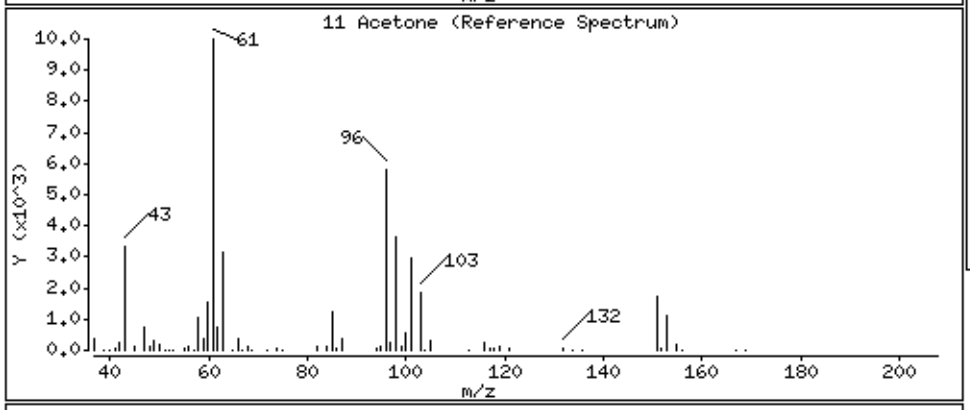
11 Acetone Concentration: 8 ug/Kg

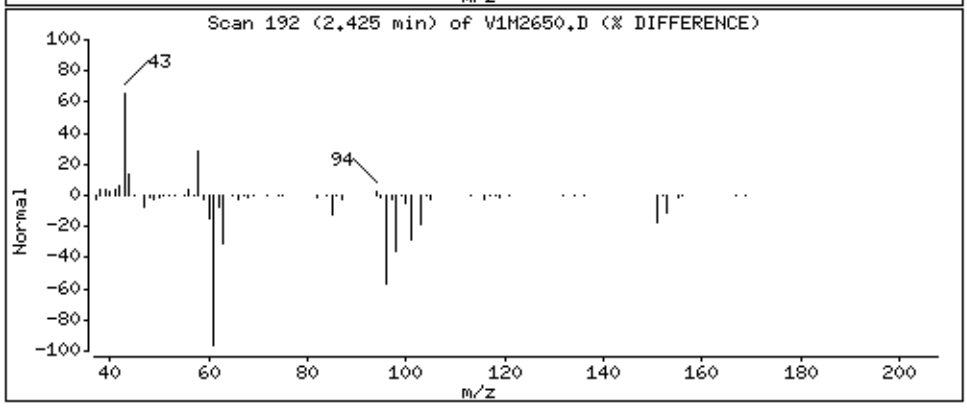












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

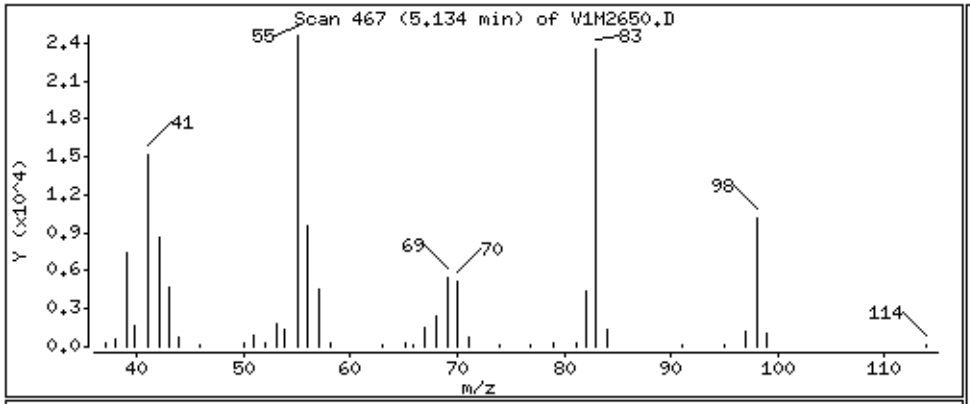
Client ID: PC-01 Instrument: V1.i

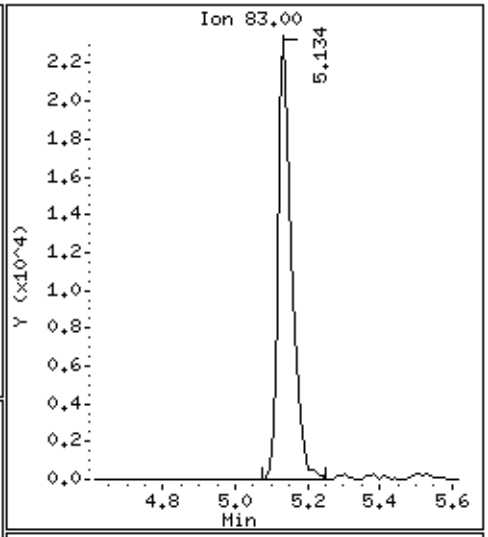
Sample Info: 5G,M1032-01B,,72527

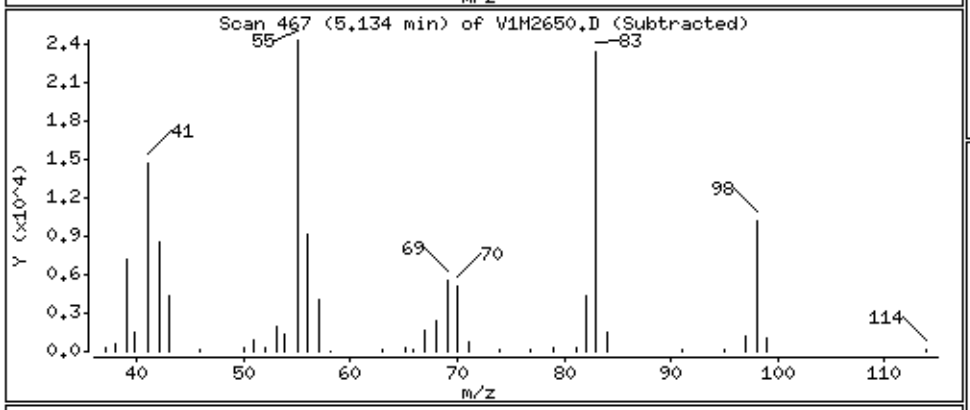
Operator: WL SRC: LIMS

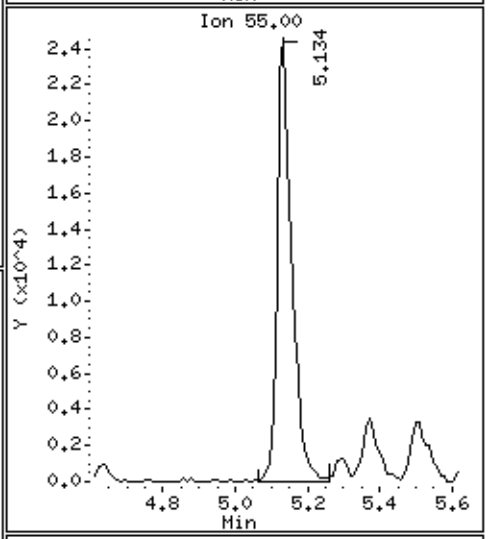
Column phase: DB-624 Column diameter: 0.25

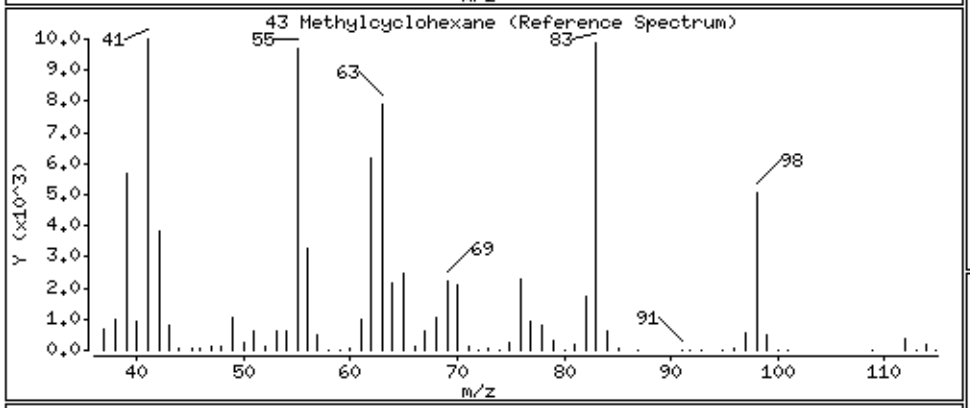
43 Methylcyclohexane Concentration: 17 ug/Kg

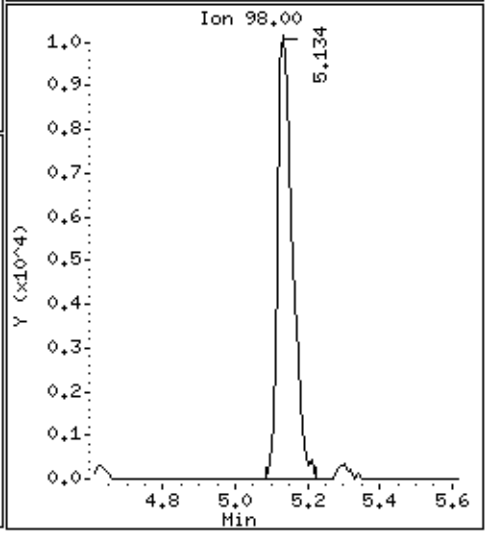


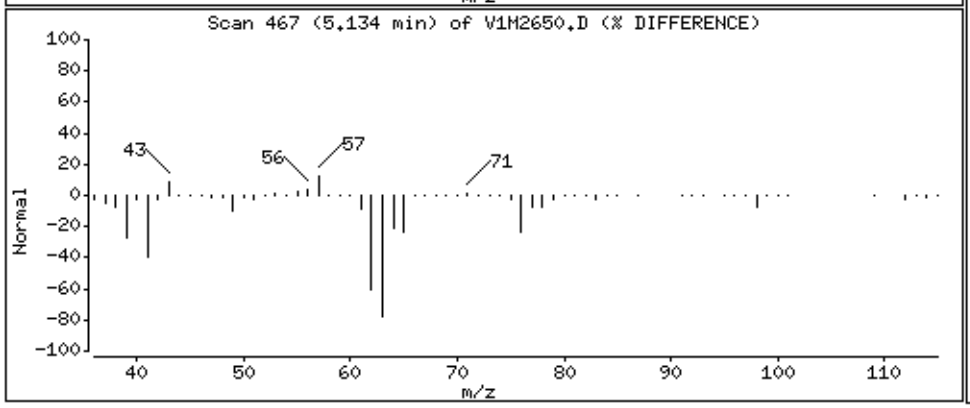












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

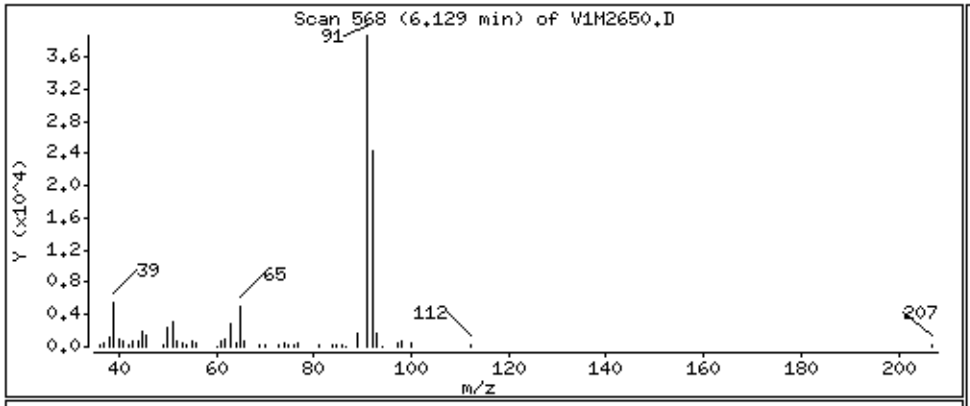
Client ID: PC-01 Instrument: V1.i

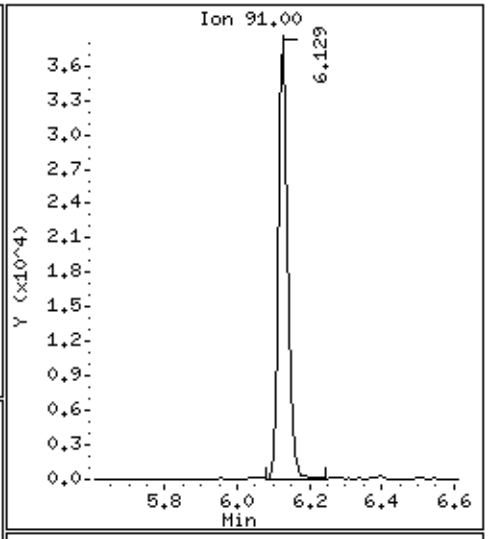
Sample Info: 5G,M1032-01B,,72527

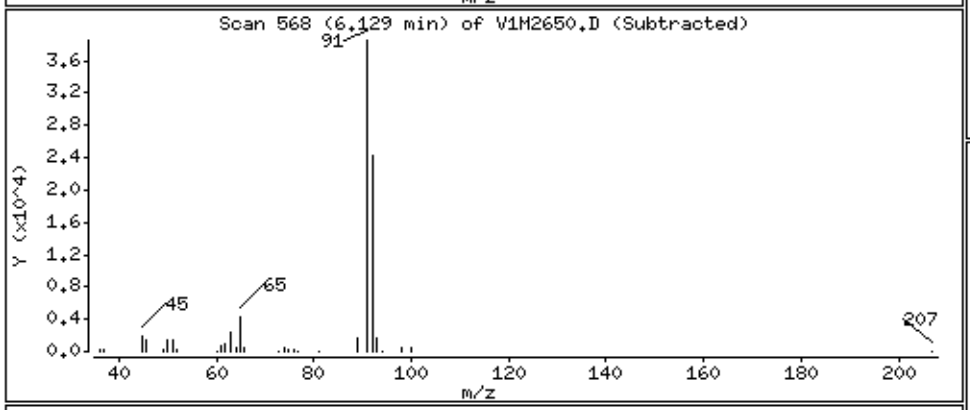
Operator: WL SRC: LIMS

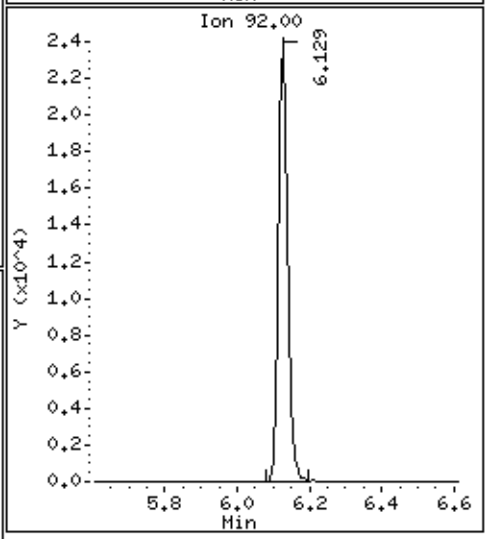
Column phase: DB-624 Column diameter: 0.25

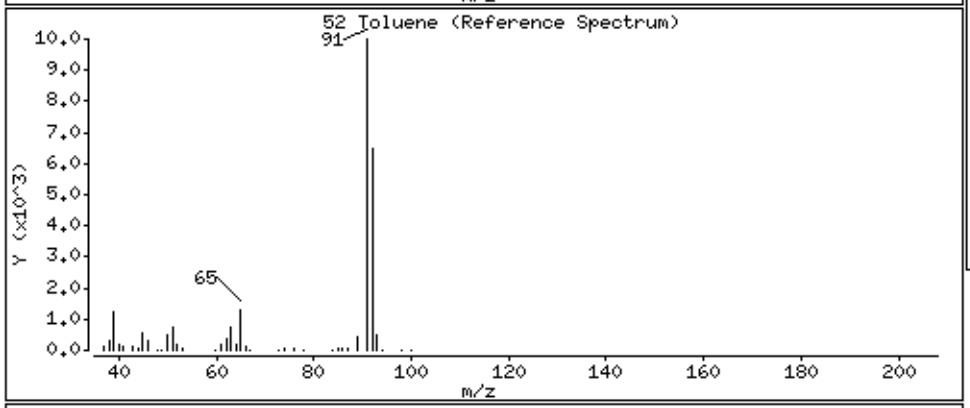
52 Toluene Concentration: 8 ug/Kg

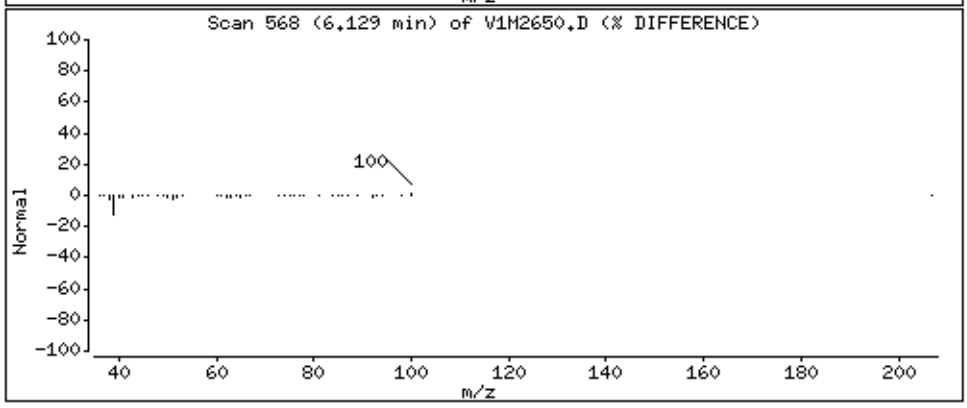












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

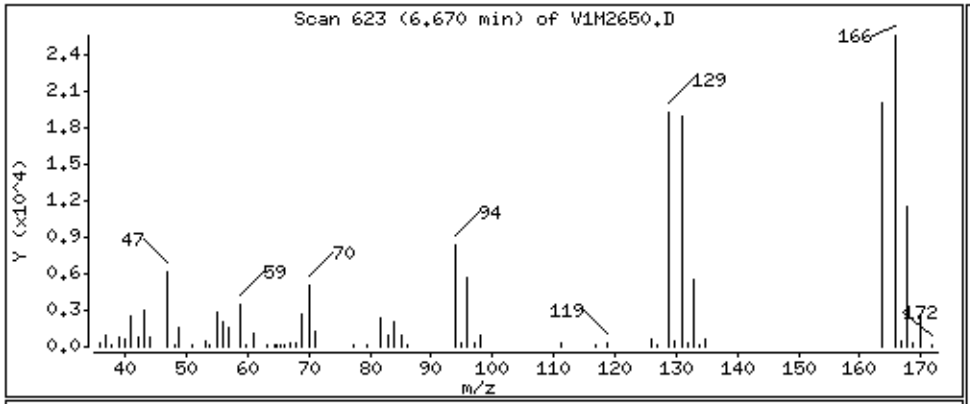
Client ID: PC-01 Instrument: V1.i

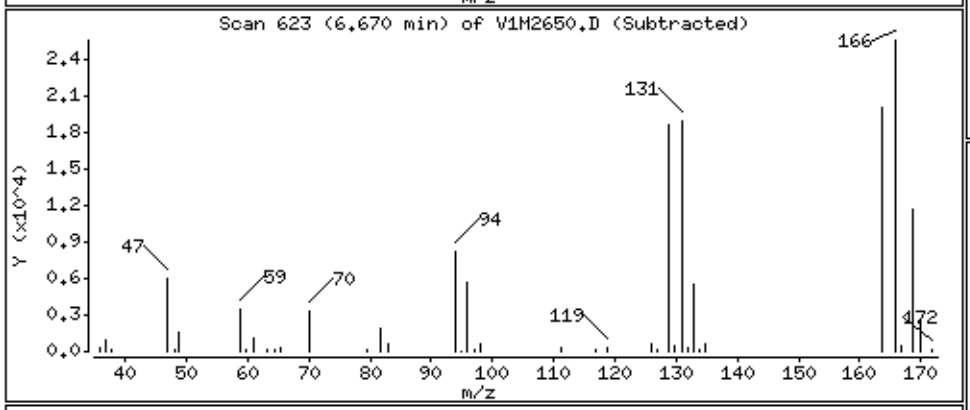
Sample Info: 5G,M1032-01B,,72527

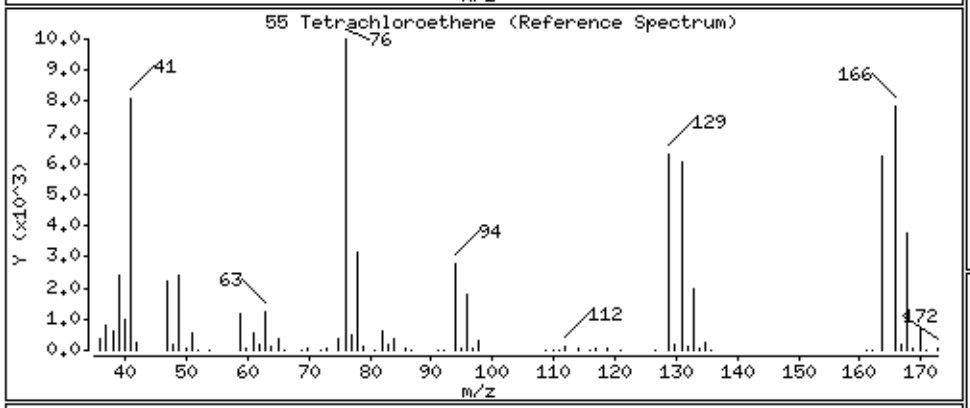
Operator: WL SRC: LIMS

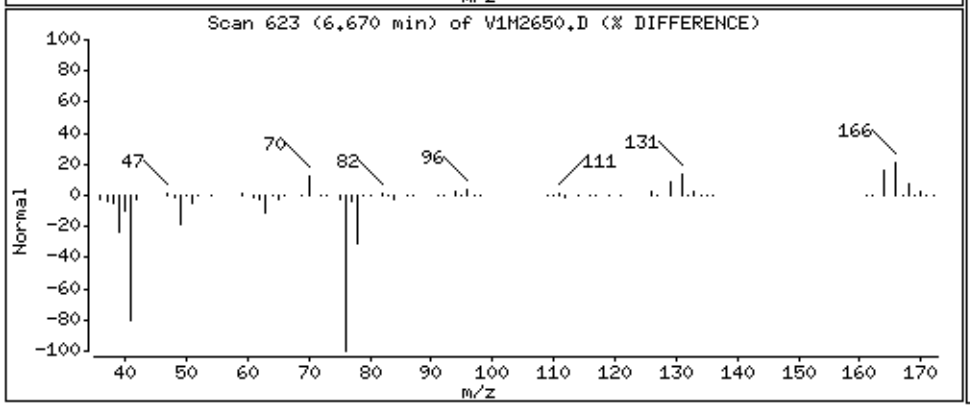
Column phase: DB-624 Column diameter: 0.25

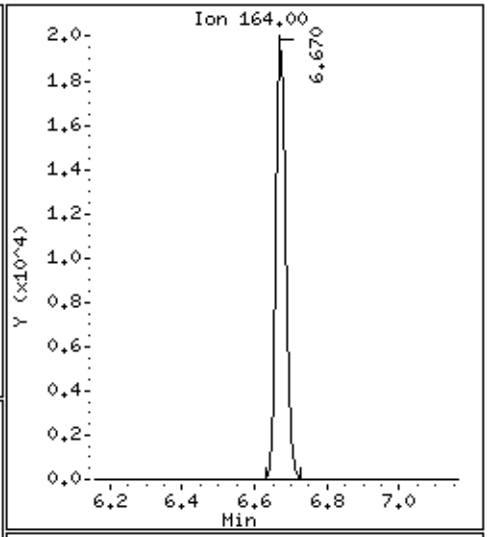
55 Tetrachloroethene Concentration: 20 ug/Kg

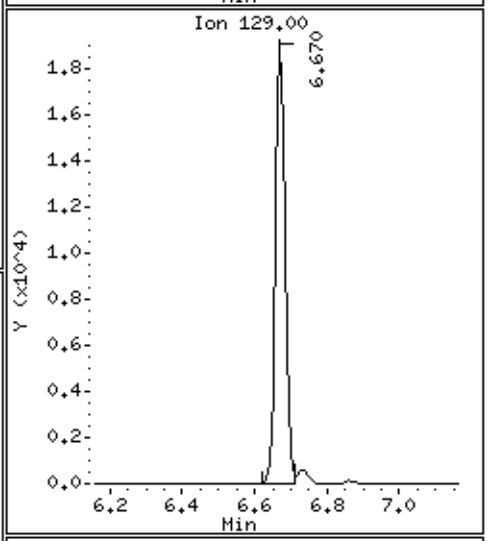


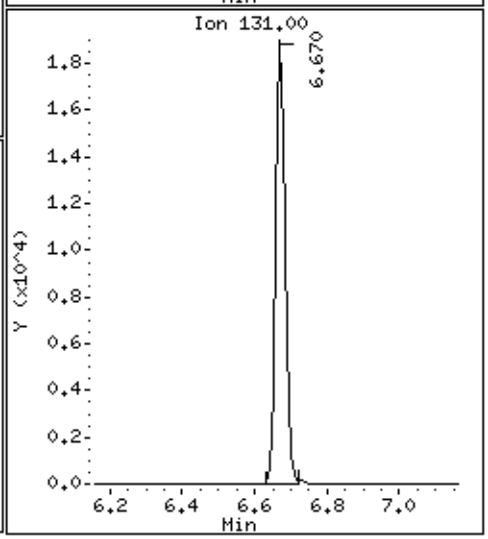












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

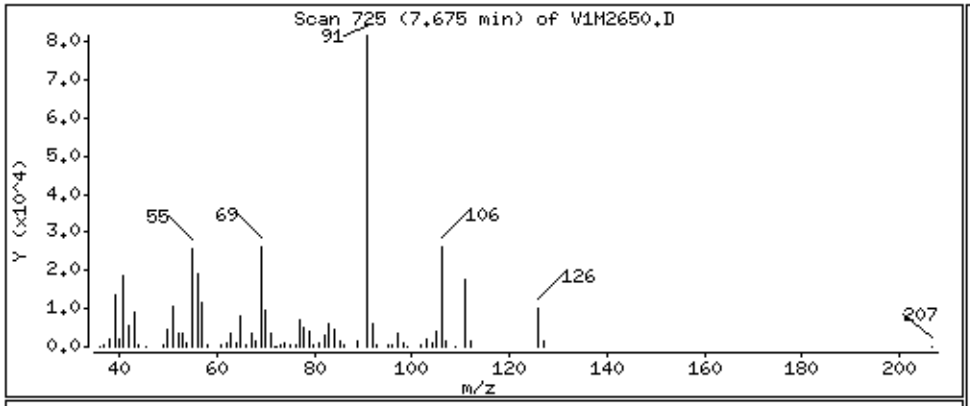
Client ID: PC-01 Instrument: V1.i

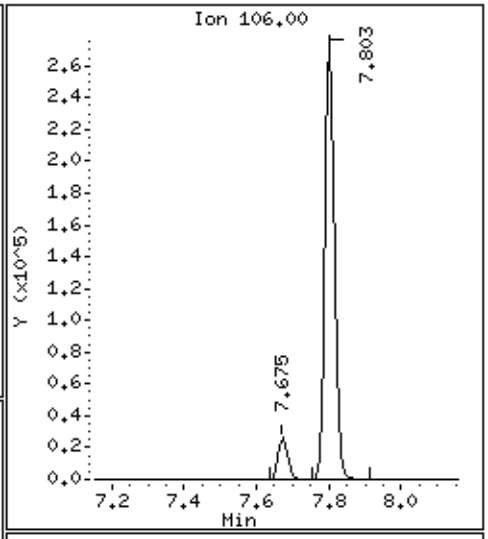
Sample Info: 5G,M1032-01B,,72527

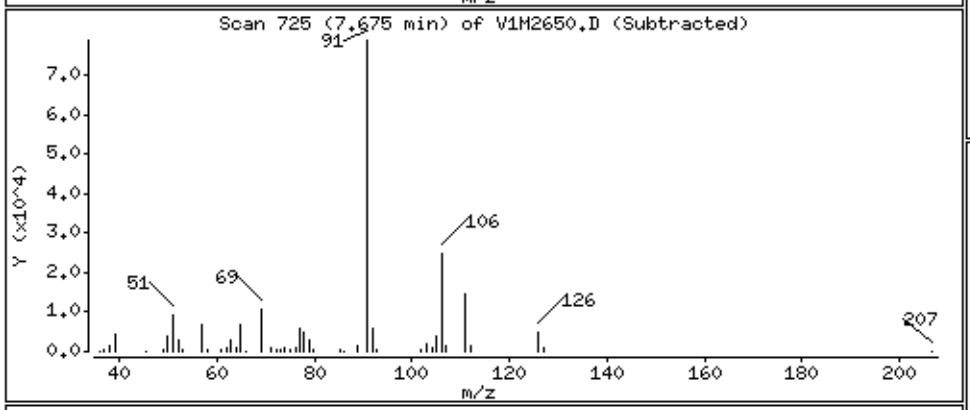
Operator: WL SRC: LIMS

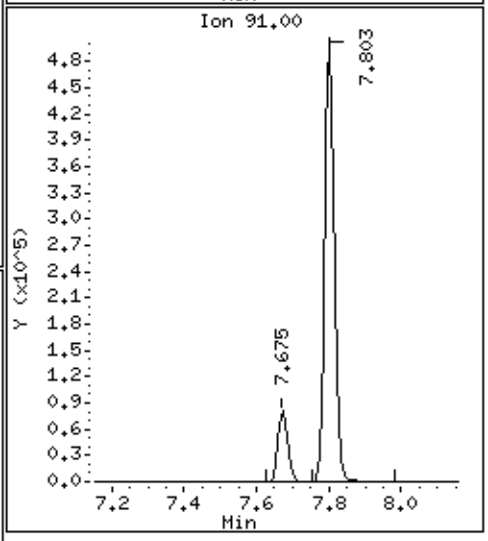
Column phase: DB-624 Column diameter: 0.25

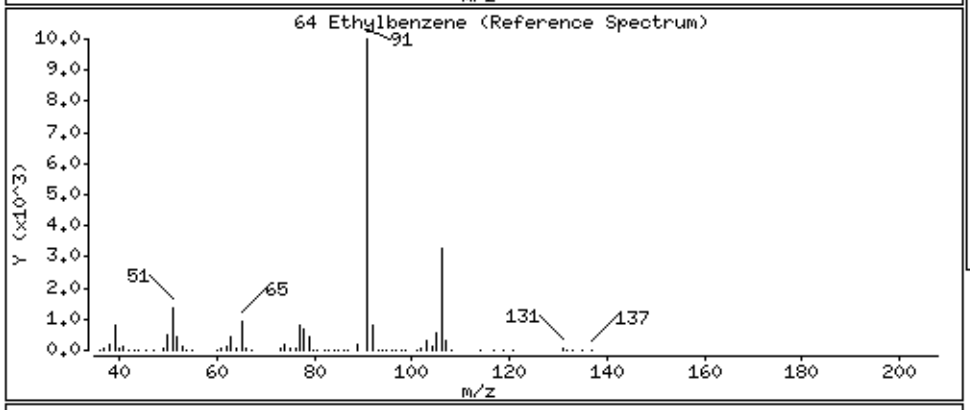
64 Ethylbenzene Concentration: 16 ug/Kg

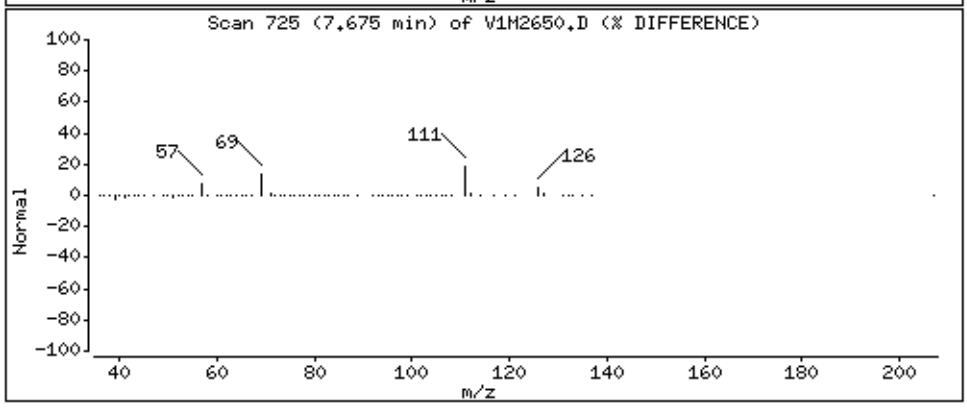












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

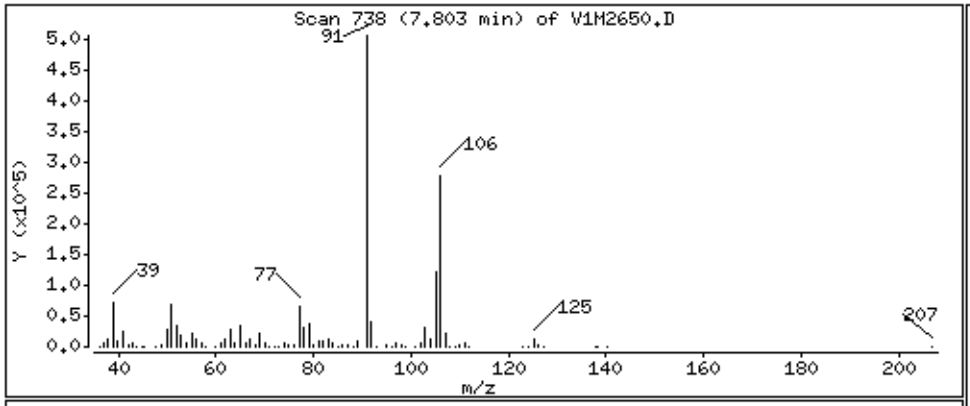
Client ID: PC-01 Instrument: V1.i

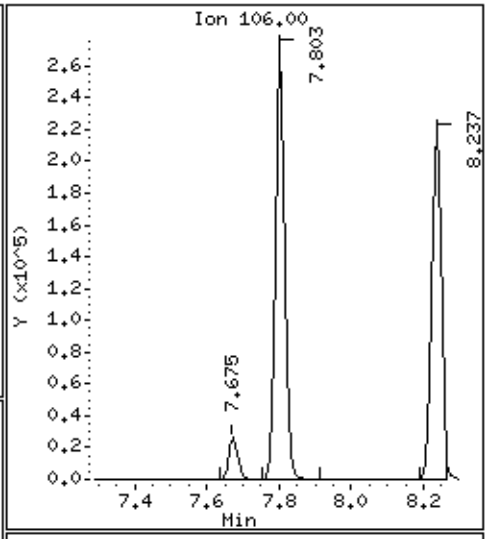
Sample Info: 5G,M1032-01B,,72527

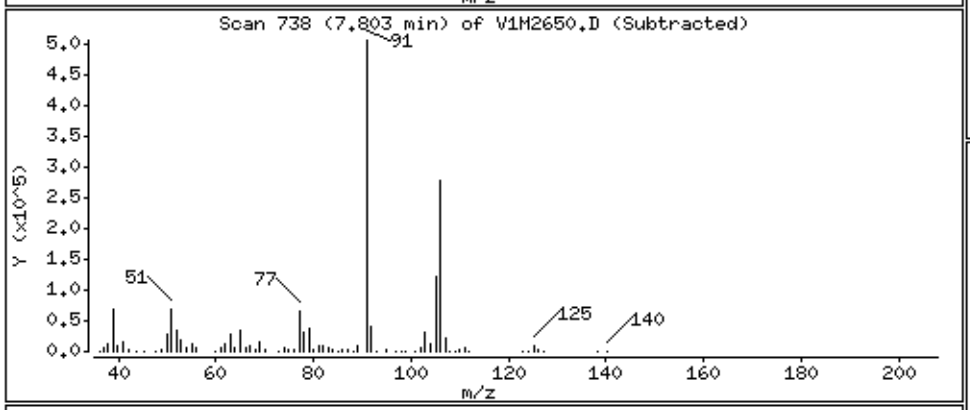
Operator: WL SRC: LIMS

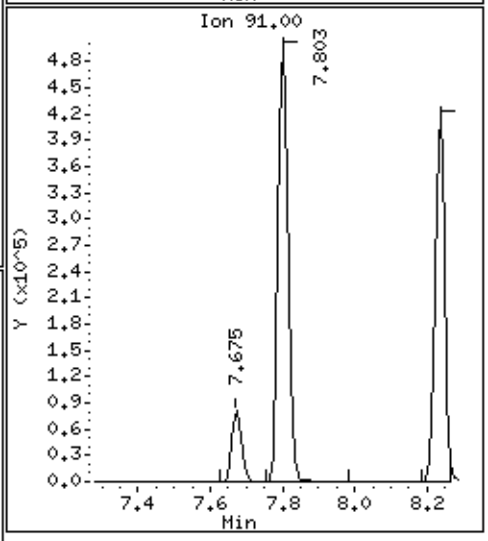
Column phase: DB-624 Column diameter: 0.25

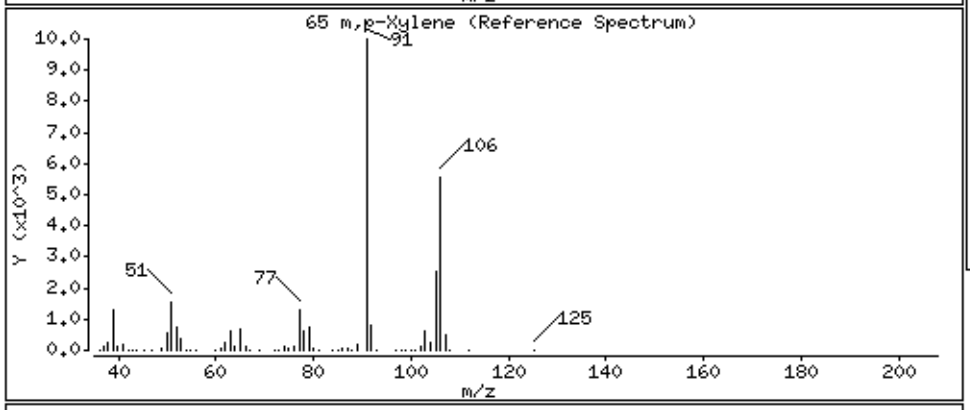
65 m,p-Xylene Concentration: 140 ug/Kg

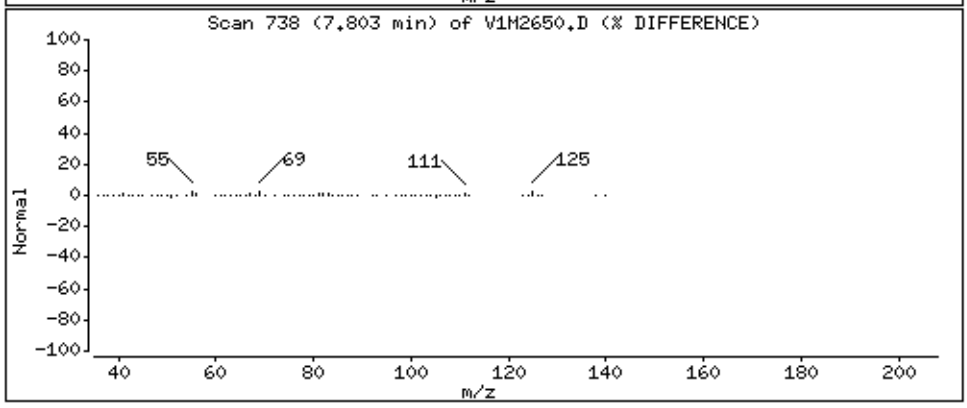












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

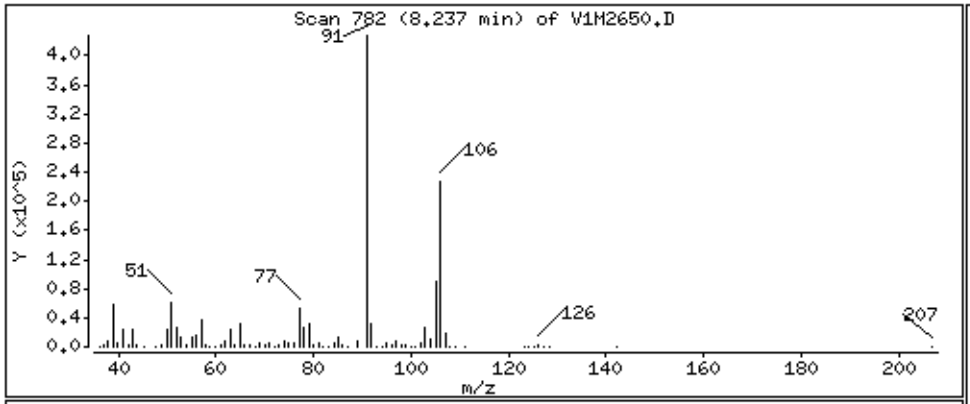
Client ID: PC-01 Instrument: V1.i

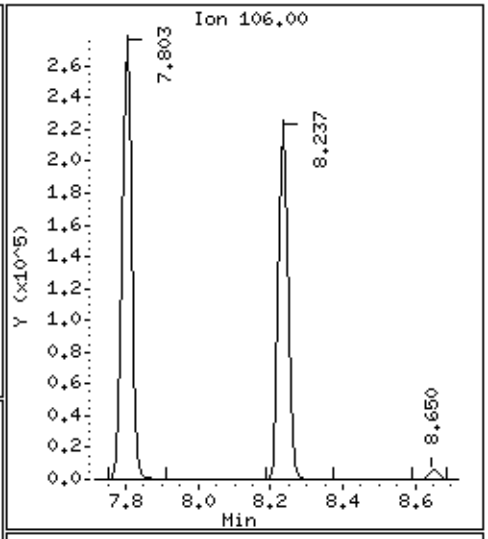
Sample Info: 5G,M1032-01B,,72527

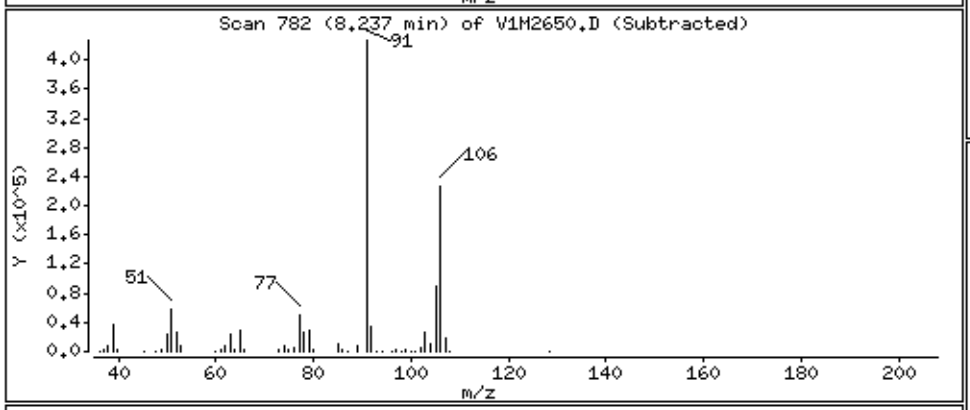
Operator: WL SRC: LIMS

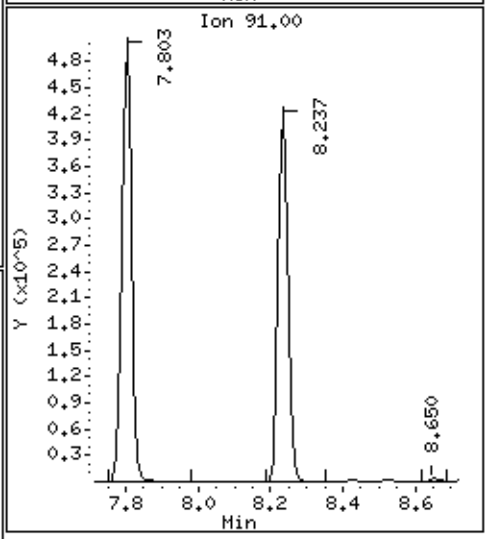
Column phase: DB-624 Column diameter: 0.25

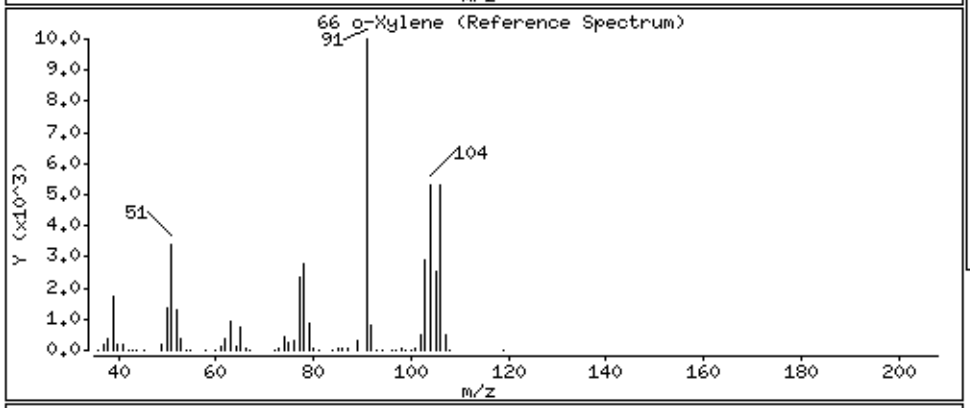
66 o-Xylene Concentration: 110 ug/Kg

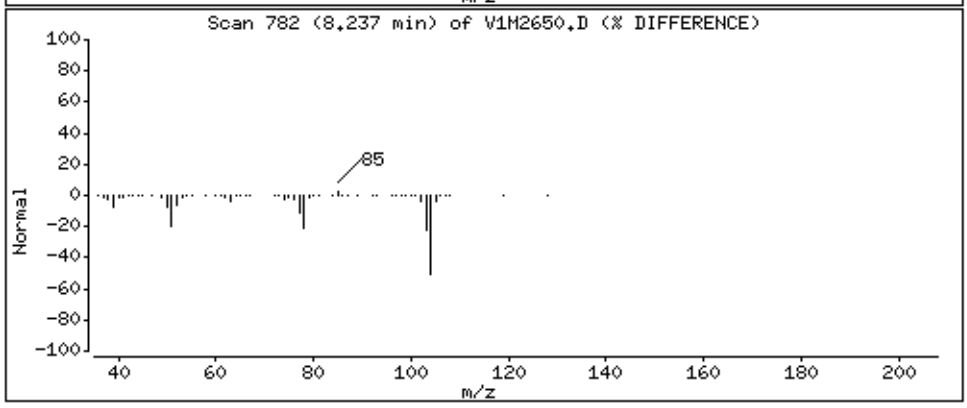












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

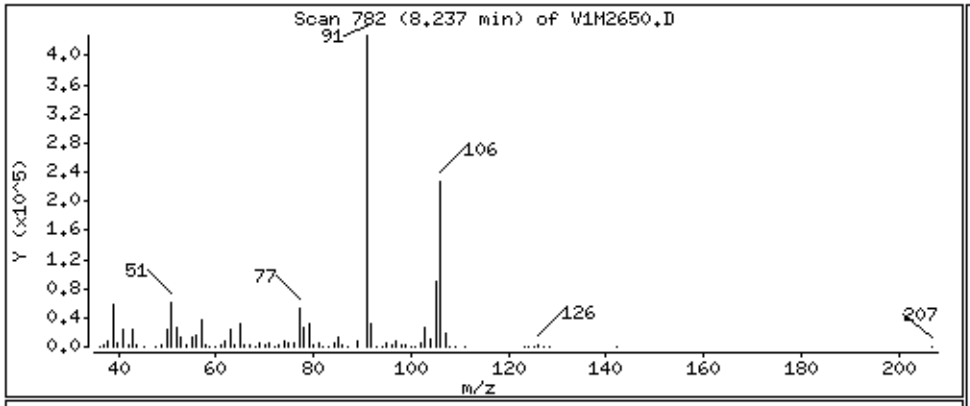
Client ID: PC-01 Instrument: V1.i

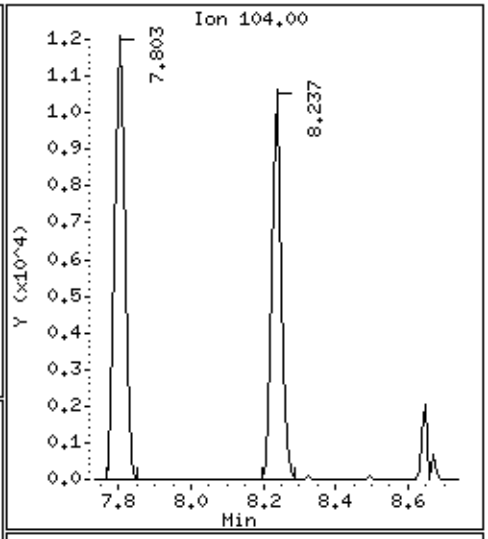
Sample Info: 5G,M1032-01B,,72527

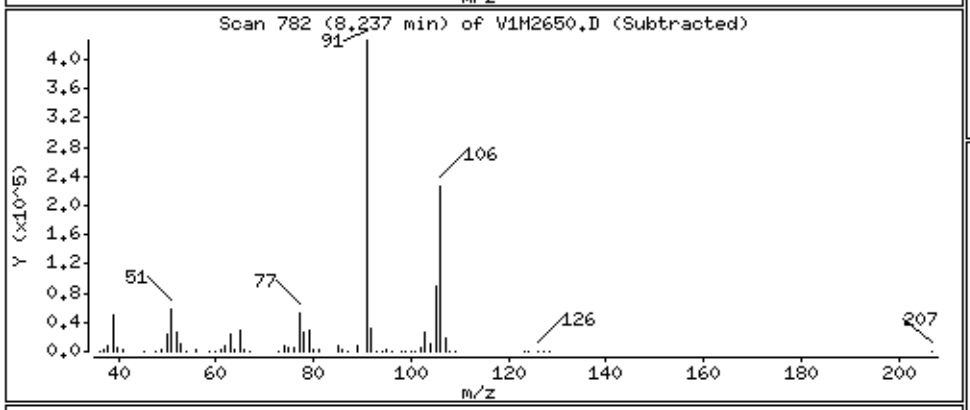
Operator: WL SRC: LIMS

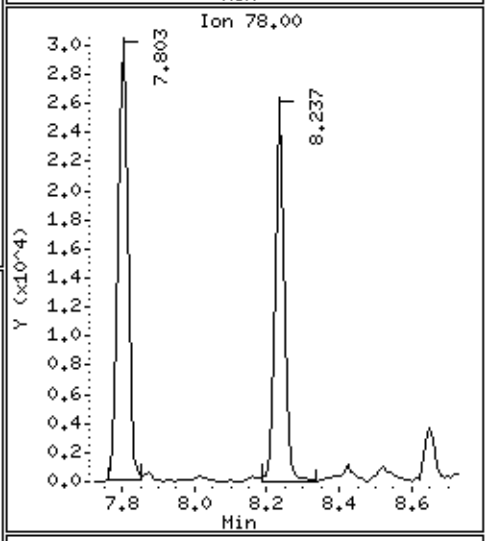
Column phase: DB-624 Column diameter: 0.25

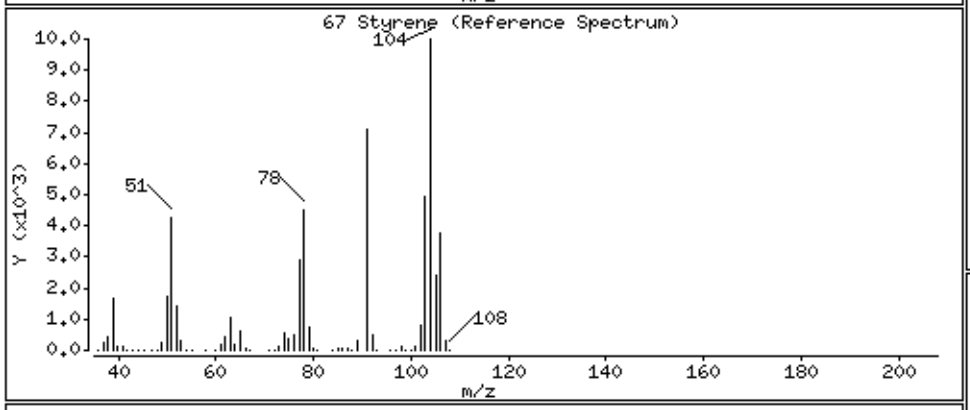
67 Styrene Concentration: 3 ug/Kg

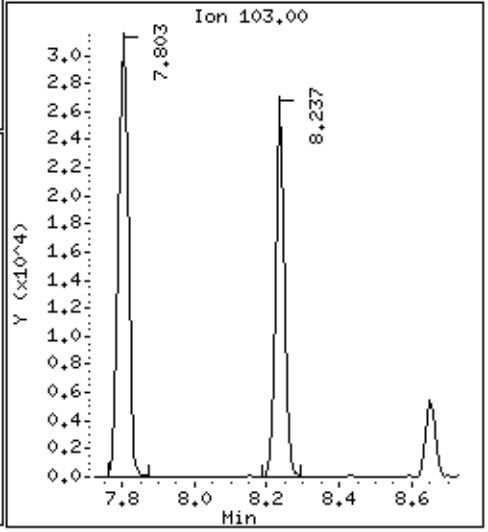


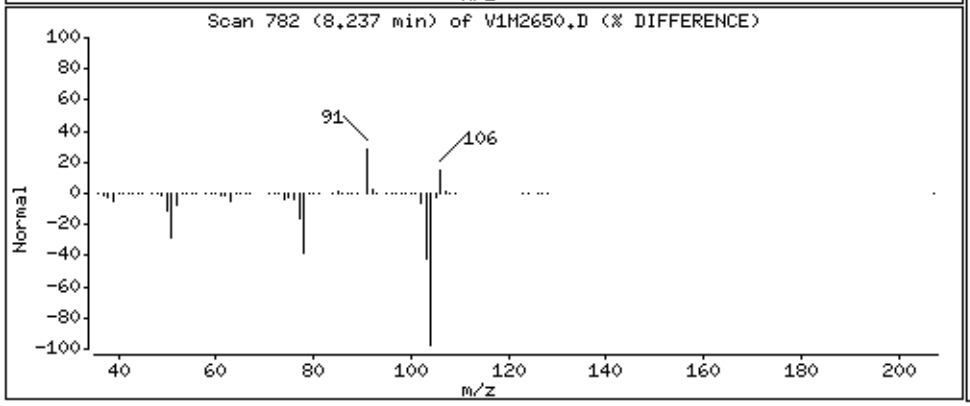












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

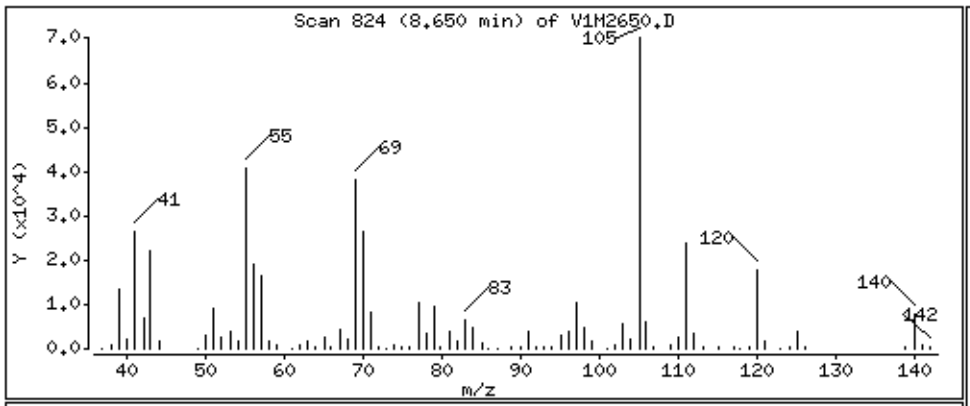
Client ID: PC-01 Instrument: V1.i

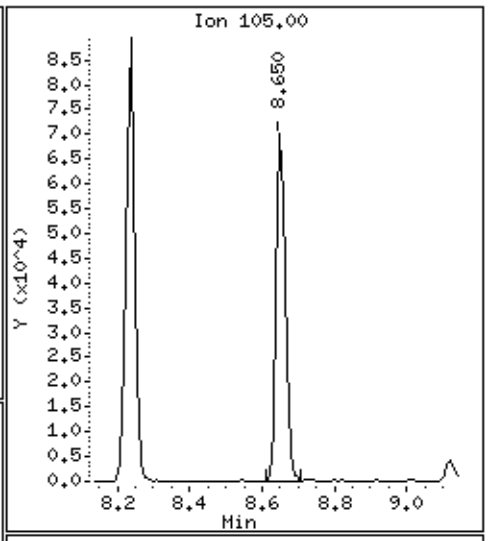
Sample Info: 5G,M1032-01B,,72527

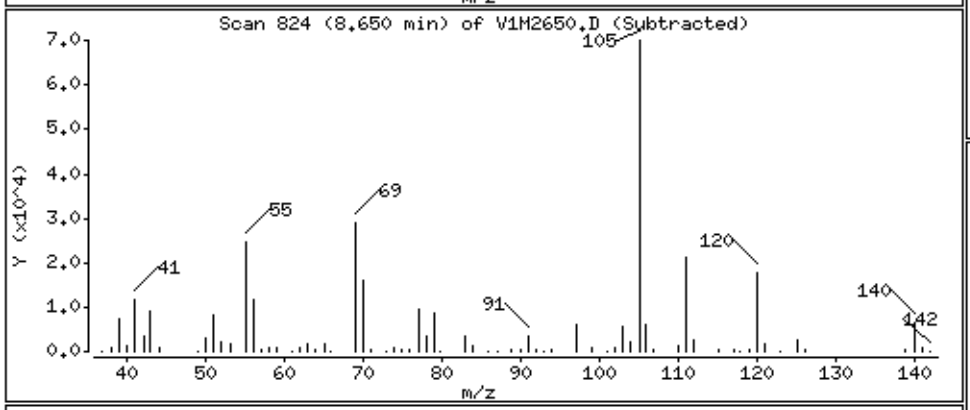
Operator: WL SRC: LIMS

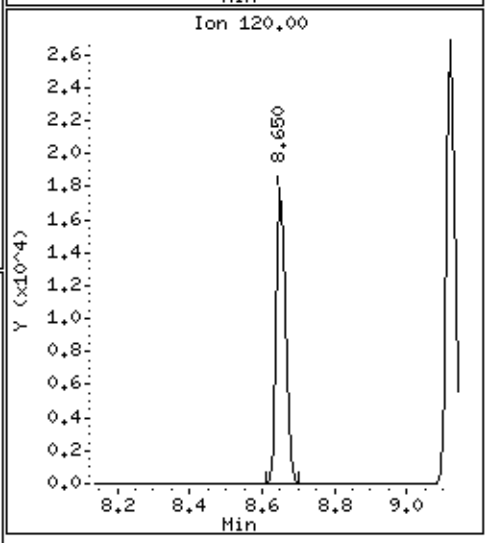
Column phase: DB-624 Column diameter: 0.25

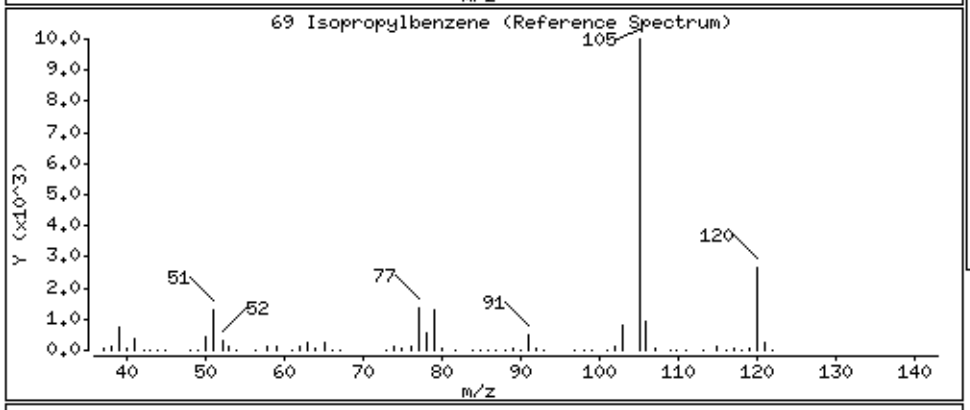
69 Isopropylbenzene Concentration: 14 ug/Kg

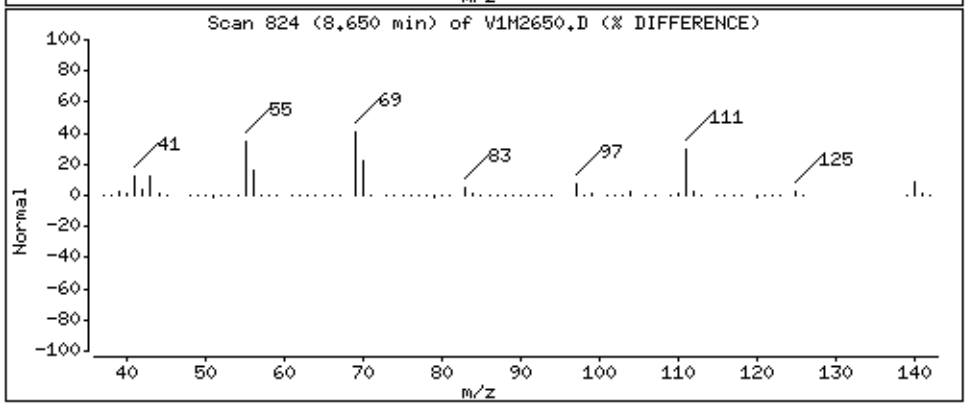












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

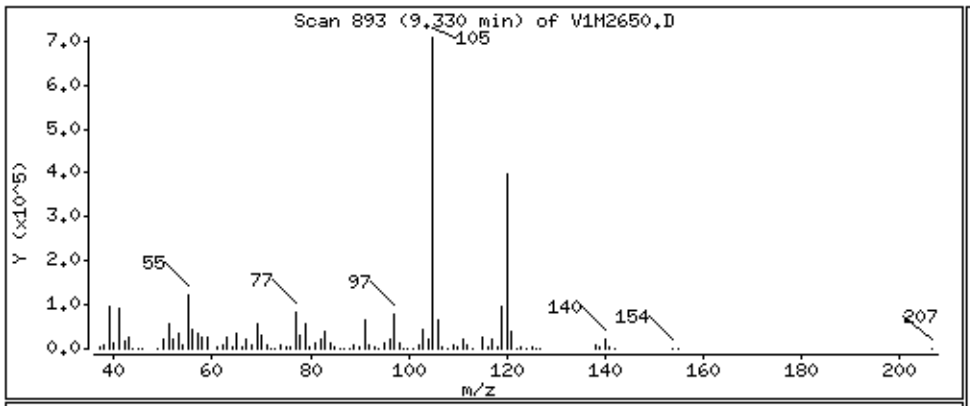
Client ID: PC-01 Instrument: V1.i

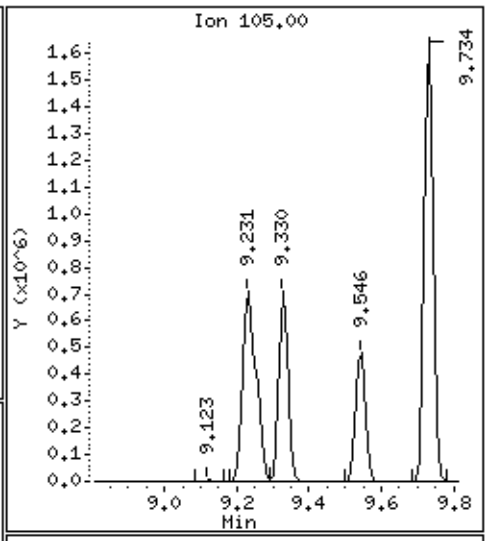
Sample Info: 5G,M1032-01B,,72527

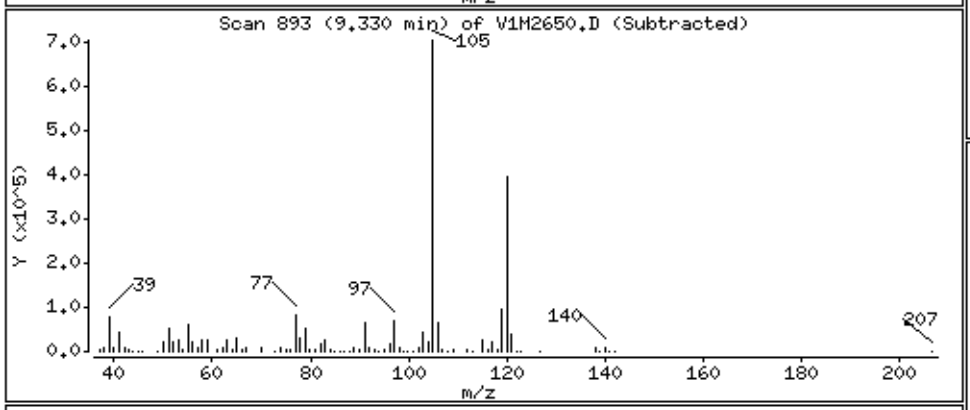
Operator: WL SRC: LIMS

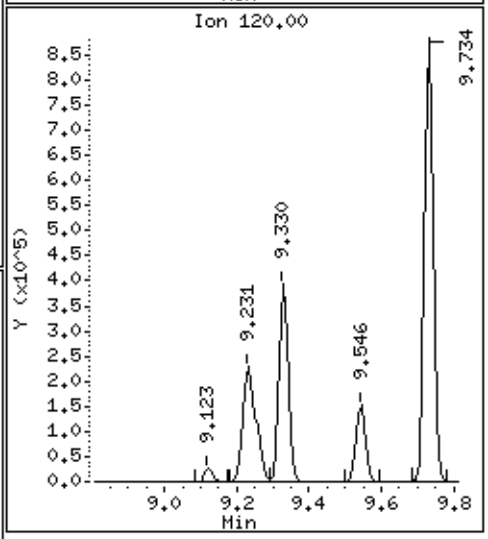
Column phase: DB-624 Column diameter: 0.25

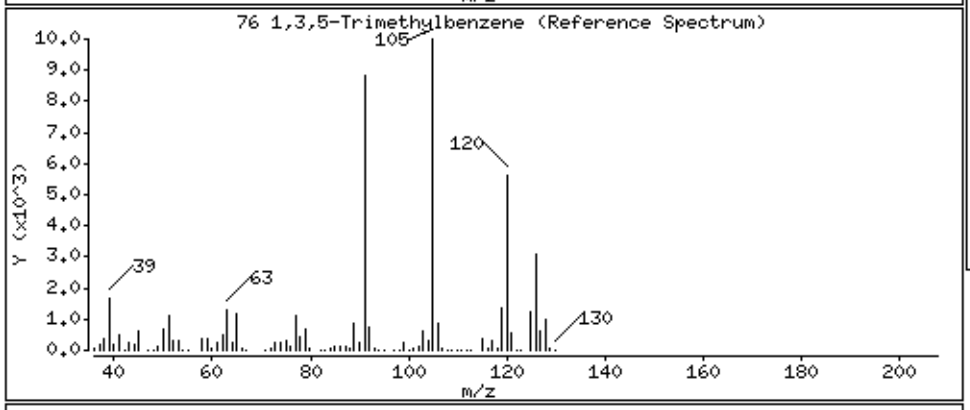
76 1,3,5-Trimethylbenzene Concentration: 160 ug/Kg

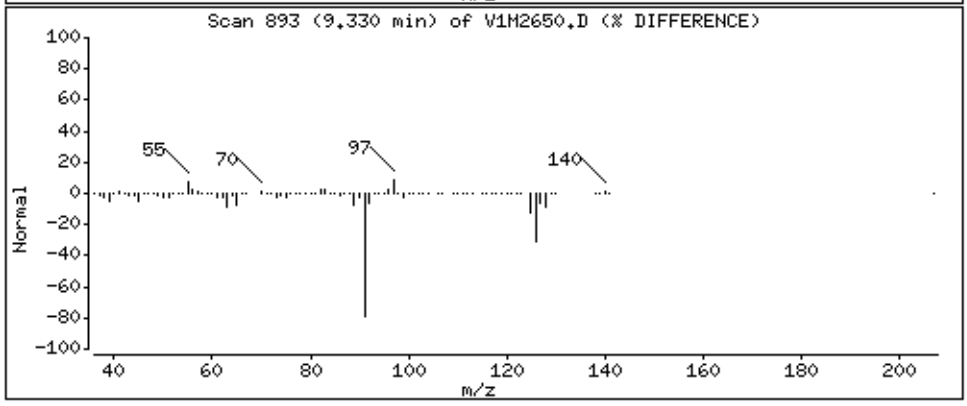












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

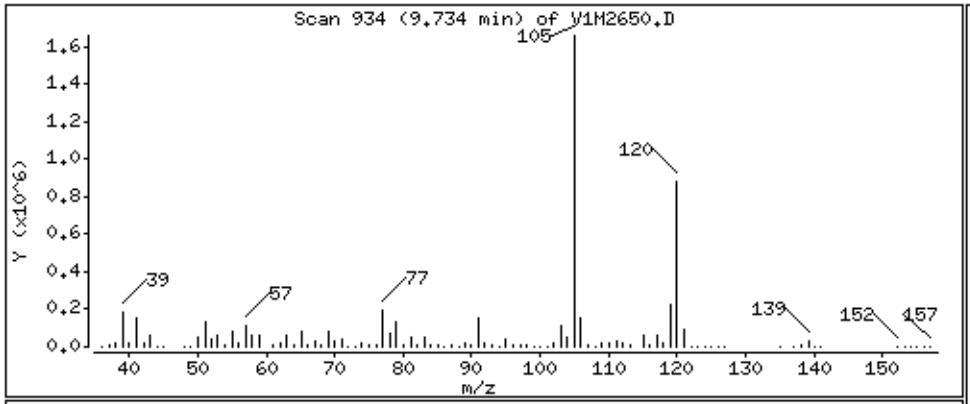
Client ID: PC-01 Instrument: V1.i

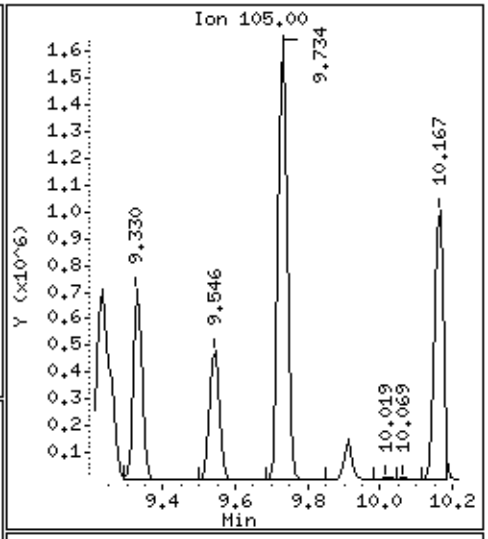
Sample Info: 5G,M1032-01B,,72527

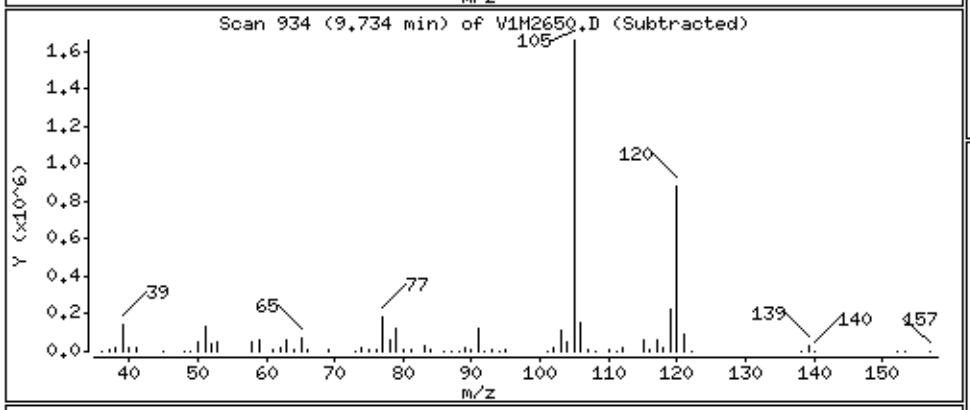
Operator: WL SRC: LIMS

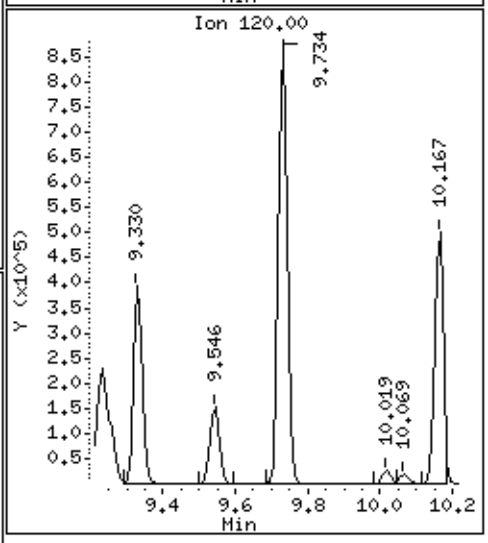
Column phase: DB-624 Column diameter: 0.25

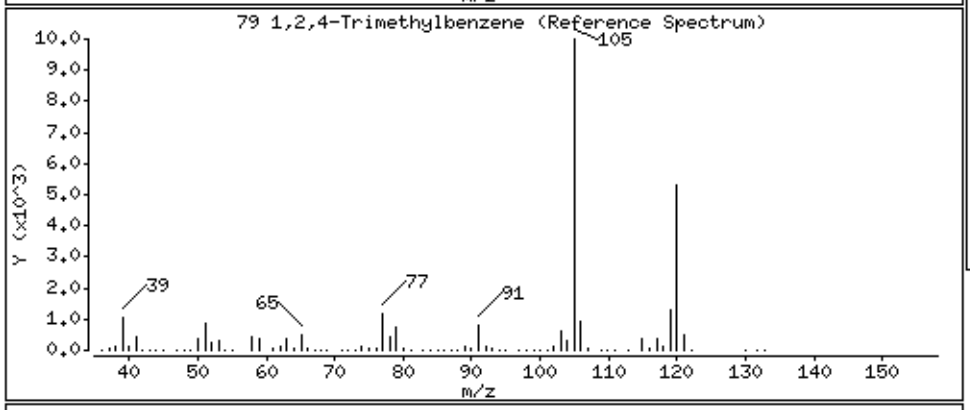
79 1,2,4-Trimethylbenzene Concentration: 370 ug/Kg

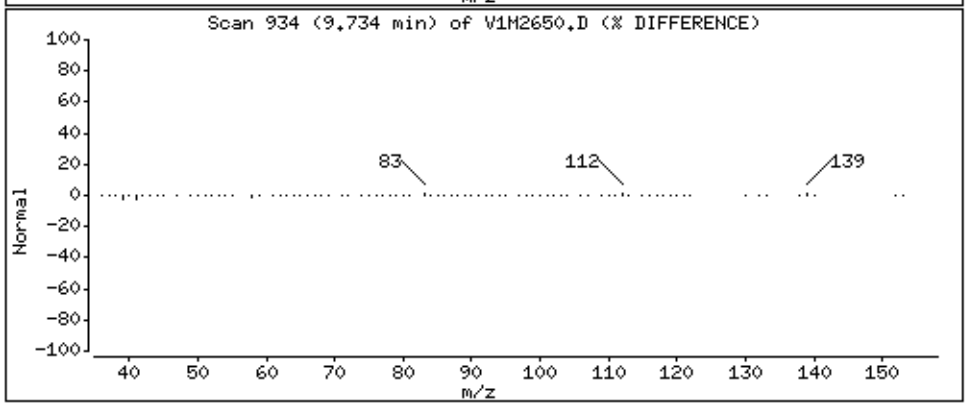












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

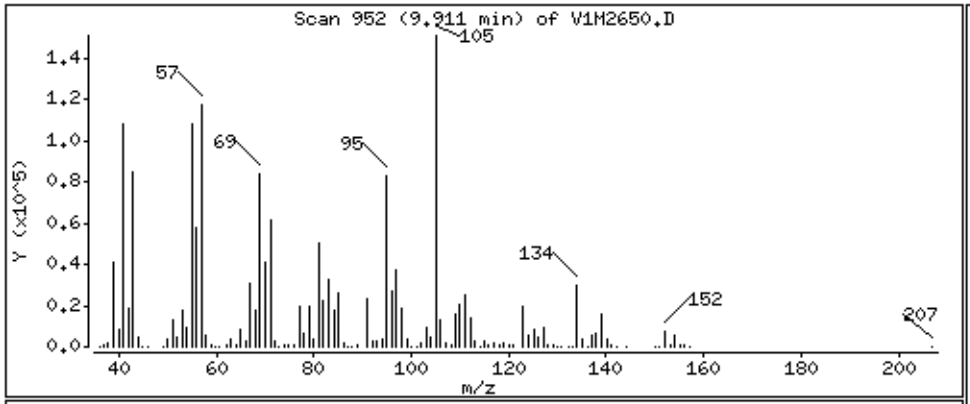
Client ID: PC-01 Instrument: V1.i

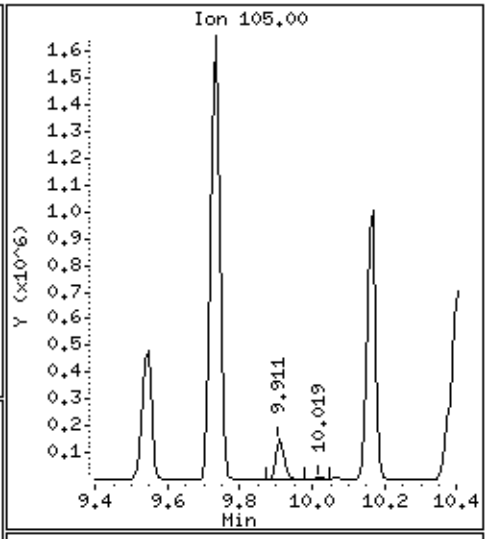
Sample Info: 5G,M1032-01B,,72527

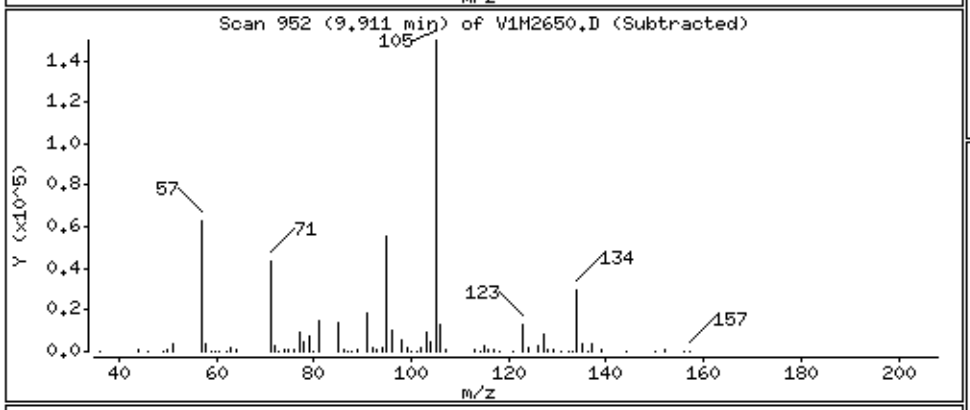
Operator: WL SRC: LIMS

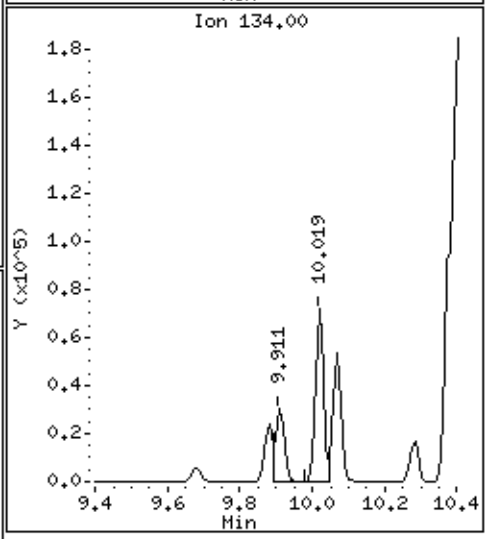
Column phase: DB-624 Column diameter: 0.25

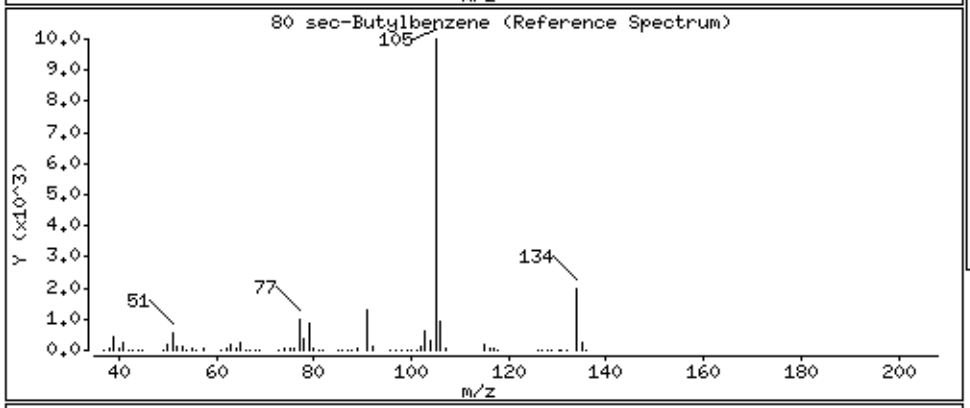
80 sec-Butylbenzene Concentration: 23 ug/Kg

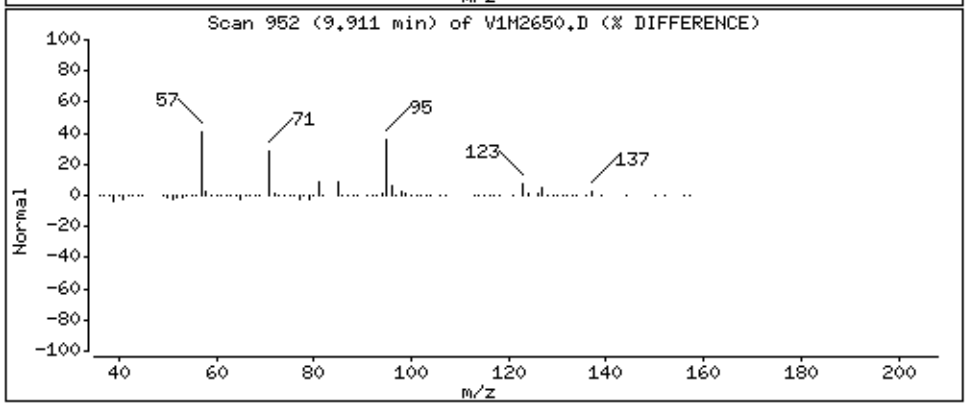












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

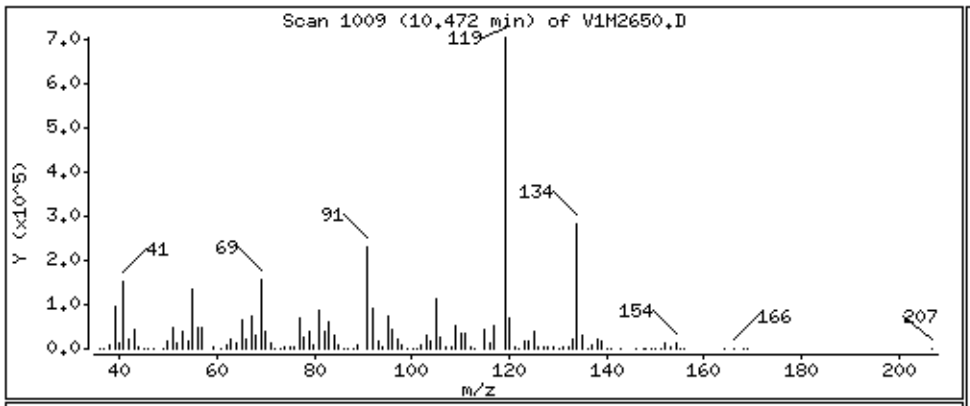
Client ID: PC-01 Instrument: V1.i

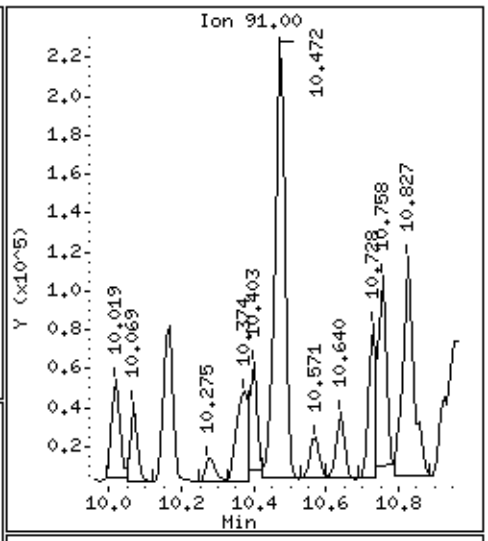
Sample Info: 5G,M1032-01B,,72527

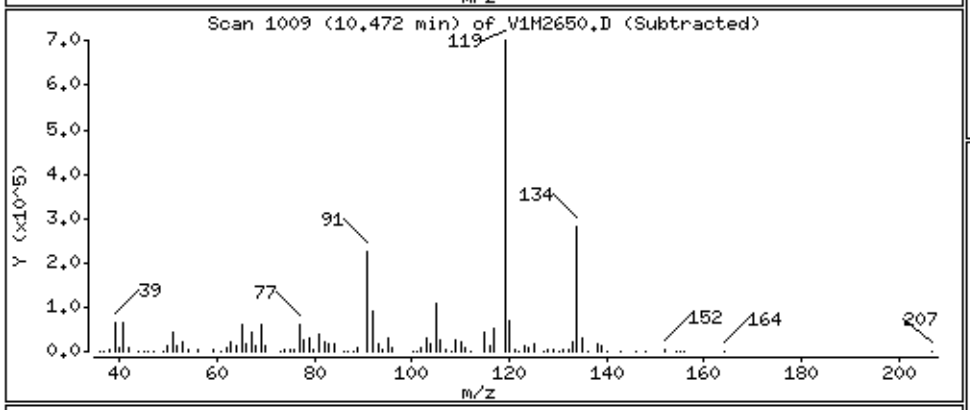
Operator: WL SRC: LIMS

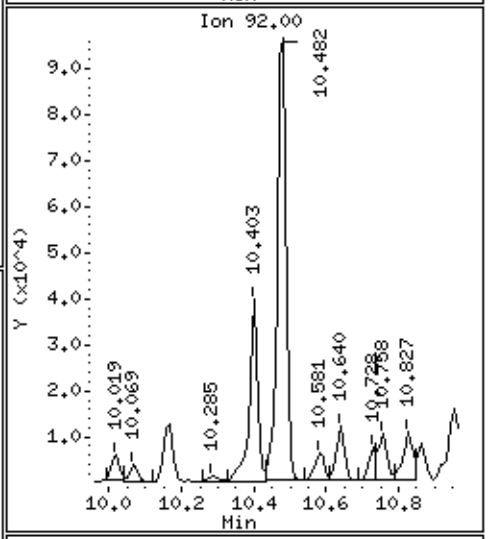
Column phase: DB-624 Column diameter: 0.25

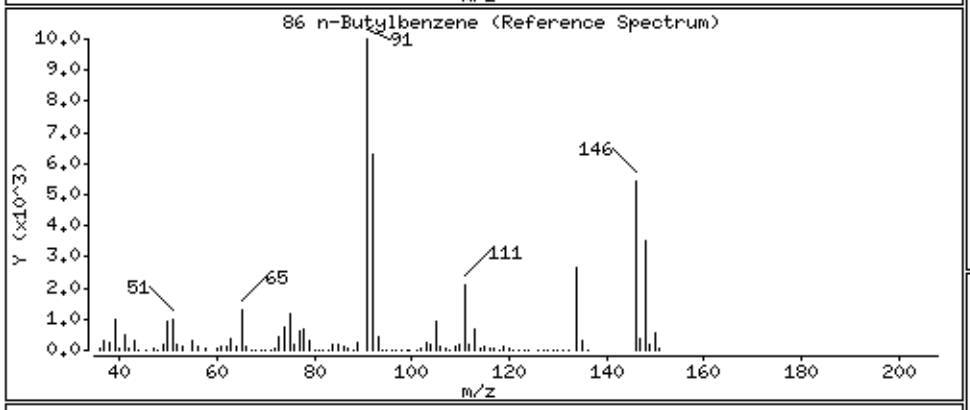
86 n-Butylbenzene Concentration: 64 ug/Kg

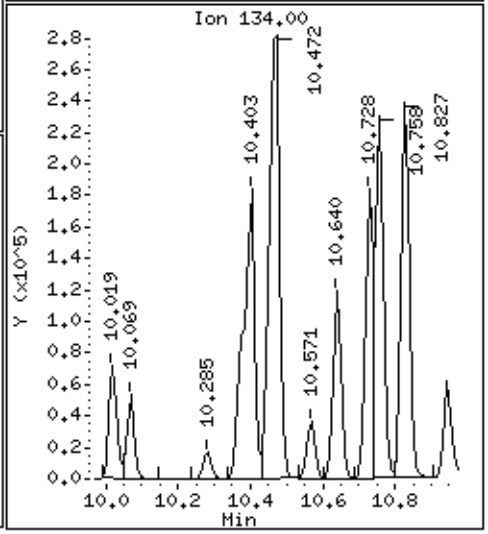


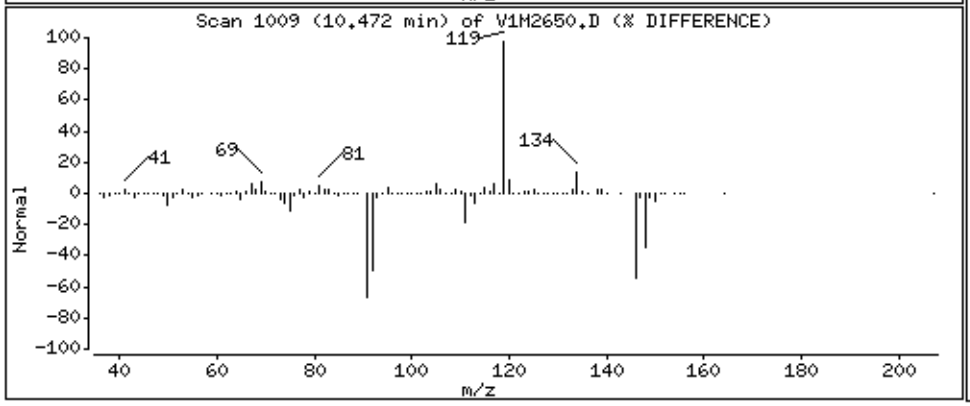












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2650.D

Date : 29-JUN-2013 01:43

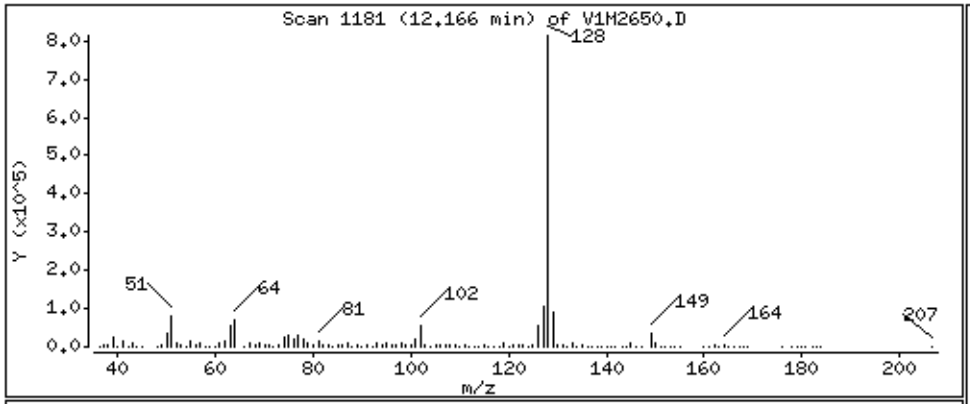
Client ID: PC-01 Instrument: V1.i

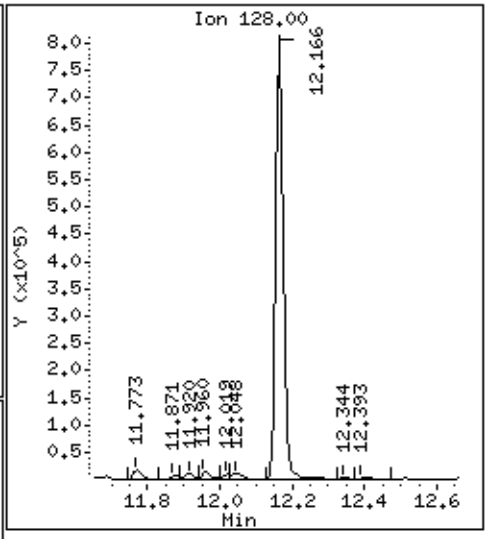
Sample Info: 5G,M1032-01B,,72527

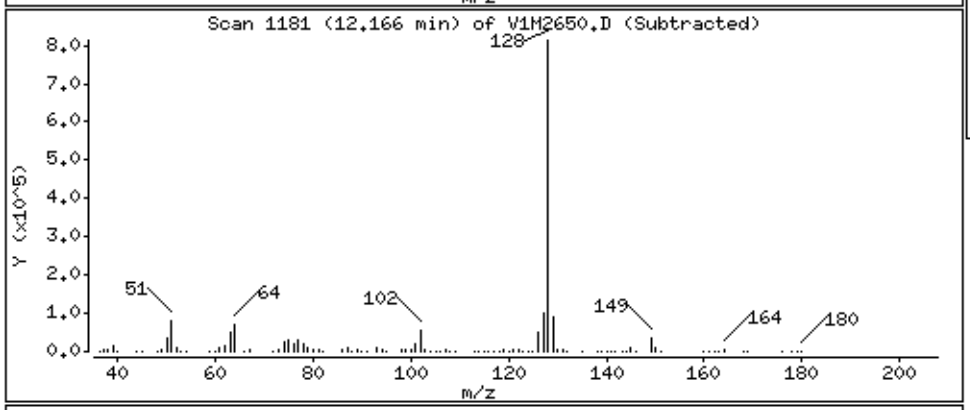
Operator: WL SRC: LIMS

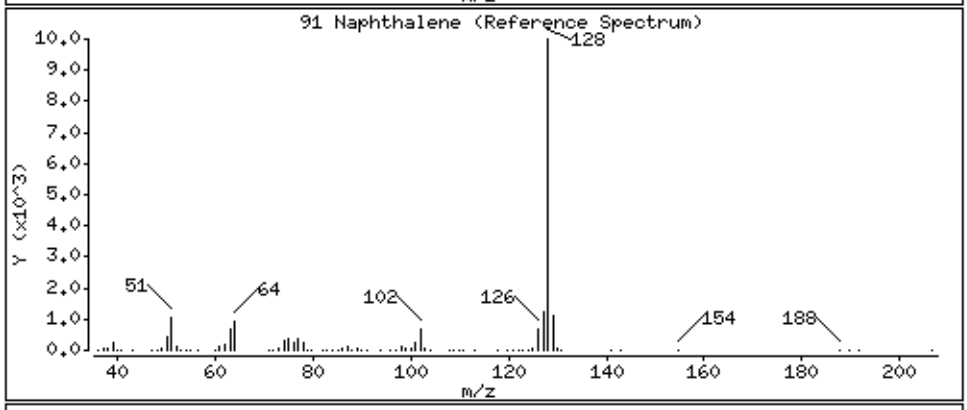
Column phase: DB-624 Column diameter: 0.25

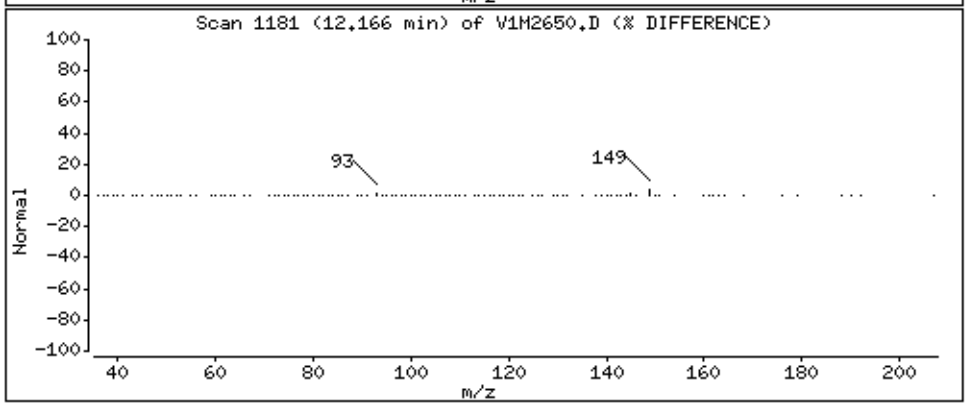
91 Naphthalene Concentration: 200 ug/Kg











1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PC-01ME

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-01B

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V6I1702.D

Level: (TRACE/LOW/MED) MED Date Received: 06/22/2013

% Moisture: not dec. 4.5 Date Analyzed: 07/01/2013

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	270	U
74-87-3	Chloromethane	270	U
75-01-4	Vinyl chloride	270	U
74-83-9	Bromomethane	270	U
75-00-3	Chloroethane	270	U
75-69-4	Trichlorofluoromethane	270	U
75-35-4	1,1-Dichloroethene	270	U
67-64-1	Acetone	270	U
74-88-4	Iodomethane	270	U
75-15-0	Carbon disulfide	270	U
75-09-2	Methylene chloride	270	U
156-60-5	trans-1,2-Dichloroethene	270	U
1634-04-4	Methyl tert-butyl ether	270	U
75-34-3	1,1-Dichloroethane	270	U
108-05-4	Vinyl acetate	270	U
78-93-3	2-Butanone	270	U
156-59-2	cis-1,2-Dichloroethene	270	U
594-20-7	2,2-Dichloropropane	270	U
74-97-5	Bromochloromethane	270	U
67-66-3	Chloroform	270	U
71-55-6	1,1,1-Trichloroethane	270	U
563-58-6	1,1-Dichloropropene	270	U
56-23-5	Carbon tetrachloride	270	U
107-06-2	1,2-Dichloroethane	270	U
71-43-2	Benzene	270	U
79-01-6	Trichloroethene	270	U
78-87-5	1,2-Dichloropropane	270	U
74-95-3	Dibromomethane	270	U
75-27-4	Bromodichloromethane	270	U
10061-01-5	cis-1,3-Dichloropropene	270	U
108-10-1	4-Methyl-2-pentanone	270	U
108-88-3	Toluene	270	U
10061-02-6	trans-1,3-Dichloropropene	270	U
79-00-5	1,1,2-Trichloroethane	270	U
142-28-9	1,3-Dichloropropane	270	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PC-01ME

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-01B

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V6I1702.D

Level: (TRACE/LOW/MED) MED Date Received: 06/22/2013

% Moisture: not dec. 4.5 Date Analyzed: 07/01/2013

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	270	U
591-78-6	2-Hexanone	270	U
124-48-1	Dibromochloromethane	270	U
106-93-4	1,2-Dibromoethane	270	U
108-90-7	Chlorobenzene	270	U
630-20-6	1,1,1,2-Tetrachloroethane	270	U
100-41-4	Ethylbenzene	270	U
179601-23-1	m,p-Xylene	270	U
95-47-6	o-Xylene	270	U
1330-20-7	Xylene (Total)	270	U
100-42-5	Styrene	270	U
75-25-2	Bromoform	270	U
98-82-8	Isopropylbenzene	270	U
79-34-5	1,1,2,2-Tetrachloroethane	270	U
108-86-1	Bromobenzene	270	U
96-18-4	1,2,3-Trichloropropane	270	U
103-65-1	n-Propylbenzene	270	U
95-49-8	2-Chlorotoluene	270	U
108-67-8	1,3,5-Trimethylbenzene	150	J
106-43-4	4-Chlorotoluene	270	U
98-06-6	tert-Butylbenzene	270	U
95-63-6	1,2,4-Trimethylbenzene	400	
135-98-8	sec-Butylbenzene	35	J
99-87-6	4-Isopropyltoluene	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	270	U
104-51-8	n-Butylbenzene	170	J
95-50-1	1,2-Dichlorobenzene	270	U
96-12-8	1,2-Dibromo-3-chloropropane	270	U
120-82-1	1,2,4-Trichlorobenzene	270	U
87-68-3	Hexachlorobutadiene	270	U
87-61-6	1,2,3-Trichlorobenzene	270	U
91-20-3	Naphthalene	630	

Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D
Report Date: 10-Jul-2013 09:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130701.B\V6I1702.D
Lab Smp Id: M1032-01B Client Smp ID: PC-01
Inj Date : 01-JUL-2013 13:15
Operator : ALM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,M1032-01B,,72542,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130701.B\v68260Gadd-6lvl.m
Meth Date : 10-Jul-2013 09:29 amarquis Quant Type: ISTD
Cal Date : 20-JUN-2013 18:05 Cal File: V6I1526.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

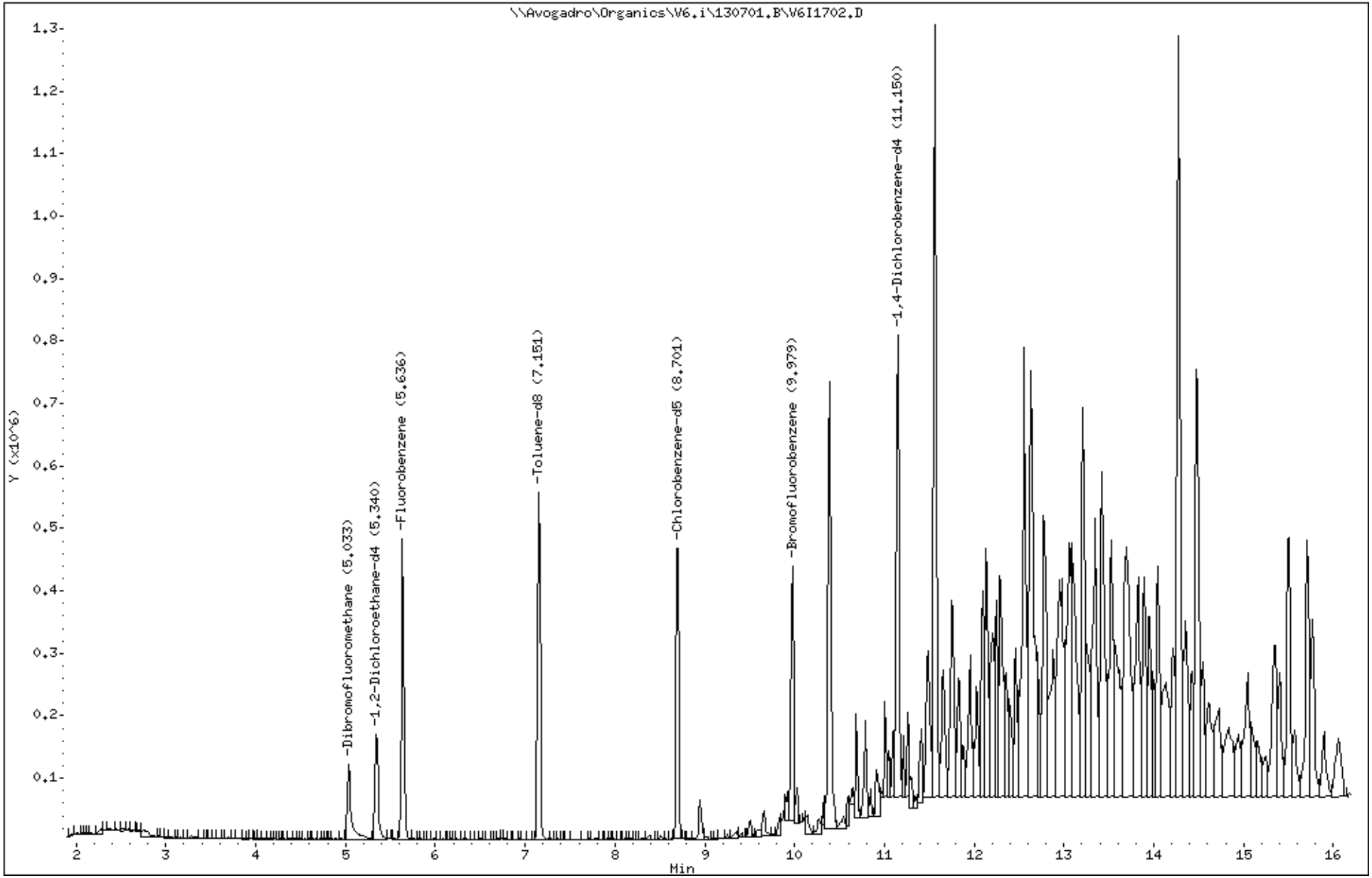
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 36	Dibromofluoromethane	113	5.032	5.041	(0.893)	115353	46.8551	2300
$ 42	1,2-Dichloroethane-d4	102	5.352	5.349	(0.950)	32476	51.7587	2600
* 46	Fluorobenzene	96	5.636	5.645	(1.000)	457743	50.0000	
$ 58	Toluene-d8	98	7.150	7.159	(0.822)	422190	48.5608	2400
* 68	Chlorobenzene-d5	117	8.700	8.697	(1.000)	358737	50.0000	
$ 79	Bromofluorobenzene	95	9.978	9.975	(1.147)	175477	50.9327	2500
85	1,3,5-Trimethylbenzene	105	10.404	10.413	(0.933)	31061	2.74709	140(a)
88	1,2,4-Trimethylbenzene	105	10.795	10.792	(0.968)	83860	7.38846	370
89	sec-Butylbenzene	105	10.961	10.957	(0.983)	9365	0.64813	32(a)
* 92	1,4-Dichlorobenzene-d4	152	11.150	11.147	(1.000)	205518	50.0000	
95	n-Butylbenzene	91	11.493	11.502	(1.031)	35103	3.10687	160(aQH)
101	Naphthalene	128	13.209	13.218	(1.185)	147954	11.4982	570

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D
Date : 01-JUL-2013 13:15
Client ID: PC-01
Instrument: V6.i
Sample Info: 5ML,M1032-01B,,72542,
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D

Date : 01-JUL-2013 13:15

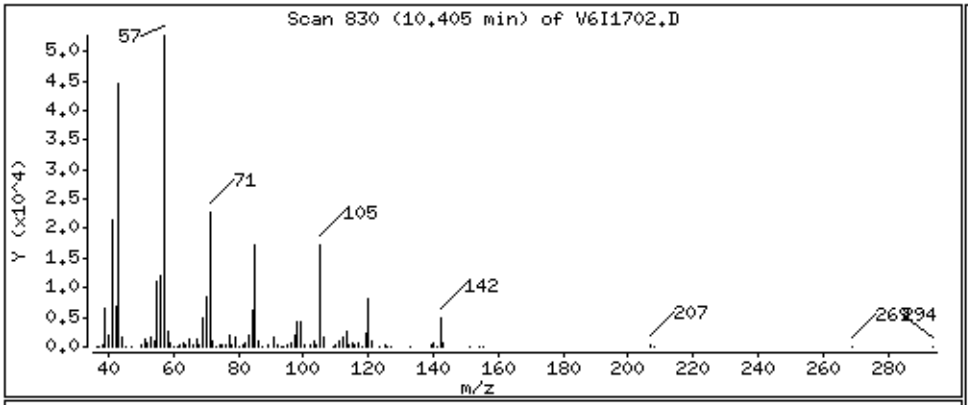
Client ID: PC-01 Instrument: V6.i

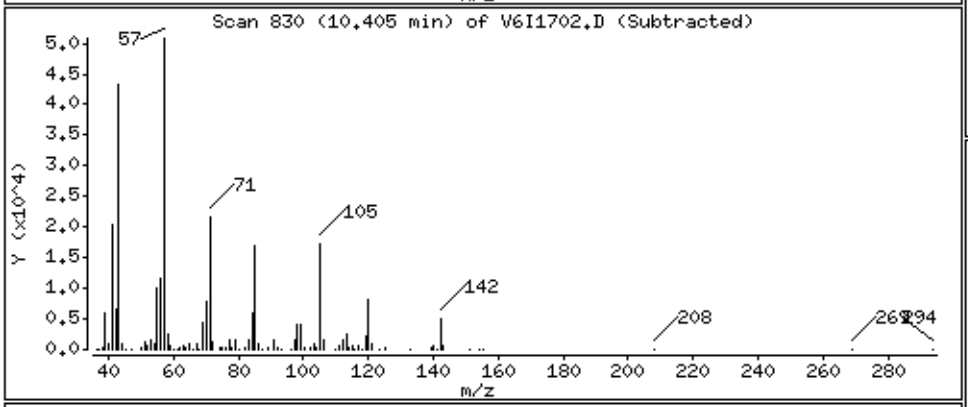
Sample Info: 5ML,M1032-01B,,72542,

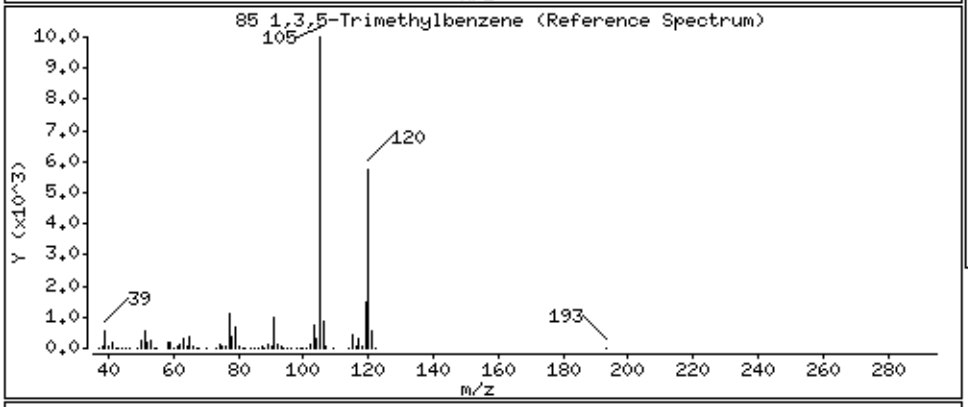
Operator: ALM SRC: LIMS

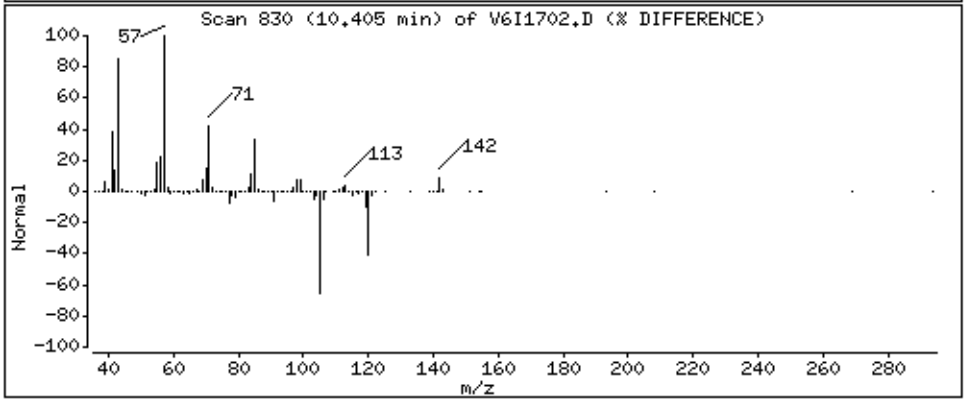
Column phase: DB-624 Column diameter: 0.25

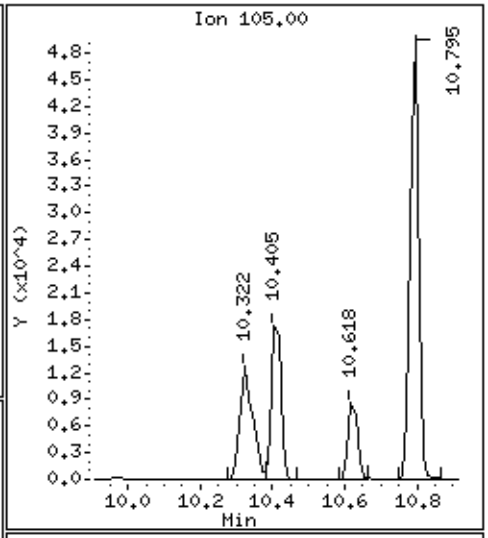
85 1,3,5-Trimethylbenzene Concentration: 140 ug/Kg

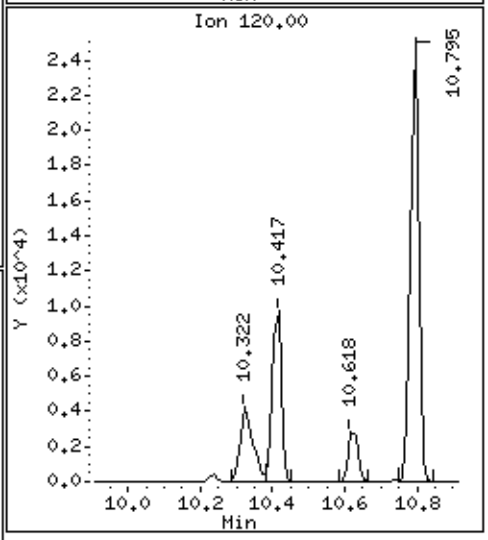












Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D

Date : 01-JUL-2013 13:15

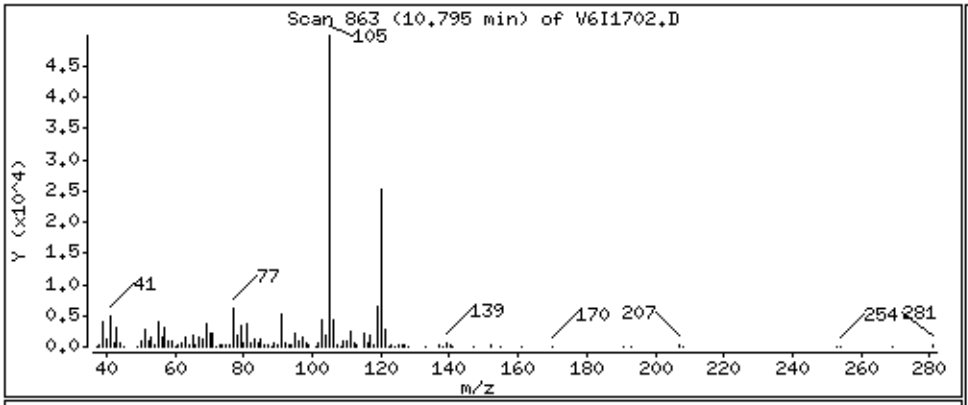
Client ID: PC-01 Instrument: V6.i

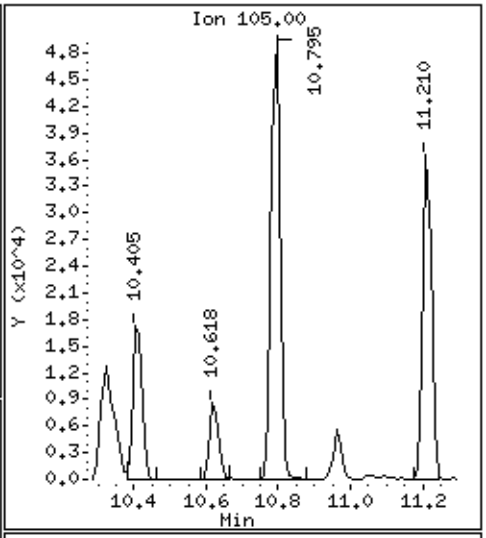
Sample Info: 5ML,M1032-01B,,72542,

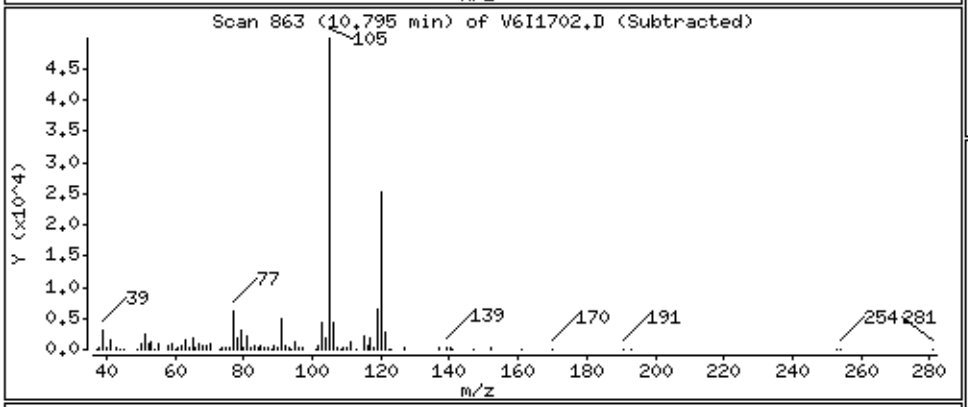
Operator: ALM SRC: LIMS

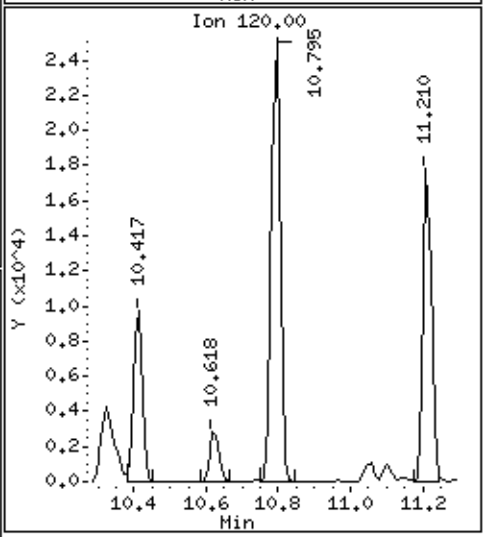
Column phase: DB-624 Column diameter: 0.25

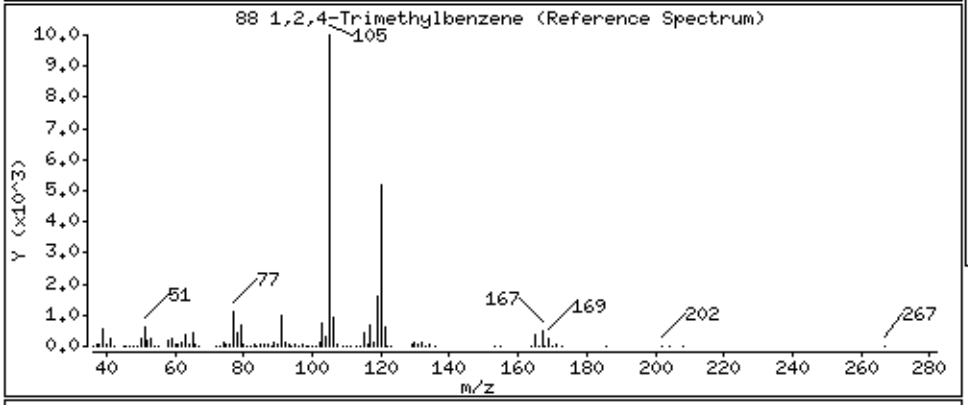
88 1,2,4-Trimethylbenzene Concentration: 370 ug/Kg

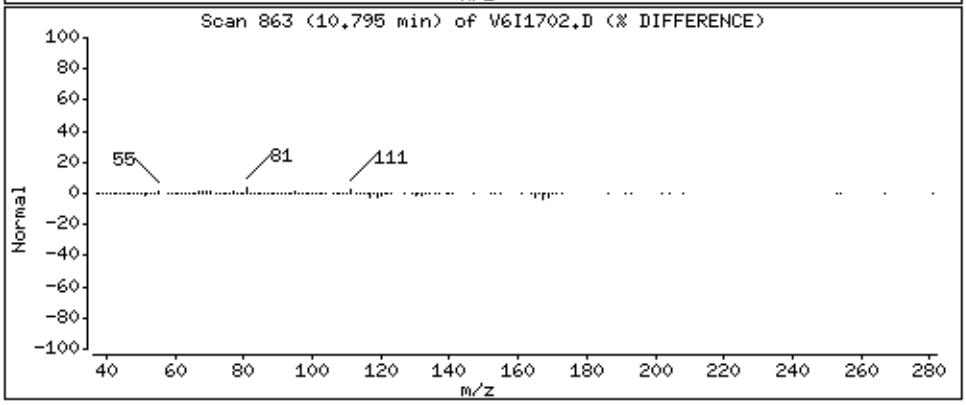












Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D

Date : 01-JUL-2013 13:15

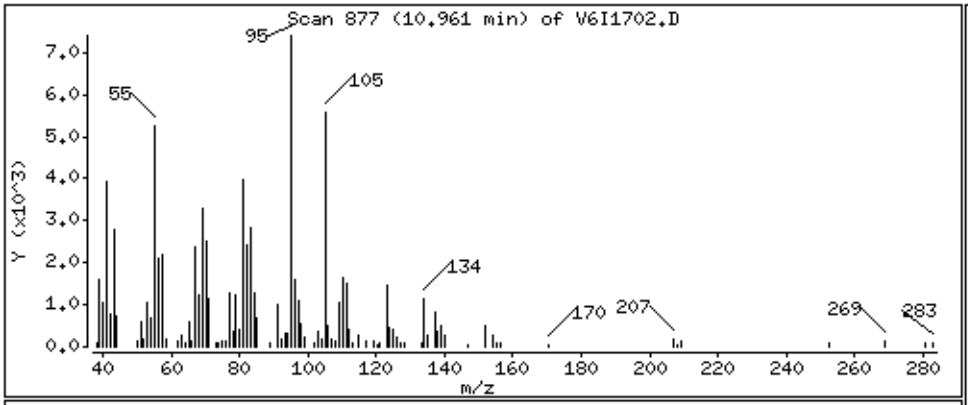
Client ID: PC-01 Instrument: V6.i

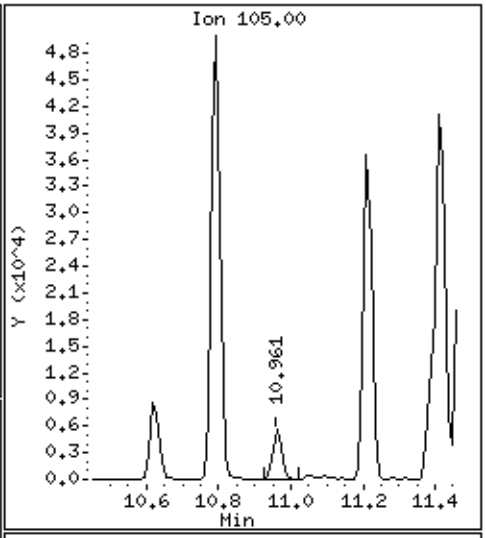
Sample Info: 5ML,M1032-01B,,72542,

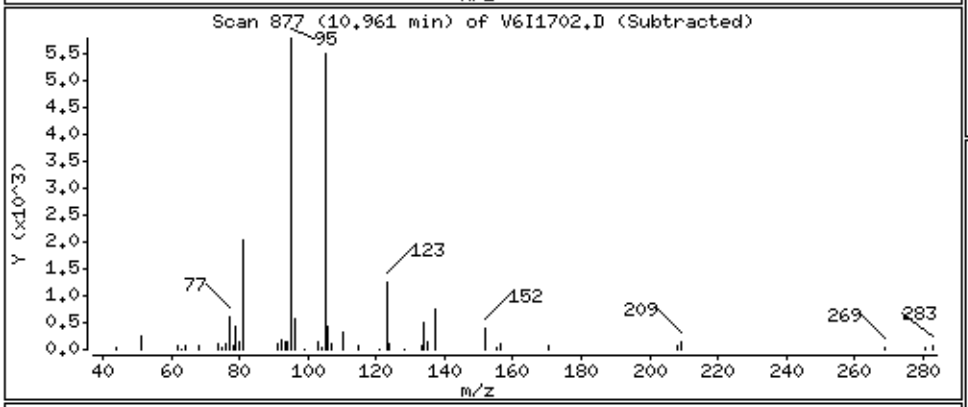
Operator: ALM SRC: LIMS

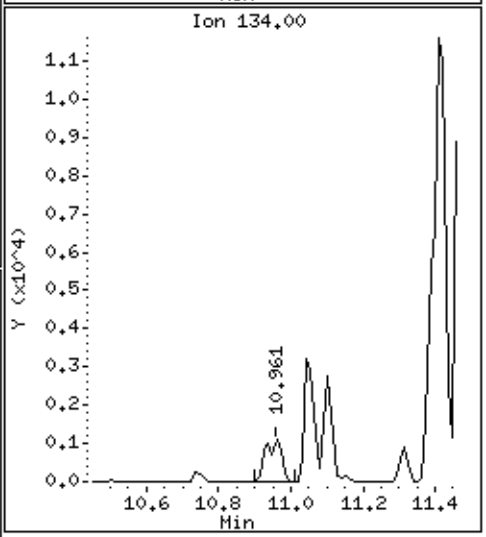
Column phase: DB-624 Column diameter: 0.25

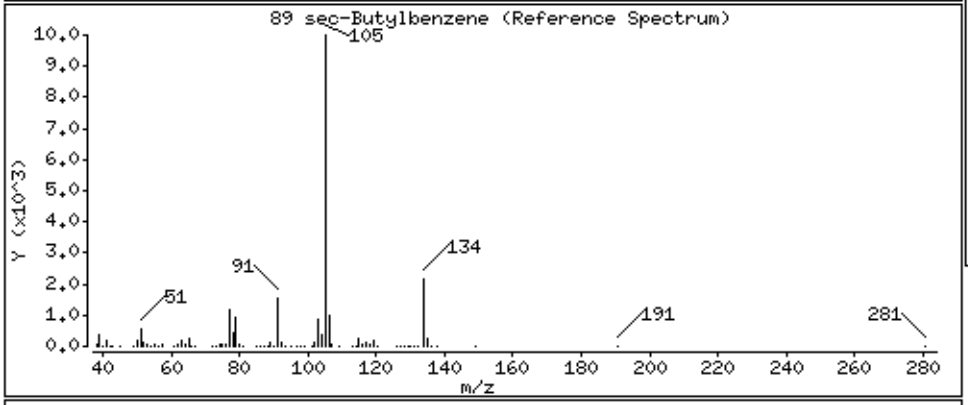
89 sec-Butylbenzene Concentration: 32 ug/Kg

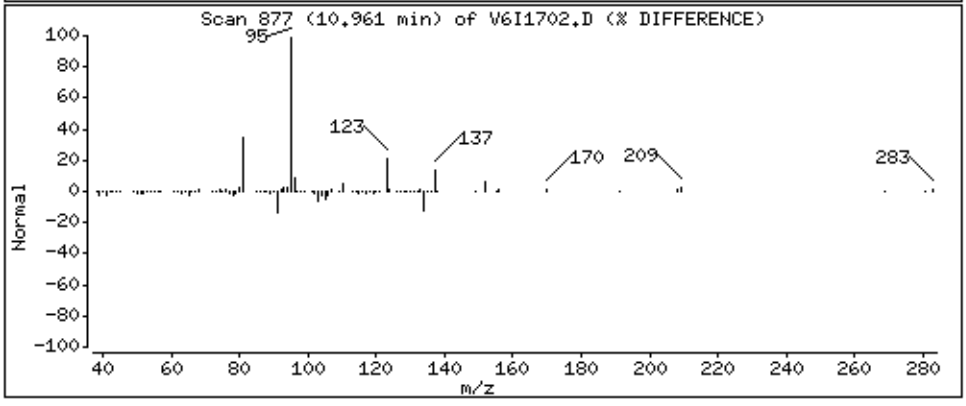












Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D

Date : 01-JUL-2013 13:15

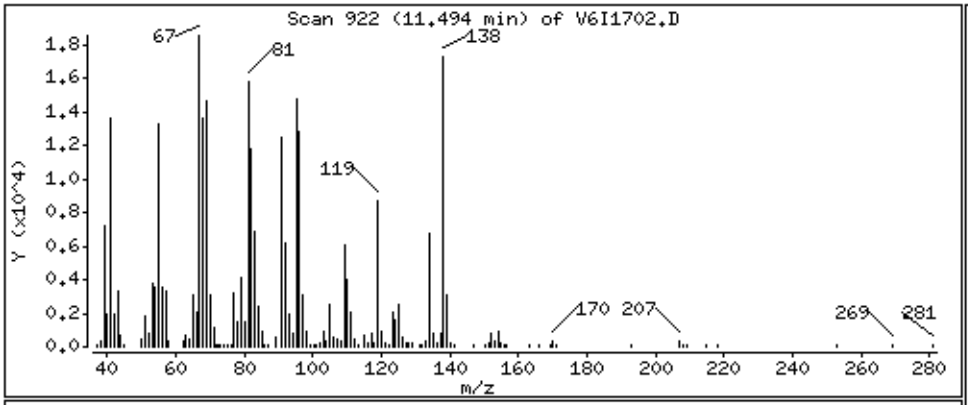
Client ID: PC-01 Instrument: V6.i

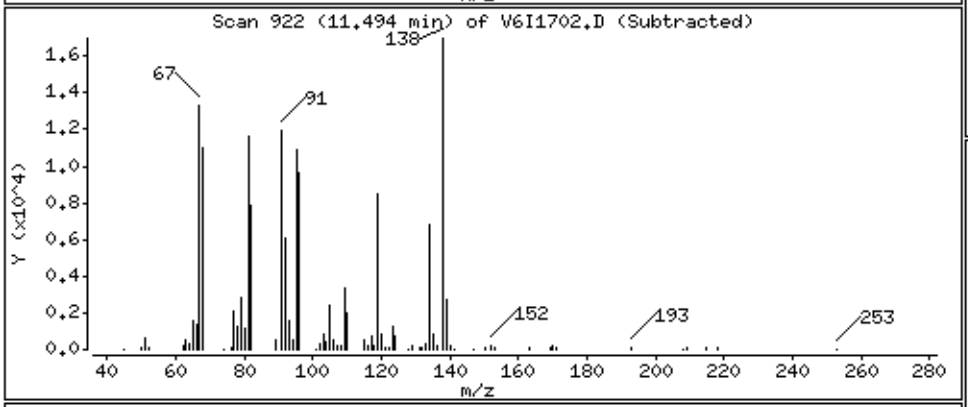
Sample Info: 5ML,M1032-01B,,72542,

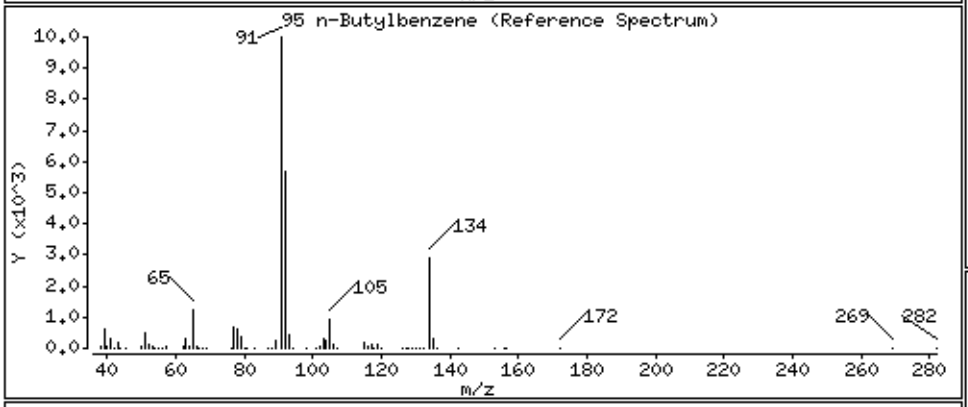
Operator: ALM SRC: LIMS

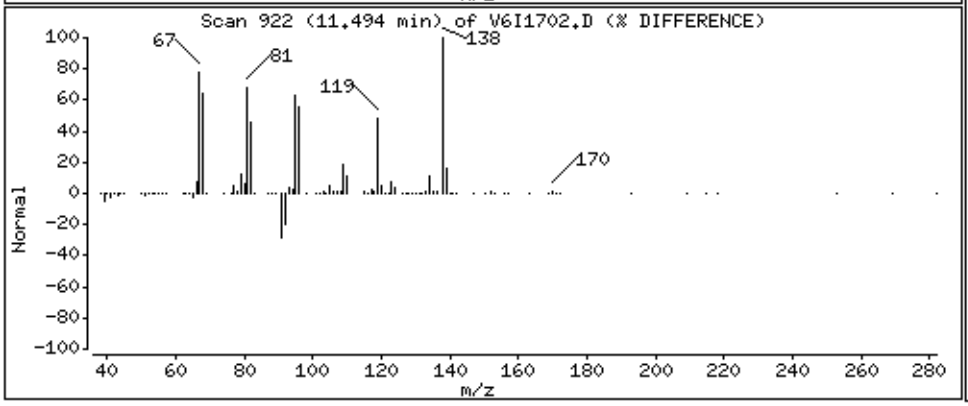
Column phase: DB-624 Column diameter: 0.25

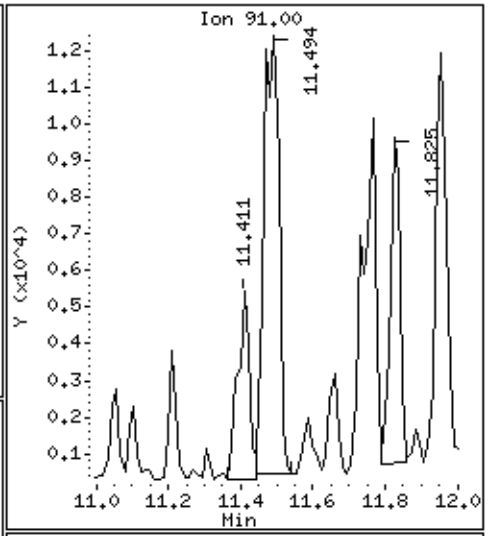
95 n-Butylbenzene Concentration: 160 ug/Kg

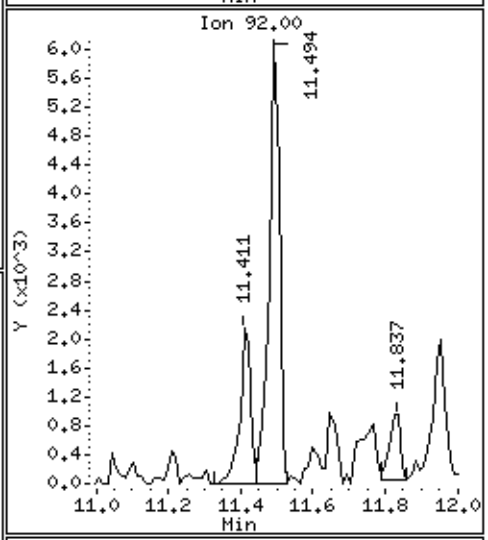


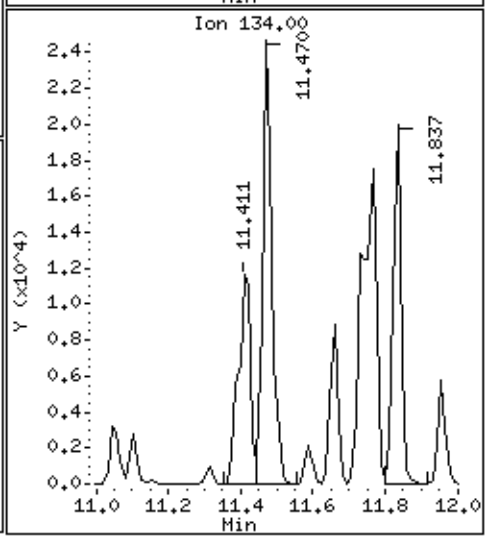












Data File: \\Avogadro\Organics\V6.i\130701.B\V6I1702.D

Date : 01-JUL-2013 13:15

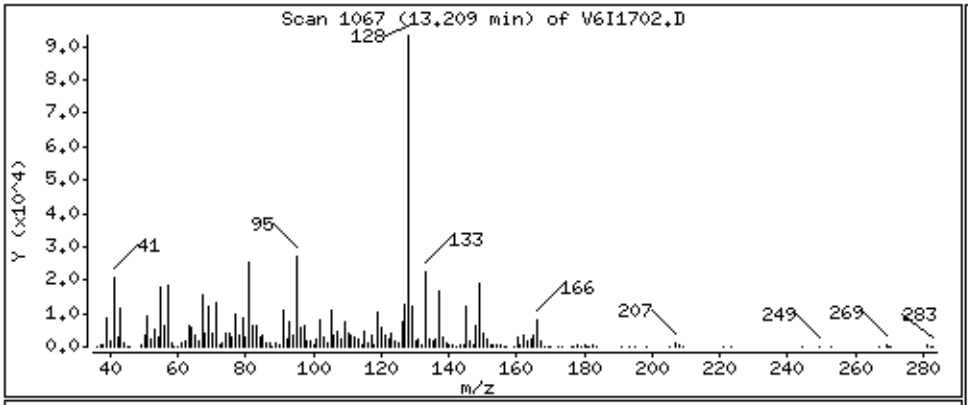
Client ID: PC-01 Instrument: V6.i

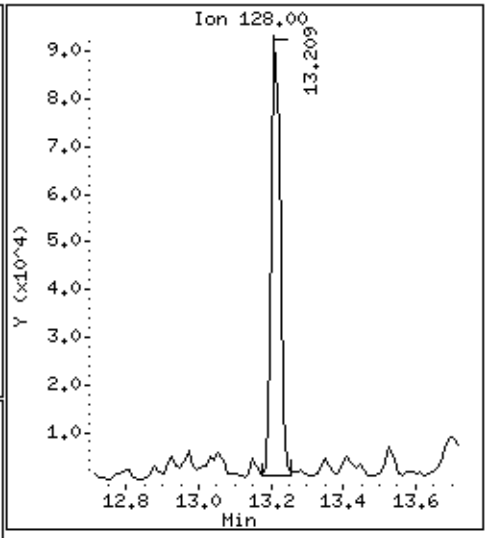
Sample Info: 5ML,M1032-01B,,72542,

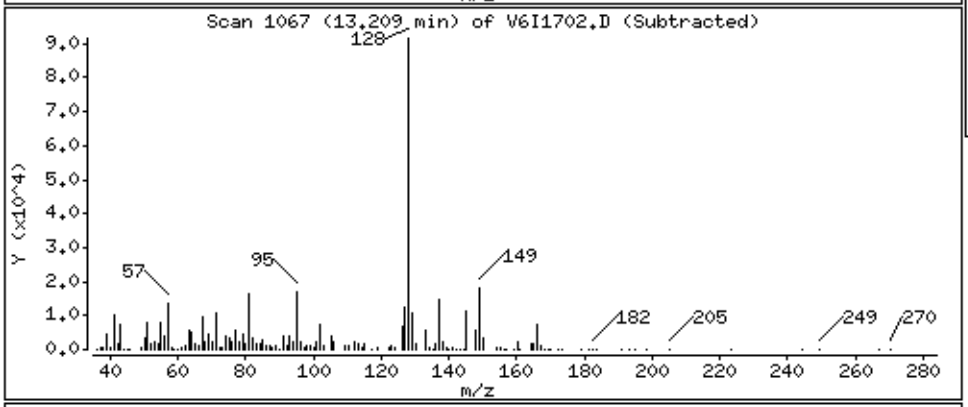
Operator: ALM SRC: LIMS

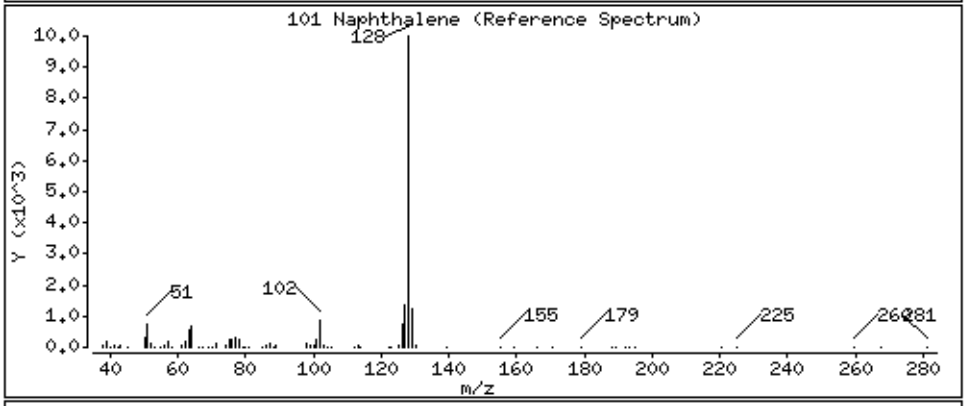
Column phase: DB-624 Column diameter: 0.25

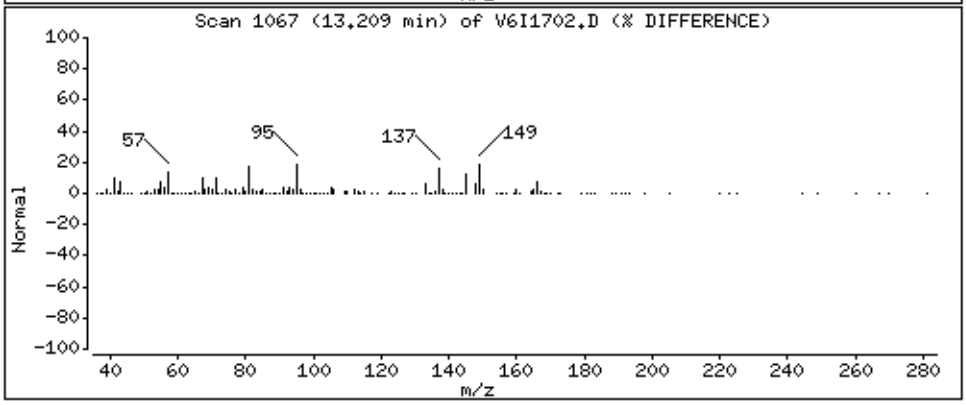
101 Naphthalene Concentration: 570 ug/Kg











1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PC-02

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-02B

Sample wt/vol: 5.70 (g/mL) G Lab File ID: V1M2642.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/22/2013

% Moisture: not dec. 5.3 Date Analyzed: 06/28/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	4.6	U
74-87-3	Chloromethane	4.6	U
75-01-4	Vinyl chloride	4.6	U
74-83-9	Bromomethane	4.6	U
75-00-3	Chloroethane	4.6	U
75-69-4	Trichlorofluoromethane	4.6	U
75-35-4	1,1-Dichloroethene	4.6	U
67-64-1	Acetone	8.0	
74-88-4	Iodomethane	4.6	U
75-15-0	Carbon disulfide	4.6	U
75-09-2	Methylene chloride	4.6	U
156-60-5	trans-1,2-Dichloroethene	4.6	U
1634-04-4	Methyl tert-butyl ether	4.6	U
75-34-3	1,1-Dichloroethane	4.6	U
108-05-4	Vinyl acetate	4.6	U
78-93-3	2-Butanone	4.6	U
156-59-2	cis-1,2-Dichloroethene	4.6	U
594-20-7	2,2-Dichloropropane	4.6	U
74-97-5	Bromochloromethane	4.6	U
67-66-3	Chloroform	4.6	U
71-55-6	1,1,1-Trichloroethane	4.6	U
563-58-6	1,1-Dichloropropene	4.6	U
56-23-5	Carbon tetrachloride	4.6	U
107-06-2	1,2-Dichloroethane	4.6	U
71-43-2	Benzene	4.6	U
79-01-6	Trichloroethene	4.6	U
78-87-5	1,2-Dichloropropane	4.6	U
74-95-3	Dibromomethane	4.6	U
75-27-4	Bromodichloromethane	4.6	U
10061-01-5	cis-1,3-Dichloropropene	4.6	U
108-10-1	4-Methyl-2-pentanone	4.6	U
108-88-3	Toluene	4.6	U
10061-02-6	trans-1,3-Dichloropropene	4.6	U
79-00-5	1,1,2-Trichloroethane	4.6	U
142-28-9	1,3-Dichloropropane	4.6	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PC-02

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-02B

Sample wt/vol: 5.70 (g/mL) G Lab File ID: V1M2642.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/22/2013

% Moisture: not dec. 5.3 Date Analyzed: 06/28/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	4.6	U
591-78-6	2-Hexanone	4.6	U
124-48-1	Dibromochloromethane	4.6	U
106-93-4	1,2-Dibromoethane	4.6	U
108-90-7	Chlorobenzene	4.6	U
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U
100-41-4	Ethylbenzene	4.6	U
179601-23-1	m,p-Xylene	4.6	U
95-47-6	o-Xylene	4.6	U
1330-20-7	Xylene (Total)	4.6	U
100-42-5	Styrene	4.6	U
75-25-2	Bromoform	4.6	U
98-82-8	Isopropylbenzene	4.6	U
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U
108-86-1	Bromobenzene	4.6	U
96-18-4	1,2,3-Trichloropropane	4.6	U
103-65-1	n-Propylbenzene	4.6	U
95-49-8	2-Chlorotoluene	4.6	U
108-67-8	1,3,5-Trimethylbenzene	4.6	U
106-43-4	4-Chlorotoluene	4.6	U
98-06-6	tert-Butylbenzene	4.6	U
95-63-6	1,2,4-Trimethylbenzene	4.6	U
135-98-8	sec-Butylbenzene	4.6	U
99-87-6	4-Isopropyltoluene	4.6	U
541-73-1	1,3-Dichlorobenzene	4.6	U
106-46-7	1,4-Dichlorobenzene	4.6	U
104-51-8	n-Butylbenzene	4.6	U
95-50-1	1,2-Dichlorobenzene	4.6	U
96-12-8	1,2-Dibromo-3-chloropropane	4.6	U
120-82-1	1,2,4-Trichlorobenzene	4.6	U
87-68-3	Hexachlorobutadiene	4.6	U
87-61-6	1,2,3-Trichlorobenzene	4.6	U
91-20-3	Naphthalene	2.7	J

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2642.D
Report Date: 02-Jul-2013 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628A.B\V1M2642.D
Lab Smp Id: M1032-02B Client Smp ID: PC-02
Inj Date : 28-JUN-2013 22:20
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,M1032-02B,,72527
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628A.B\v18260GH.m
Meth Date : 30-Jun-2013 11:23 V1.i Quant Type: ISTD
Cal Date : 28-JUN-2013 13:25 Cal File: V1M2621.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

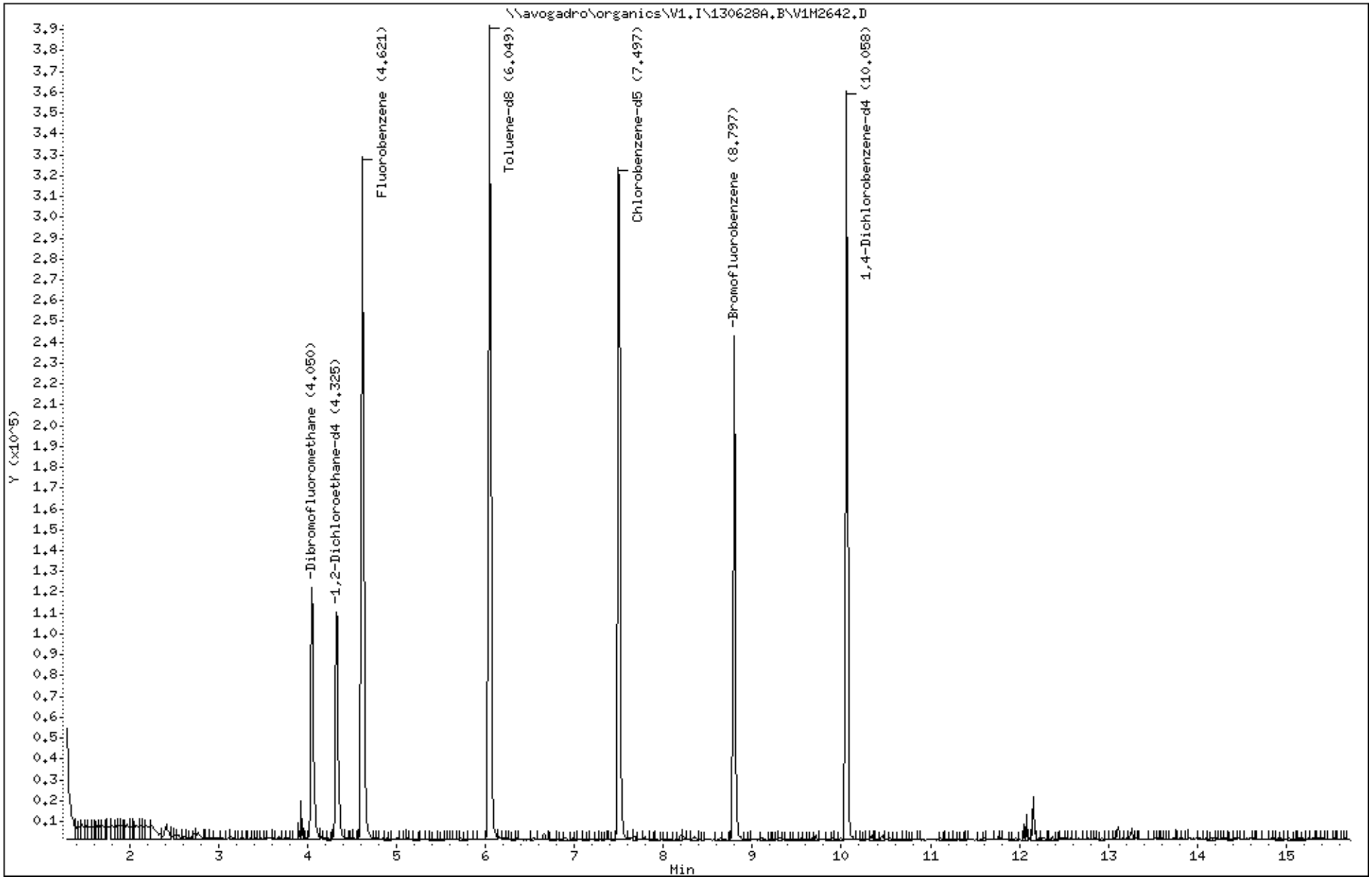
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.700	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	11 Acetone	58	2.414	2.415	(0.523)	2535	8.58868	8(Q)
$	32 Dibromofluoromethane	113	4.049	4.050	(0.876)	79059	52.9801	46
$	37 1,2-Dichloroethane-d4	102	4.335	4.326	(0.938)	22211	53.3304	47
*	41 Fluorobenzene	96	4.620	4.611	(1.000)	304908	50.0000	
$	51 Toluene-d8	98	6.049	6.049	(0.806)	270760	49.2260	43
*	60 Chlorobenzene-d5	117	7.506	7.507	(1.000)	215746	50.0000	
$	70 Bromofluorobenzene	95	8.797	8.797	(1.172)	96877	48.5279	42
*	84 1,4-Dichlorobenzene-d4	152	10.057	10.058	(1.000)	96442	50.0000	(Q)
	91 Naphthalene	128	12.155	12.156	(1.209)	14875	2.87432	2(a)

QC Flag Legend

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

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2642.D
Date : 28-JUN-2013 22:20
Client ID: PC-02
Instrument: V1.i
Sample Info: 5G,M1032-02B,,72527
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628A.B\V1M2642.D

Date : 28-JUN-2013 22:20

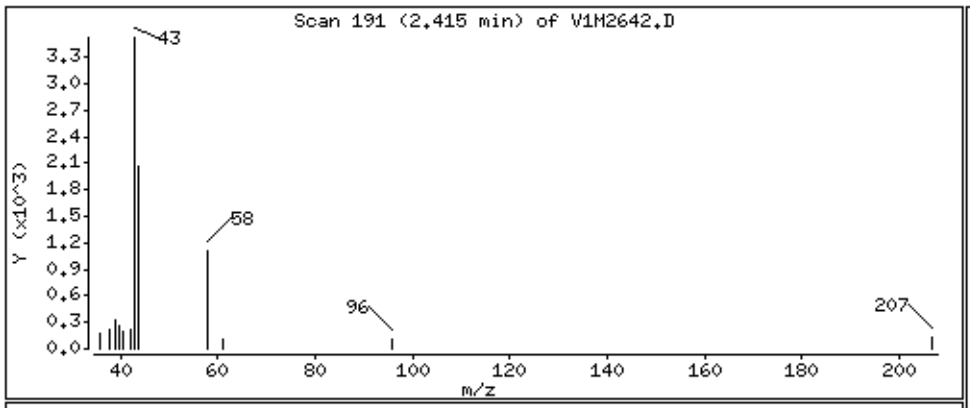
Client ID: PC-02 Instrument: V1.i

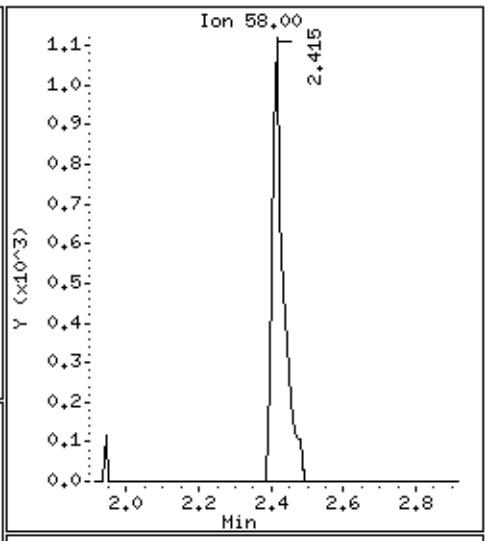
Sample Info: 5G,M1032-02B,,72527

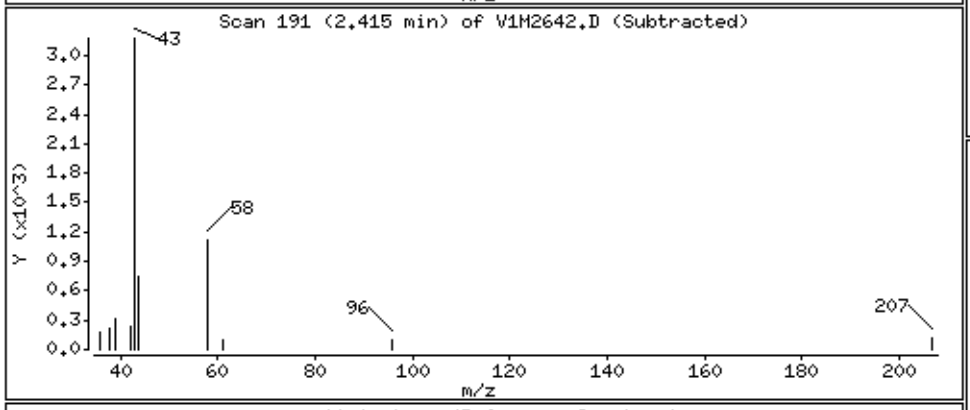
Operator: WL SRC: LIMS

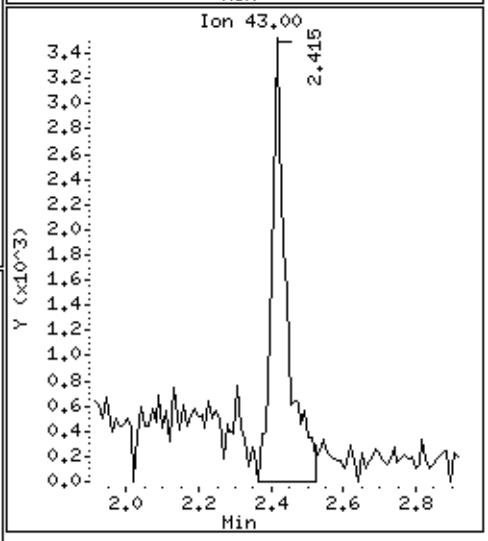
Column phase: DB-624 Column diameter: 0.25

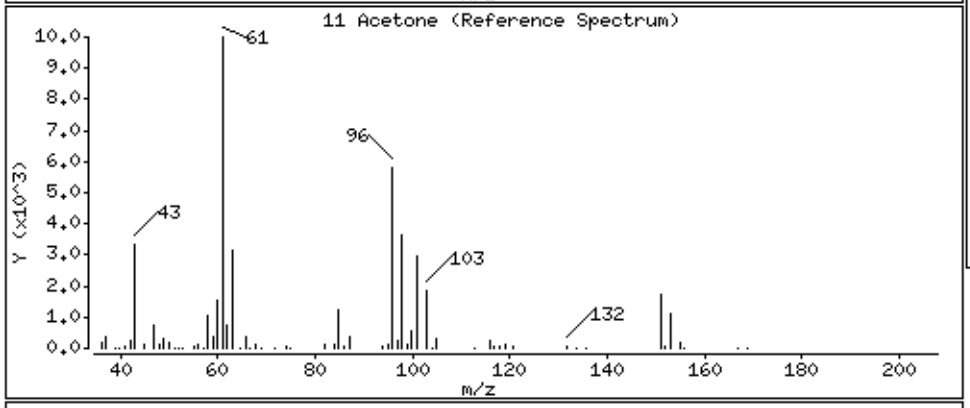
11 Acetone Concentration: 8 ug/Kg

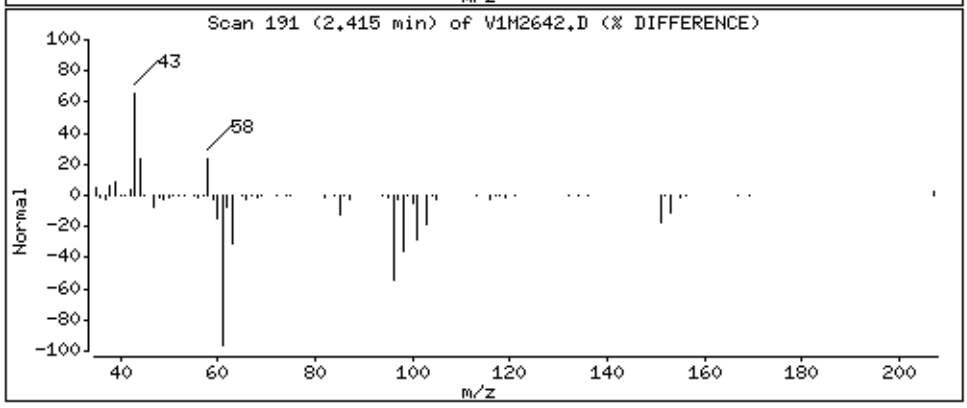












Data File: \\avogadro\organics\V1.I\130628A.B\V1M2642.D

Date : 28-JUN-2013 22:20

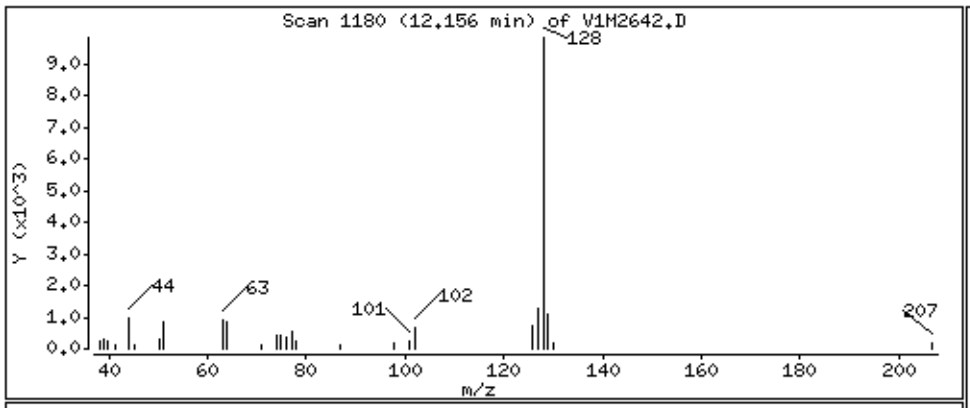
Client ID: PC-02 Instrument: V1.i

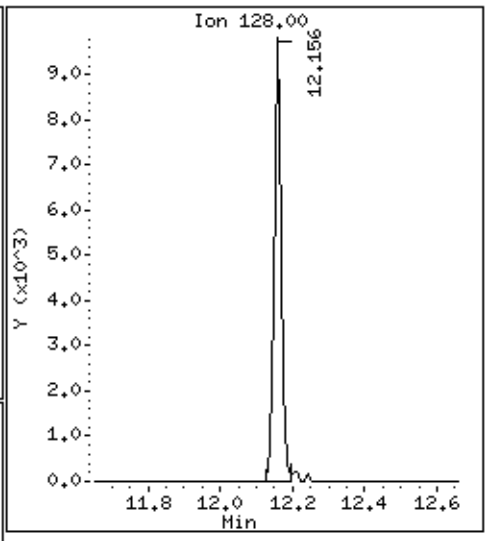
Sample Info: 5G,M1032-02B,,72527

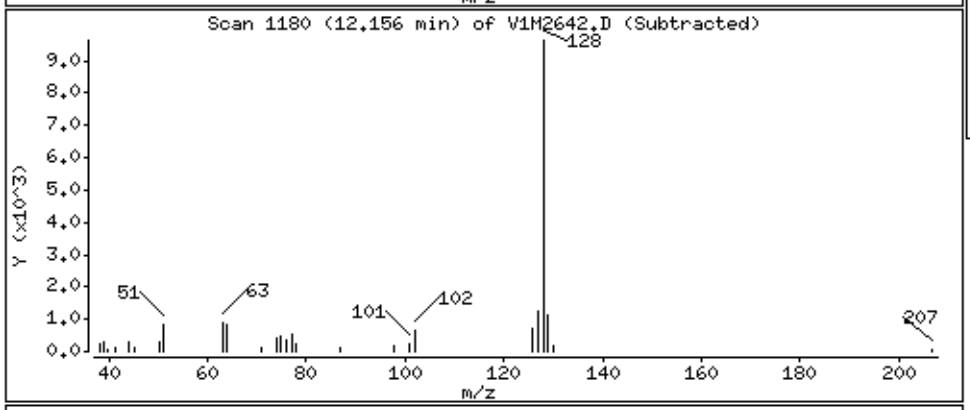
Operator: WL SRC: LIMS

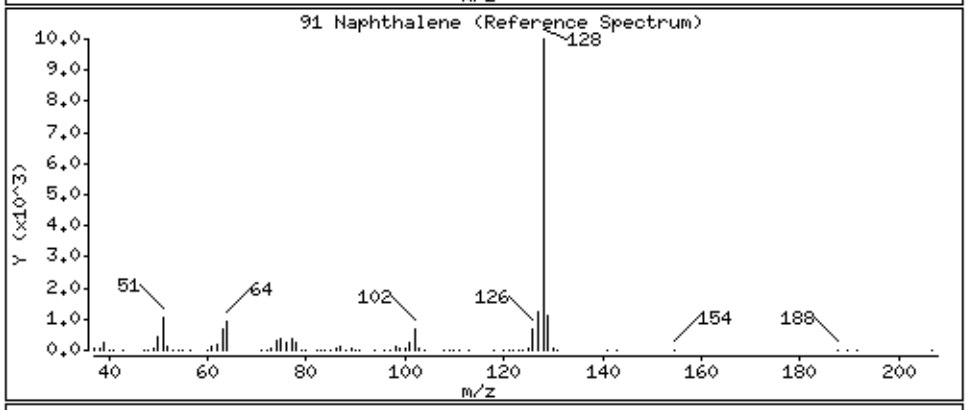
Column phase: DB-624 Column diameter: 0.25

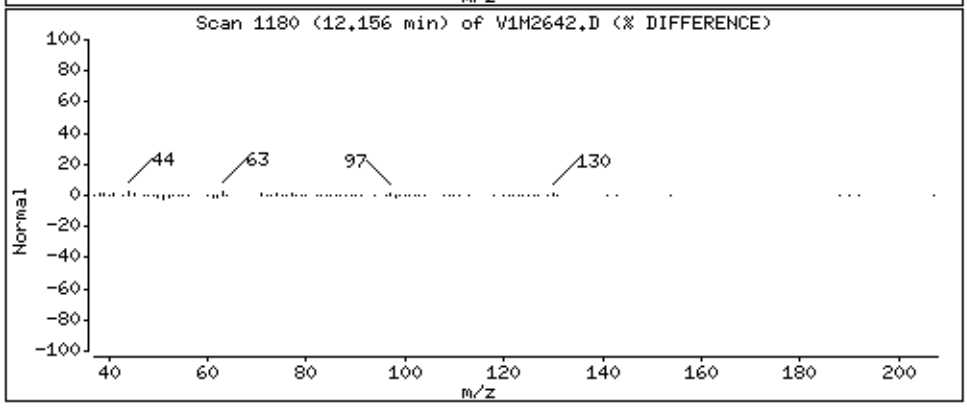
91 Naphthalene Concentration: 2 ug/Kg











VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V1 Calibration Date(s): 06/28/2013 06/28/2013

Heated Purge: (Y/N) Y Calibration Time(s): 13:25 15:07

Purge Volume: 5.0 (mL)

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

LAB FILE ID: RRF005 = V1M2621.D RRF020 = V1M2622.D

RRF050 = V1M2623.D RRF100 = V1M2624.D RRF200 = V1M2625.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.126	0.125	0.134	0.097	0.116	0.120	11.9
Chloromethane	0.579	0.571	0.599	0.613	0.636	0.600	4.4
Vinyl chloride	0.458	0.438	0.454	0.454	0.485	0.458	3.7
Bromomethane	0.296	0.241	0.249	0.255	0.268	0.262	8.1
Chloroethane	0.312	0.307	0.306	0.309	0.326	0.312	2.6
Trichlorofluoromethane	0.225	0.267	0.270	0.271	0.295	0.266	9.5
1,1-Dichloroethene	0.332	0.304	0.308	0.313	0.335	0.318	4.5
Acetone	0.056	0.044	0.050	0.048	0.045	0.048	9.7
Iodomethane	0.424	0.450	0.411	0.418	0.440	0.429	3.8
Carbon disulfide	0.932	0.766	0.803	0.769	0.813	0.817	8.3
Methylene chloride	0.227	0.201	0.201	0.174	0.169	0.195	12.1
trans-1,2-Dichloroethene	0.309	0.333	0.321	0.323	0.337	0.325	3.4
Methyl tert-butyl ether	0.737	0.754	0.696	0.743	0.746	0.735	3.1
1,1-Dichloroethane	0.677	0.646	0.620	0.626	0.653	0.644	3.5
Vinyl acetate	1.327	1.324	1.110	1.281	1.297	1.268	7.1
2-Butanone	0.030	0.037	0.035	0.038	0.036	0.035	8.7
cis-1,2-Dichloroethene	0.385	0.360	0.343	0.353	0.362	0.361	4.2
2,2-Dichloropropane	0.195	0.196	0.192	0.186	0.185	0.191	2.7
Bromochloromethane	0.159	0.180	0.168	0.180	0.183	0.174	5.9
Chloroform	0.481	0.487	0.452	0.466	0.485	0.474	3.1
1,1,1-Trichloroethane	0.314	0.288	0.293	0.295	0.318	0.302	4.4
1,1-Dichloropropene	0.142	0.142	0.135	0.137	0.150	0.141	4.1
Carbon tetrachloride	0.259	0.279	0.279	0.273	0.299	0.278	5.1
1,2-Dichloroethane	0.342	0.334	0.311	0.328	0.325	0.328	3.5
Benzene	1.326	1.282	1.208	1.250	1.284	1.270	3.4
Trichloroethene	0.353	0.321	0.324	0.313	0.332	0.329	4.6
1,2-Dichloropropane	0.380	0.403	0.362	0.376	0.390	0.382	4.0
Dibromomethane	0.179	0.185	0.173	0.180	0.185	0.181	2.7
Bromodichloromethane	0.349	0.359	0.342	0.360	0.371	0.356	3.2
cis-1,3-Dichloropropene	0.502	0.519	0.490	0.526	0.540	0.515	3.9
4-Methyl-2-pentanone	0.425	0.379	0.394	0.415	0.418	0.406	4.7
Toluene	1.221	1.149	1.139	1.148	1.191	1.170	3.0
trans-1,3-Dichloropropene	0.379	0.399	0.384	0.411	0.428	0.400	5.0
1,1,2-Trichloroethane	0.271	0.252	0.229	0.250	0.256	0.252	5.9
1,3-Dichloropropane	0.675	0.685	0.636	0.674	0.675	0.669	2.9
Tetrachloroethene	0.385	0.360	0.488	0.346	0.363	0.388	14.8
2-Hexanone	0.374	0.411	0.421	0.444	0.433	0.417	6.4
Dibromochloromethane	0.391	0.429	0.404	0.447	0.449	0.424	6.1
1,2-Dibromoethane	0.390	0.392	0.373	0.396	0.396	0.389	2.5

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V1 Calibration Date(s): 06/28/2013 06/28/2013

Heated Purge: (Y/N) Y Calibration Time(s): 13:25 15:07

Purge Volume: 5.0 (mL)

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

LAB FILE ID: RRF005 = V1M2621.D RRF020 = V1M2622.D

RRF050 = V1M2623.D RRF100 = V1M2624.D RRF200 = V1M2625.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Chlorobenzene	1.182	1.162	1.113	1.163	1.171	1.158	2.3
1,1,1,2-Tetrachloroethane	0.392	0.406	0.380	0.417	0.423	0.404	4.4
Ethylbenzene	0.571	0.600	0.566	0.577	0.604	0.584	3.0
m,p-Xylene	0.776	0.766	0.726	0.748	0.763	0.756	2.6
o-Xylene	0.746	0.750	0.709	0.740	0.754	0.740	2.4
Xylene (Total)	0.766	0.761	0.721	0.745	0.760	0.751	2.5
Styrene	1.231	1.290	1.213	1.294	1.299	1.265	3.2
Bromoform	0.215	0.230	0.229	0.260	0.271	0.241	9.7
Isopropylbenzene	1.893	1.837	1.789	1.807	1.883	1.842	2.5
1,1,2,2-Tetrachloroethane	1.217	1.131	1.086	1.135	1.128	1.139	4.2
Bromobenzene	1.018	1.010	0.994	1.012	1.023	1.011	1.1
1,2,3-Trichloropropane	1.054	1.086	1.093	1.152	1.195	1.116	5.0
n-Propylbenzene	1.117	1.089	1.100	1.056	1.127	1.098	2.5
2-Chlorotoluene	1.067	0.993	0.992	0.986	1.042	1.016	3.6
1,3,5-Trimethylbenzene	3.338	3.290	3.287	3.163	3.268	3.269	2.0
4-Chlorotoluene	1.056	1.072	0.998	1.015	1.047	1.037	2.9
tert-Butylbenzene	3.416	3.416	3.014	3.204	3.382	3.286	5.4
1,2,4-Trimethylbenzene	3.443	3.406	3.324	3.292	3.382	3.369	1.8
sec-Butylbenzene	4.869	4.539	4.501	4.278	4.493	4.536	4.7
4-Isopropyltoluene	3.650	3.599	3.600	3.385	3.591	3.565	2.9
1,3-Dichlorobenzene	2.069	1.971	1.946	1.966	2.068	2.004	3.0
1,4-Dichlorobenzene	2.072	1.984	1.973	2.043	2.081	2.030	2.4
n-Butylbenzene	3.380	3.346	3.266	3.080	3.186	3.251	3.7
1,2-Dichlorobenzene	1.944	1.892	1.849	1.869	1.897	1.890	1.9
1,2-Dibromo-3-chloropropane	0.118	0.111	0.130	0.133	0.135	0.125	8.2
1,2,4-Trichlorobenzene	1.201	1.170	1.139	1.099	1.069	1.135	4.7
Hexachlorobutadiene	0.572	0.573	0.542	0.456	0.480	0.525	10.2
1,2,3-Trichlorobenzene	0.913	0.998	0.997	0.967	0.922	0.960	4.2
Naphthalene	3.086	2.530	2.599	2.627	2.573	2.683	8.5

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V1 Calibration Date(s): 06/28/2013 06/28/2013

Heated Purge: (Y/N) Y Calibration Time(s): 13:25 15:07

Purge Volume: 5.0 (mL)

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

LAB FILE ID: RRF005 = V1M2621.D RRF020 = V1M2622.D

RRF050 = V1M2623.D RRF100 = V1M2624.D RRF200 = V1M2625.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dibromofluoromethane	0.240	0.248	0.247	0.241	0.248	0.245	1.6
1,2-Dichloroethane-d4	0.072	0.071	0.068	0.065	0.066	0.068	4.1
Toluene-d8	1.253	1.284	1.268	1.295	1.274	1.275	1.3
Bromofluorobenzene	0.450	0.468	0.458	0.471	0.466	0.463	1.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date(s): 06/20/2013 06/20/2013

Heated Purge: (Y/N) N Calibration Times: 16:28 18:53

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V6I1524.D RRF020 = V6I1523.D RRF050 = V6I1522.D RRF100 = V6I1528.D RRF200 = V6I1527.D
RRF001 = V6I1526.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.235	0.234	0.220	0.212	0.215	0.184					0.217	8.6
Chloromethane	0.380	0.345	0.337	0.339	0.323	0.371					0.349	6.3
Vinyl chloride	0.344	0.327	0.316	0.317	0.309	0.286					0.317	6.1
Bromomethane	0.193	0.153	0.148	0.160	0.147	0.150					0.159	11.1
Chloroethane	0.198	0.195	0.180	0.179	0.179	0.188					0.186	4.6
Trichlorofluoromethane	0.439	0.421	0.403	0.397	0.385	0.336					0.397	8.9
1,1-Dichloroethene	0.317	0.274	0.260	0.263	0.255	0.256					0.270	8.7
Acetone	0.036	0.024	0.024	0.027	0.032						0.029	18.9
Iodomethane	0.339	0.330	0.300	0.322	0.326	0.306					0.320	4.7
Carbon disulfide	0.986	0.898	0.859	0.841	0.781	0.829					0.866	8.1
Methylene chloride	0.305	0.286	0.272	0.279	0.275	0.336					0.292	8.3
trans-1,2-Dichloroethene	0.337	0.308	0.294	0.291	0.285	0.305					0.304	6.1
Methyl tert-butyl ether	0.903	0.934	0.863	0.838	0.792	0.805					0.856	6.5
1,1-Dichloroethane	0.571	0.542	0.497	0.490	0.473	0.513					0.514	7.0
Vinyl acetate	1.028	1.060	0.972	0.928	0.889	0.940					0.970	6.6
2-Butanone	0.036	0.042	0.035	0.032	0.043						0.038	12.0
cis-1,2-Dichloroethene	0.343	0.320	0.317	0.312	0.309	0.329					0.322	3.9
2,2-Dichloropropane	0.461	0.436	0.417	0.387	0.374	0.404					0.413	7.8
Bromochloromethane	0.160	0.151	0.141	0.145	0.152	0.126					0.146	7.9
Chloroform	0.529	0.506	0.477	0.463	0.446	0.420					0.474	8.4
1,1,1-Trichloroethane	0.475	0.452	0.435	0.429	0.417	0.369					0.429	8.4
1,1-Dichloropropene	0.160	0.156	0.156	0.155	0.152	0.130					0.151	7.3
Carbon tetrachloride	0.441	0.420	0.415	0.407	0.397	0.334					0.402	9.0
1,2-Dichloroethane	0.418	0.415	0.375	0.362	0.354	0.366					0.382	7.4
Benzene	1.195	1.127	1.099	1.037	0.953	0.933					1.057	9.7
Trichloroethene	0.352	0.341	0.336	0.334	0.324	0.249					0.323	11.5
1,2-Dichloropropane	0.306	0.307	0.297	0.292	0.291	0.268					0.294	4.8

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.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date(s): 06/20/2013 06/20/2013

Heated Purge: (Y/N) N Calibration Times: 16:28 18:53

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V6I1524.D RRF020 = V6I1523.D RRF050 = V6I1522.D RRF100 = V6I1528.D RRF200 = V6I1527.D
RRF001 = V6I1526.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.207	0.205	0.186	0.176	0.173	0.181					0.188	7.8
Bromodichloromethane	0.389	0.387	0.371	0.361	0.359	0.358					0.371	3.8
cis-1,3-Dichloropropene	0.505	0.494	0.478	0.461	0.450	0.395					0.464	8.5
4-Methyl-2-pentanone	0.399	0.416	0.370	0.352	0.378						0.383	6.6
Toluene	1.274	1.181	1.135	1.085	0.997	1.020					1.115	9.3
trans-1,3-Dichloropropene	0.454	0.471	0.446	0.426	0.427	0.340					0.427	10.8
1,1,2-Trichloroethane	0.276	0.298	0.269	0.256	0.264	0.225					0.265	9.1
1,3-Dichloropropane	0.602	0.628	0.576	0.541	0.548	0.519					0.569	7.2
Tetrachloroethene	0.338	0.341	0.333	0.330	0.319	0.272					0.322	8.1
2-Hexanone	0.402	0.374	0.338	0.316	0.340						0.354	9.6
Dibromochloromethane	0.424	0.462	0.448	0.434	0.437	0.350					0.426	9.3
1,2-Dibromoethane	0.414	0.431	0.404	0.381	0.392	0.349					0.395	7.2
Chlorobenzene	1.125	1.086	1.048	1.014	0.948	0.862					1.014	9.5
1,1,1,2-Tetrachloroethane	0.414	0.421	0.418	0.406	0.405	0.293					0.393	12.6
Ethylbenzene	0.598	0.591	0.565	0.565	0.532	0.537					0.565	4.7
m,p-Xylene	0.796	0.740	0.681	0.656	0.610	0.692					0.696	9.4
o-Xylene	0.756	0.718	0.666	0.664	0.631	0.641					0.679	7.1
Xylene (Total)	0.783	0.733	0.676	0.659	0.617	0.675					0.690	8.5
Styrene	1.214	1.199	1.114	1.082	1.008	0.925					1.090	10.2
Bromoform	0.258	0.302	0.293	0.282	0.291	0.210					0.273	12.5
Isopropylbenzene	1.970	1.854	1.686	1.616	1.439	1.741					1.718	10.8
1,1,2,2-Tetrachloroethane	0.941	1.044	0.962	0.844	0.853	0.895					0.923	8.2
Bromobenzene	0.967	0.978	0.920	0.843	0.818	0.747					0.879	10.4
1,2,3-Trichloropropane	1.091	1.239	1.194	1.054	1.095	1.021					1.116	7.5
n-Propylbenzene	1.081	1.085	1.037	0.961	0.930	0.812					0.984	10.7
2-Chlorotoluene	0.892	0.968	0.885	0.847	0.806	0.729					0.855	9.6
1,3,5-Trimethylbenzene	3.053	2.978	2.841	2.590	2.329	2.714					2.751	9.7

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date(s): 06/20/2013 06/20/2013

Heated Purge: (Y/N) N Calibration Times: 16:28 18:53

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V6I1524.D RRF020 = V6I1523.D RRF050 = V6I1522.D RRF100 = V6I1528.D RRF200 = V6I1527.D
RRF001 = V6I1526.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.930	0.982	0.921	0.881	0.845	0.825					0.897	6.5
tert-Butylbenzene	3.608	3.598	3.435	3.155	2.901	2.917					3.269	9.9
1,2,4-Trimethylbenzene	3.064	3.003	2.776	2.620	2.334	2.771					2.761	9.6
sec-Butylbenzene	4.042	3.936	3.754	3.333	2.902	3.125					3.515	13.2
4-Isopropyltoluene	3.507	3.455	3.233	2.976	2.582	2.779					3.089	12.1
1,3-Dichlorobenzene	1.758	1.790	1.716	1.600	1.483	1.384					1.622	10.0
1,4-Dichlorobenzene	1.810	1.831	1.712	1.646	1.506	1.434					1.656	9.7
n-Butylbenzene	2.955	3.062	2.942	2.653	2.295	2.587					2.749	10.5
1,2-Dichlorobenzene	1.764	1.711	1.576	1.531	1.420	1.251					1.542	12.3
1,2-Dibromo-3-chloropropane	0.225	0.213	0.192	0.185	0.191	0.221					0.204	8.5
1,2,4-Trichlorobenzene	1.211	1.193	1.263	1.197	1.148	1.043					1.176	6.4
Hexachlorobutadiene	0.563	0.506	0.599	0.565	0.540	0.510					0.547	6.6
1,2,3-Trichlorobenzene	1.153	1.120	1.186	1.173	1.117	1.156					1.151	2.4
Naphthalene	3.098	3.430	3.249	3.127	2.845	3.034					3.131	6.3

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.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date(s): 06/20/2013 06/20/2013

Heated Purge: (Y/N) N Calibration Times: 16:28 18:53

Purge Volume: 5 (mL)

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

LAB FILE ID: RRF005 = V6I1524.D RRF020 = V6I1523.D RRF050 = V6I1522.D RRF100 = V6I1528.D RRF200 = V6I1527.D
RRF001 = V6I1526.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.279	0.273	0.262	0.264	0.266						0.269	2.6
1,2-Dichloroethane-d4	0.069	0.072	0.067	0.066	0.069						0.069	3.2
Toluene-d8	1.183	1.224	1.215	1.224	1.213						1.212	1.4
Bromofluorobenzene	0.499	0.490	0.461	0.475	0.475						0.480	3.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\avogadro\organics\V1.I\130628.B\V1M2621.D
Report Date: 02-Jul-2013 10:35

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628.B\V1M2621.D
Lab Smp Id: VSTD005B1 Client Smp ID: VSTD005B1
Inj Date : 28-JUN-2013 13:25
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD005B1,VSTD005B1
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628.B\v18260GH.m
Meth Date : 30-Jun-2013 10:55 wluo Quant Type: ISTD
Cal Date : 28-JUN-2013 13:25 Cal File: V1M2621.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.351	1.335	(0.292)	4191	5.00000	5
2	Chloromethane	50	1.459	1.453	(0.316)	19231	5.00000	5
3	Vinyl Chloride	62	1.558	1.552	(0.337)	15226	5.00000	5
4	Bromomethane	94	1.794	1.788	(0.388)	9823	5.00000	6
5	Chloroethane	64	1.873	1.867	(0.405)	10385	5.00000	5
6	Trichlorofluoromethane	101	2.060	2.044	(0.446)	7483	5.00000	4(a)
7	Ether	59	2.228	2.222	(0.482)	11328	5.00000	5
8	Acrolein	56	2.316	2.310	(0.501)	11595	25.0000	26
9	1,1-Dichloroethene	96	2.425	2.419	(0.525)	11035	5.00000	5
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.444	2.429	(0.529)	10744	5.00000	5
11	Acetone	58	2.434	2.419	(0.527)	1851	5.00000	6
12	Iodomethane	142	2.543	2.537	(0.550)	14107	5.00000	5
13	Carbon Disulfide	76	2.572	2.566	(0.557)	30988	5.00000	6
14	Acetonitrile	40	2.641	2.606	(0.572)	17385	50.0000	67
15	Methyl Acetate	43	2.661	2.655	(0.576)	12646	5.00000	5
16	Methylene Chloride	84	2.740	2.724	(0.593)	7560	5.00000	6
17	tert-Butanol	59	2.809	2.803	(0.608)	1997	10.0000	10
18	Acrylonitrile	53	2.907	2.891	(0.629)	5134	5.00000	5
20	Methyl tert-butyl ether	73	2.947	2.941	(0.638)	24497	5.00000	5
19	trans-1,2-Dichloroethene	96	2.937	2.931	(0.636)	10256	5.00000	5
21	1,1-Dichloroethane	63	3.252	3.236	(0.704)	22493	5.00000	5

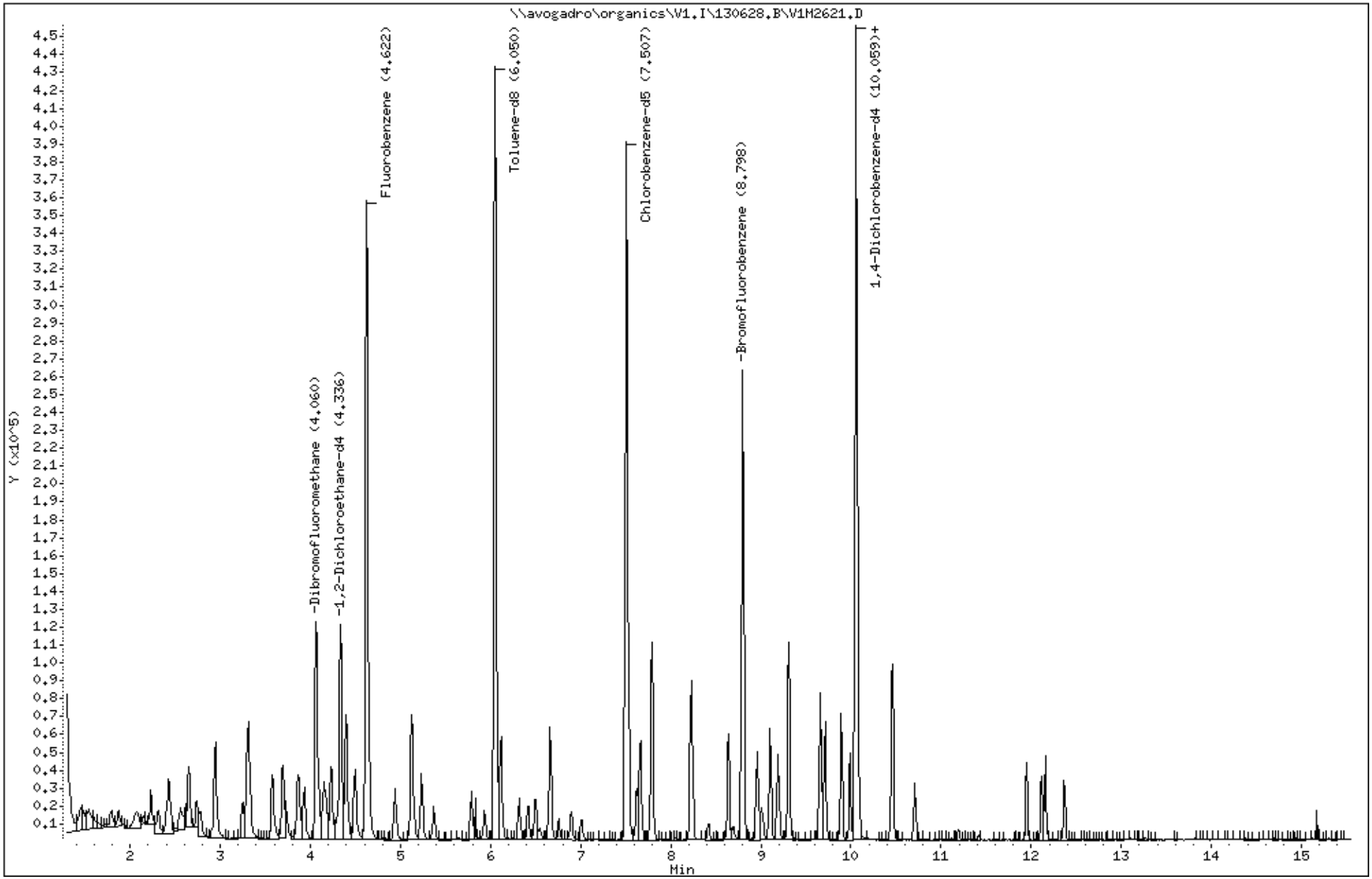
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	22 Vinyl acetate	43	3.301	3.295	(0.714)	44100	5.00000	5
	23 Diisopropyl Ether	45	3.301	3.295	(0.714)	55417	5.00000	5
	24 Ethyl tert-butyl ether	59	3.577	3.571	(0.774)	35833	5.00000	5
M	27 1,2-dichloroethene, (Total)	100				23040	10.0000	10
	25 cis-1,2-Dichloroethene	96	3.695	3.679	(0.800)	12784	5.00000	5
	26 2,2-Dichloropropane	77	3.695	3.679	(0.800)	6493	5.00000	5
	28 2-Butanone	72	3.685	3.679	(0.798)	996	5.00000	4(a)
	29 Bromochloromethane	128	3.882	3.867	(0.840)	5274	5.00000	4(a)
	30 Tetrahydrofuran	72	3.922	3.906	(0.849)	2487	10.0000	10
	31 Chloroform	83	3.932	3.926	(0.851)	15973	5.00000	5
$	32 Dibromofluoromethane	113	4.060	4.054	(0.879)	79882	50.0000	49
	33 1,1,1-Trichloroethane	97	4.089	4.083	(0.885)	10426	5.00000	5
	34 Cyclohexane	56	4.148	4.142	(0.898)	24204	5.00000	5
	36 Carbon Tetrachloride	117	4.237	4.221	(0.917)	8619	5.00000	5
	35 1,1-Dichloropropene	110	4.227	4.221	(0.915)	4728	5.00000	5
$	37 1,2-Dichloroethane-d4	102	4.335	4.320	(0.938)	23791	50.0000	52
	38 Benzene	78	4.395	4.379	(0.951)	44062	5.00000	5
	39 1,2-Dichloroethane	62	4.395	4.389	(0.951)	11373	5.00000	5
	40 tert-Amyl methyl ether	73	4.493	4.477	(0.972)	26469	5.00000	5
*	41 Fluorobenzene	96	4.621	4.615	(1.000)	332344	50.0000	
	42 Trichloroethene	130	4.946	4.930	(1.070)	11720	5.00000	5
	43 Methylcyclohexane	83	5.123	5.108	(1.109)	17893	5.00000	5
	44 1,2-Dichloropropane	63	5.133	5.118	(1.111)	12640	5.00000	5(T)
	46 Dibromomethane	93	5.232	5.216	(1.132)	5963	5.00000	5
	47 1,4-Dioxane	88	5.251	5.246	(1.136)	1200	100.000	100
	48 Bromodichloromethane	83	5.370	5.354	(1.162)	11609	5.00000	5
	45 2-Chloroethyl vinyl ether	63	6.118	6.102	(1.324)	3119	5.00000	5(T)
	49 cis-1,3-Dichloropropene	75	5.783	5.777	(1.251)	16679	5.00000	5
	50 4-Methyl-2-pentanone	43	5.931	5.925	(1.283)	14139	5.00000	5
$	51 Toluene-d8	98	6.049	6.043	(0.806)	288803	50.0000	49
	52 Toluene	91	6.118	6.112	(1.324)	40564	5.00000	5
	53 trans-1,3-Dichloropropene	75	6.315	6.309	(1.367)	12591	5.00000	5
	54 1,1,2-Trichloroethane	97	6.492	6.487	(1.405)	9002	5.00000	5
	55 Tetrachloroethene	164	6.660	6.654	(0.887)	8877	5.00000	5
	56 1,3-Dichloropropane	76	6.660	6.664	(0.887)	15567	5.00000	5
	57 2-Hexanone	43	6.758	6.753	(0.900)	8632	5.00000	4(a)
	58 Dibromochloromethane	129	6.896	6.890	(0.919)	9009	5.00000	5(T)
	59 1,2-Dibromoethane	107	7.005	7.009	(0.933)	8982	5.00000	5(T)
*	60 Chlorobenzene-d5	117	7.507	7.501	(1.000)	230519	50.0000	
	63 1-Chlorohexane	91	7.527	7.521	(1.003)	14933	5.00000	5
	61 Chlorobenzene	112	7.537	7.531	(1.004)	27239	5.00000	5
	62 1,1,1,2-Tetrachloroethane	131	7.625	7.619	(1.016)	9031	5.00000	5
	64 Ethylbenzene	106	7.665	7.659	(1.021)	13168	5.00000	5
	65 m,p-Xylene	106	7.793	7.787	(1.038)	35791	10.0000	10
	66 o-Xylene	106	8.216	8.220	(1.094)	17198	5.00000	5
	67 Styrene	104	8.236	8.230	(1.097)	28383	5.00000	5
	68 Bromoform	173	8.423	8.417	(1.122)	4958	5.00000	4(Ta)
	69 Isopropylbenzene	105	8.640	8.634	(1.151)	43628	5.00000	5
	126 trans-1,4-Dichloro-2-butene	75	8.699	8.693	(1.159)	2484	5.00000	4(a)
$	70 Bromofluorobenzene	95	8.797	8.791	(1.172)	103692	50.0000	49
	72 Bromobenzene	156	8.965	8.959	(0.891)	10613	5.00000	5
	71 1,1,2,2-Tetrachloroethane	83	8.965	8.959	(0.891)	12684	5.00000	5
	73 1,2,3-Trichloropropane	75	9.004	8.998	(0.895)	10992	5.00000	5
	74 n-Propylbenzene	120	9.103	9.107	(0.905)	11643	5.00000	5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
75	2-Chlorotoluene	126	9.191	9.185	(0.914)	11123	5.00000	5
76	1,3,5-Trimethylbenzene	105	9.309	9.304	(0.926)	34799	5.00000	5
77	4-Chlorotoluene	126	9.309	9.304	(0.926)	11004	5.00000	5
78	tert-Butylbenzene	119	9.664	9.658	(0.961)	35605	5.00000	5
79	1,2,4-Trimethylbenzene	105	9.713	9.707	(0.966)	35886	5.00000	5
M 81	Xylene (Total)	106				52989	15.0000	15
80	sec-Butylbenzene	105	9.891	9.895	(0.983)	50758	5.00000	5
82	1,3-Dichlorobenzene	146	9.989	9.983	(0.993)	21572	5.00000	5
83	4-Isopropyltoluene	119	10.048	10.052	(0.999)	38043	5.00000	5
* 84	1,4-Dichlorobenzene-d4	152	10.058	10.052	(1.000)	104241	50.0000	
85	1,4-Dichlorobenzene	146	10.078	10.082	(1.002)	21602	5.00000	5
86	n-Butylbenzene	91	10.462	10.466	(1.040)	35232	5.00000	5
87	1,2-Dichlorobenzene	146	10.452	10.446	(1.039)	20267	5.00000	5
88	1,2-Dibromo-3-chloropropane	75	11.201	11.195	(1.114)	1234	5.00000	5
89	1,2,4-Trichlorobenzene	180	11.949	11.953	(1.188)	12517	5.00000	5
90	Hexachlorobutadiene	225	12.117	12.111	(1.205)	5960	5.00000	5
91	Naphthalene	128	12.156	12.160	(1.209)	32173	5.00000	6
92	1,2,3-Trichlorobenzene	180	12.363	12.367	(1.229)	9521	5.00000	5

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\V1.I\130628.B\V1M2621.D
Date : 28-JUN-2013 13:25
Client ID: VSTD005B1
Instrument: V1.i
Sample Info: 5G,VSTD005B1,VSTD005B1
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628.B\V1M2622.D
Report Date: 02-Jul-2013 10:35

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628.B\V1M2622.D
Lab Smp Id: VSTD020B1 Client Smp ID: VSTD020B1
Inj Date : 28-JUN-2013 13:51
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD020B1,VSTD020B1
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628.B\v18260GH.m
Meth Date : 30-Jun-2013 10:55 wluo Quant Type: ISTD
Cal Date : 28-JUN-2013 13:51 Cal File: V1M2622.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.335	1.335	(0.290)	17001	20.0000	21
2	Chloromethane	50	1.463	1.453	(0.318)	77632	20.0000	19
3	Vinyl Chloride	62	1.572	1.552	(0.341)	59651	20.0000	19
4	Bromomethane	94	1.788	1.788	(0.388)	32826	20.0000	18
5	Chloroethane	64	1.867	1.867	(0.405)	41715	20.0000	20
6	Trichlorofluoromethane	101	2.054	2.044	(0.446)	36357	20.0000	20
127	Ethanol	46	2.153	2.143	(0.468)	19996	2000.00	1800(Q)
7	Ether	59	2.222	2.222	(0.482)	47188	20.0000	21
8	Acrolein	56	2.310	2.310	(0.502)	47300	100.000	100
9	1,1-Dichloroethene	96	2.419	2.419	(0.525)	41389	20.0000	19
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.428	2.429	(0.527)	41403	20.0000	20
11	Acetone	58	2.419	2.419	(0.525)	5962	20.0000	18(Q)
12	Iodomethane	142	2.537	2.537	(0.551)	61204	20.0000	21
13	Carbon Disulfide	76	2.576	2.566	(0.559)	104259	20.0000	19
14	Acetonitrile	40	2.616	2.606	(0.568)	47707	200.000	180(Q)
15	Methyl Acetate	43	2.655	2.655	(0.577)	57114	20.0000	21
16	Methylene Chloride	84	2.734	2.724	(0.594)	27301	20.0000	21(Q)
17	tert-Butanol	59	2.813	2.803	(0.611)	7737	40.0000	40
18	Acrylonitrile	53	2.901	2.891	(0.630)	19884	20.0000	20
20	Methyl tert-butyl ether	73	2.941	2.941	(0.639)	102586	20.0000	20
19	trans-1,2-Dichloroethene	96	2.941	2.931	(0.639)	45282	20.0000	20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.236	3.236	(0.703)	87869	20.0000	20
	22 Vinyl acetate	43	3.295	3.295	(0.716)	180139	20.0000	21
	23 Diisopropyl Ether	45	3.295	3.295	(0.716)	229860	20.0000	20
	24 Ethyl tert-butyl ether	59	3.571	3.571	(0.775)	142353	20.0000	20
M	27 1,2-dichloroethene, (Total)	100				94278	40.0000	40
	25 cis-1,2-Dichloroethene	96	3.679	3.679	(0.799)	48996	20.0000	20
	26 2,2-Dichloropropane	77	3.689	3.679	(0.801)	26712	20.0000	20
	28 2-Butanone	72	3.679	3.679	(0.799)	5052	20.0000	21(Q)
	29 Bromochloromethane	128	3.867	3.867	(0.840)	24458	20.0000	21(Q)
	30 Tetrahydrofuran	72	3.906	3.906	(0.848)	9674	40.0000	39
	31 Chloroform	83	3.926	3.926	(0.852)	66199	20.0000	20
$	32 Dibromofluoromethane	113	4.044	4.054	(0.878)	84415	50.0000	51
	33 1,1,1-Trichloroethane	97	4.083	4.083	(0.887)	39202	20.0000	19
	34 Cyclohexane	56	4.142	4.142	(0.899)	94766	20.0000	20
	36 Carbon Tetrachloride	117	4.221	4.221	(0.917)	37931	20.0000	20
	35 1,1-Dichloropropene	110	4.211	4.221	(0.914)	19258	20.0000	20
$	37 1,2-Dichloroethane-d4	102	4.320	4.320	(0.938)	23994	50.0000	52
	38 Benzene	78	4.379	4.379	(0.951)	174376	20.0000	20
	39 1,2-Dichloroethane	62	4.379	4.389	(0.951)	45472	20.0000	20
	40 tert-Amyl methyl ether	73	4.477	4.477	(0.972)	107499	20.0000	20
*	41 Fluorobenzene	96	4.605	4.615	(1.000)	340086	50.0000	
	42 Trichloroethene	130	4.920	4.930	(1.068)	43711	20.0000	20
	43 Methylcyclohexane	83	5.108	5.108	(1.109)	68679	20.0000	20
	44 1,2-Dichloropropane	63	5.117	5.118	(1.111)	54860	20.0000	21
	46 Dibromomethane	93	5.216	5.216	(1.133)	25187	20.0000	20
	47 1,4-Dioxane	88	5.236	5.246	(1.137)	4308	400.000	350
	48 Bromodichloromethane	83	5.354	5.354	(1.163)	48876	20.0000	20
	45 2-Chloroethyl vinyl ether	63	6.102	6.102	(1.325)	12685	20.0000	21(T)
	49 cis-1,3-Dichloropropene	75	5.768	5.777	(1.252)	70661	20.0000	20
	50 4-Methyl-2-pentanone	43	5.915	5.925	(1.284)	51558	20.0000	19
$	51 Toluene-d8	98	6.033	6.043	(0.804)	297402	50.0000	50
	52 Toluene	91	6.102	6.112	(1.325)	156359	20.0000	20
	53 trans-1,3-Dichloropropene	75	6.299	6.309	(1.368)	54338	20.0000	20
	54 1,1,2-Trichloroethane	97	6.487	6.487	(1.408)	34290	20.0000	20
	55 Tetrachloroethene	164	6.644	6.654	(0.886)	33331	20.0000	18
	56 1,3-Dichloropropane	76	6.654	6.664	(0.887)	63510	20.0000	20
	57 2-Hexanone	43	6.743	6.753	(0.899)	38072	20.0000	20
	58 Dibromochloromethane	129	6.881	6.890	(0.917)	39728	20.0000	20
	59 1,2-Dibromoethane	107	6.999	7.009	(0.933)	36372	20.0000	20
*	60 Chlorobenzene-d5	117	7.501	7.501	(1.000)	231669	50.0000	
	63 1-Chlorohexane	91	7.511	7.521	(1.001)	57279	20.0000	20(Q)
	61 Chlorobenzene	112	7.531	7.531	(1.004)	107684	20.0000	20
	62 1,1,1,2-Tetrachloroethane	131	7.619	7.619	(1.016)	37657	20.0000	20
	64 Ethylbenzene	106	7.659	7.659	(1.021)	55577	20.0000	20
	65 m,p-Xylene	106	7.787	7.787	(1.038)	141902	40.0000	40
	66 o-Xylene	106	8.210	8.220	(1.095)	69534	20.0000	20
	67 Styrene	104	8.230	8.230	(1.097)	119505	20.0000	20
	68 Bromoform	173	8.417	8.417	(1.122)	21313	20.0000	19
	69 Isopropylbenzene	105	8.634	8.634	(1.151)	170186	20.0000	20
	126 trans-1,4-Dichloro-2-butene	75	8.693	8.693	(1.159)	12029	20.0000	19
$	70 Bromofluorobenzene	95	8.791	8.791	(1.172)	108447	50.0000	50
	72 Bromobenzene	156	8.959	8.959	(0.891)	41775	20.0000	20
	71 1,1,2,2-Tetrachloroethane	83	8.959	8.959	(0.891)	46756	20.0000	20
	73 1,2,3-Trichloropropane	75	8.998	8.998	(0.895)	44924	20.0000	19(Q)

Data File: \\avogadro\organics\V1.I\130628.B\V1M2622.D
Report Date: 02-Jul-2013 10:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	n-Propylbenzene	120	9.097	9.107	(0.905)	45050	20.0000	20
75	2-Chlorotoluene	126	9.185	9.185	(0.914)	41051	20.0000	20
76	1,3,5-Trimethylbenzene	105	9.304	9.304	(0.926)	136054	20.0000	20
77	4-Chlorotoluene	126	9.304	9.304	(0.926)	44323	20.0000	21
78	tert-Butylbenzene	119	9.658	9.658	(0.961)	141272	20.0000	21
79	1,2,4-Trimethylbenzene	105	9.707	9.707	(0.966)	140842	20.0000	20
M 81	Xylene (Total)	106				211436	60.0000	61
80	sec-Butylbenzene	105	9.885	9.895	(0.983)	187674	20.0000	20
82	1,3-Dichlorobenzene	146	9.983	9.983	(0.993)	81521	20.0000	20
83	4-Isopropyltoluene	119	10.042	10.052	(0.999)	148833	20.0000	20
* 84	1,4-Dichlorobenzene-d4	152	10.052	10.052	(1.000)	103375	50.0000	
85	1,4-Dichlorobenzene	146	10.082	10.082	(1.003)	82035	20.0000	20
86	n-Butylbenzene	91	10.456	10.466	(1.040)	138341	20.0000	20
87	1,2-Dichlorobenzene	146	10.446	10.446	(1.039)	78225	20.0000	20
88	1,2-Dibromo-3-chloropropane	75	11.185	11.195	(1.113)	4602	20.0000	18(Q)
89	1,2,4-Trichlorobenzene	180	11.953	11.953	(1.189)	48362	20.0000	21
90	Hexachlorobutadiene	225	12.111	12.111	(1.205)	23699	20.0000	22
91	Naphthalene	128	12.160	12.160	(1.210)	104597	20.0000	19
92	1,2,3-Trichlorobenzene	180	12.367	12.367	(1.230)	41285	20.0000	21

QC Flag Legend

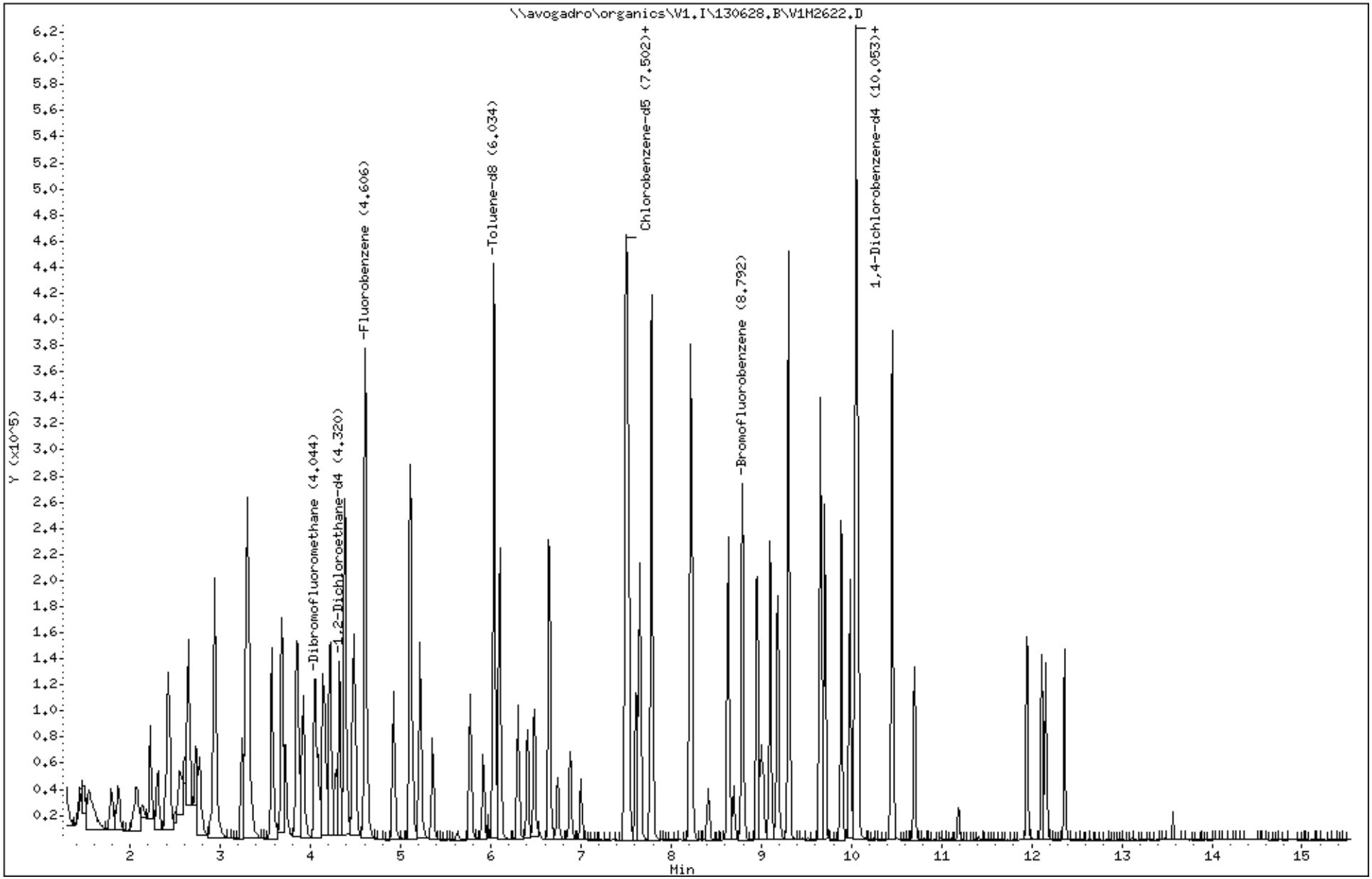
T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\130628.B\V1M2622.D
Date : 28-JUN-2013 13:51
Client ID: VSTD020B1
Sample Info: 5G,VSTD020B1,VSTD020B1

Instrument: V1.i

Operator: WL SRC: WL
Column diameter: 0.25

Column phase: DB-624



M1032

Data File: \\avogadro\organics\V1.I\130628.B\V1M2623.D
Report Date: 02-Jul-2013 10:35

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628.B\V1M2623.D
Lab Smp Id: VSTD050B1 Client Smp ID: VSTD050B1
Inj Date : 28-JUN-2013 14:16
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD050B1,VSTD050B1
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628.B\v18260GH.m
Meth Date : 30-Jun-2013 10:55 wluo Quant Type: ISTD
Cal Date : 28-JUN-2013 14:16 Cal File: V1M2623.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/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.335	1.335	(0.289)	43658	50.0000	56
2	Chloromethane	50	1.453	1.453	(0.315)	195411	50.0000	50
3	Vinyl Chloride	62	1.552	1.552	(0.336)	148029	50.0000	50
4	Bromomethane	94	1.788	1.788	(0.388)	81303	50.0000	48
5	Chloroethane	64	1.867	1.867	(0.405)	99596	50.0000	49
6	Trichlorofluoromethane	101	2.044	2.044	(0.443)	88007	50.0000	51
127	Ethanol	46	2.143	2.143	(0.464)	52475	5000.00	5000
7	Ether	59	2.222	2.222	(0.481)	103683	50.0000	47
8	Acrolein	56	2.310	2.310	(0.501)	107160	250.000	250
9	1,1-Dichloroethene	96	2.419	2.419	(0.524)	100287	50.0000	48
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.429	2.429	(0.526)	96730	50.0000	48
11	Acetone	58	2.419	2.419	(0.524)	16166	50.0000	51(Q)
12	Iodomethane	142	2.537	2.537	(0.550)	133826	50.0000	48
13	Carbon Disulfide	76	2.566	2.566	(0.556)	261747	50.0000	49
14	Acetonitrile	40	2.606	2.606	(0.565)	116700	500.000	460(Q)
15	Methyl Acetate	43	2.655	2.655	(0.575)	125709	50.0000	48
16	Methylene Chloride	84	2.724	2.724	(0.590)	65685	50.0000	52(Q)
17	tert-Butanol	59	2.803	2.803	(0.607)	17832	100.000	95
18	Acrylonitrile	53	2.891	2.891	(0.627)	46466	50.0000	48
20	Methyl tert-butyl ether	73	2.941	2.941	(0.637)	226851	50.0000	47
19	trans-1,2-Dichloroethene	96	2.931	2.931	(0.635)	104617	50.0000	49

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	21 1,1-Dichloroethane	63	3.236	3.236	(0.701)	202074	50.0000	48
	22 Vinyl acetate	43	3.295	3.295	(0.714)	361907	50.0000	44
	23 Diisopropyl Ether	45	3.295	3.295	(0.714)	517215	50.0000	48
	24 Ethyl tert-butyl ether	59	3.571	3.571	(0.774)	328144	50.0000	47
M	27 1,2-dichloroethene, (Total)	100				216473	100.000	97
	25 cis-1,2-Dichloroethene	96	3.679	3.679	(0.797)	111856	50.0000	48
	26 2,2-Dichloropropane	77	3.679	3.679	(0.797)	62727	50.0000	50
	28 2-Butanone	72	3.679	3.679	(0.797)	11444	50.0000	50(Q)
	29 Bromochloromethane	128	3.867	3.867	(0.838)	54760	50.0000	48(Q)
	30 Tetrahydrofuran	72	3.906	3.906	(0.846)	23204	100.000	98
	31 Chloroform	83	3.926	3.926	(0.851)	147270	50.0000	48
$	32 Dibromofluoromethane	113	4.054	4.054	(0.878)	80375	50.0000	50
	33 1,1,1-Trichloroethane	97	4.083	4.083	(0.885)	95582	50.0000	48
	34 Cyclohexane	56	4.142	4.142	(0.898)	215495	50.0000	47
	36 Carbon Tetrachloride	117	4.221	4.221	(0.915)	91098	50.0000	50
	35 1,1-Dichloropropene	110	4.221	4.221	(0.915)	44132	50.0000	48
$	37 1,2-Dichloroethane-d4	102	4.320	4.320	(0.936)	22235	50.0000	50
	38 Benzene	78	4.379	4.379	(0.949)	393937	50.0000	48
	39 1,2-Dichloroethane	62	4.389	4.389	(0.951)	101478	50.0000	47
	40 tert-Amyl methyl ether	73	4.477	4.477	(0.970)	247907	50.0000	48
*	41 Fluorobenzene	96	4.615	4.615	(1.000)	325982	50.0000	
	42 Trichloroethene	130	4.930	4.930	(1.068)	105546	50.0000	49
	43 Methylcyclohexane	83	5.108	5.108	(1.107)	154116	50.0000	46
	44 1,2-Dichloropropane	63	5.118	5.118	(1.109)	118015	50.0000	47
	46 Dibromomethane	93	5.216	5.216	(1.130)	56425	50.0000	48
	47 1,4-Dioxane	88	5.246	5.246	(1.137)	10512	1000.00	900
	48 Bromodichloromethane	83	5.354	5.354	(1.160)	111416	50.0000	48
	45 2-Chloroethyl vinyl ether	63	6.102	6.102	(1.322)	27867	50.0000	47(T)
	49 cis-1,3-Dichloropropene	75	5.777	5.777	(1.252)	159689	50.0000	48
	50 4-Methyl-2-pentanone	43	5.925	5.925	(1.284)	128508	50.0000	48
$	51 Toluene-d8	98	6.043	6.043	(0.806)	285400	50.0000	50
	52 Toluene	91	6.112	6.112	(1.324)	371287	50.0000	49
	53 trans-1,3-Dichloropropene	75	6.309	6.309	(1.367)	125231	50.0000	48
	54 1,1,2-Trichloroethane	97	6.487	6.487	(1.405)	74811	50.0000	46
	55 Tetrachloroethene	164	6.654	6.654	(0.887)	109813	50.0000	63
	56 1,3-Dichloropropane	76	6.664	6.664	(0.888)	143049	50.0000	48
	57 2-Hexanone	43	6.753	6.753	(0.900)	94677	50.0000	50
	58 Dibromochloromethane	129	6.890	6.890	(0.919)	90911	50.0000	48
	59 1,2-Dibromoethane	107	7.009	7.009	(0.934)	83866	50.0000	48
*	60 Chlorobenzene-d5	117	7.501	7.501	(1.000)	225065	50.0000	
	63 1-Chlorohexane	91	7.521	7.521	(1.003)	138152	50.0000	49(Q)
	61 Chlorobenzene	112	7.531	7.531	(1.004)	250401	50.0000	48
	62 1,1,1,2-Tetrachloroethane	131	7.619	7.619	(1.016)	85476	50.0000	47
	64 Ethylbenzene	106	7.659	7.659	(1.021)	127303	50.0000	48
	65 m,p-Xylene	106	7.787	7.787	(1.038)	326888	100.000	96
	66 o-Xylene	106	8.220	8.220	(1.096)	159649	50.0000	48
	67 Styrene	104	8.230	8.230	(1.097)	273020	50.0000	48
	68 Bromoform	173	8.417	8.417	(1.122)	51443	50.0000	47(T)
	69 Isopropylbenzene	105	8.634	8.634	(1.151)	402637	50.0000	48
	126 trans-1,4-Dichloro-2-butene	75	8.693	8.693	(1.159)	29575	50.0000	47
$	70 Bromofluorobenzene	95	8.791	8.791	(1.172)	103096	50.0000	50
	72 Bromobenzene	156	8.959	8.959	(0.891)	97996	50.0000	49(Q)
	71 1,1,2,2-Tetrachloroethane	83	8.959	8.959	(0.891)	107060	50.0000	48
	73 1,2,3-Trichloropropane	75	8.998	8.998	(0.895)	107828	50.0000	49(Q)

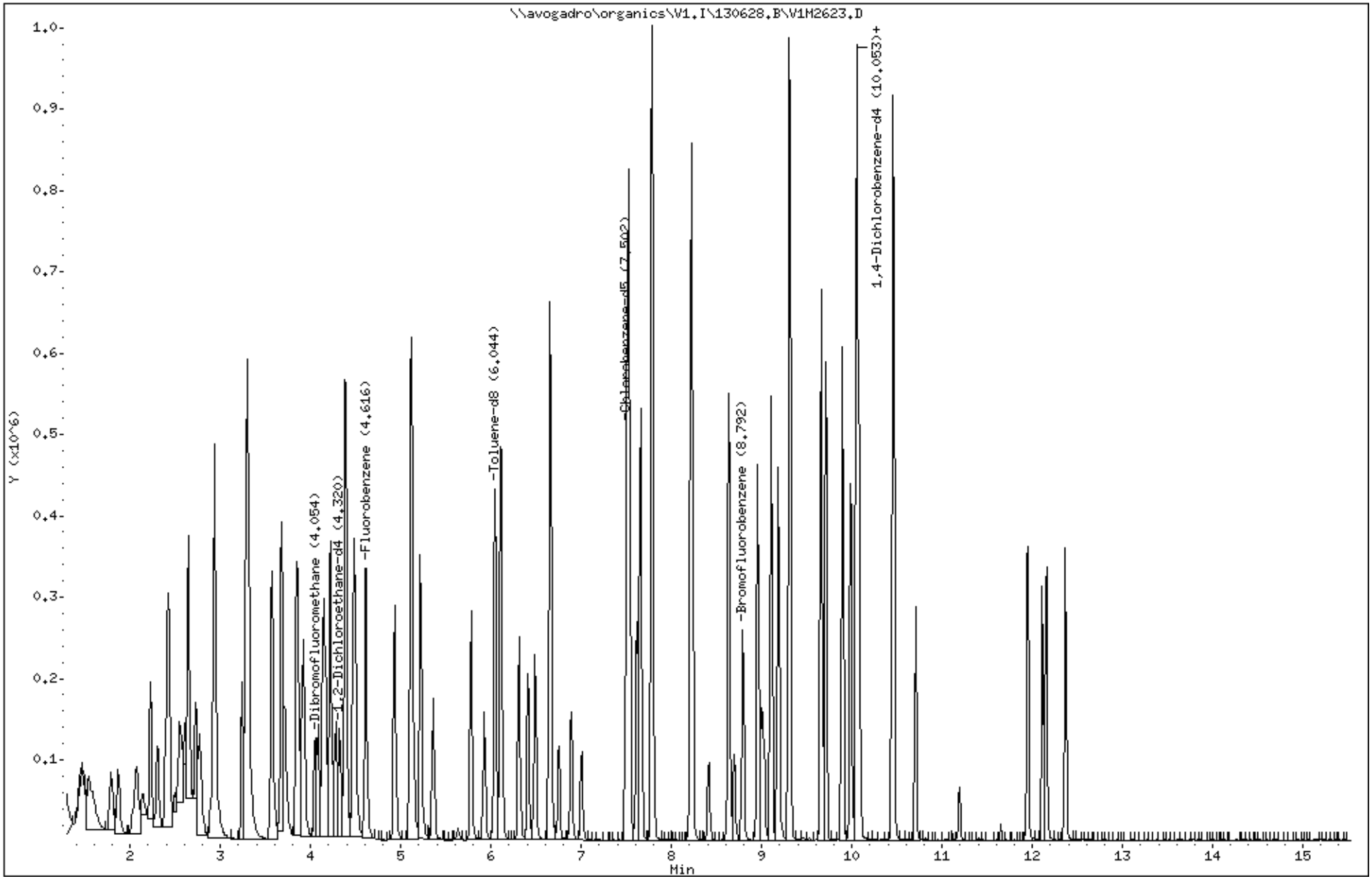
Data File: \\avogadro\organics\V1.I\130628.B\V1M2623.D
Report Date: 02-Jul-2013 10:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
74	n-Propylbenzene	120	9.107	9.107	(0.906)	108479	50.0000	50	
75	2-Chlorotoluene	126	9.185	9.185	(0.914)	97874	50.0000	49	
76	1,3,5-Trimethylbenzene	105	9.304	9.304	(0.926)	324189	50.0000	50	
77	4-Chlorotoluene	126	9.304	9.304	(0.926)	98429	50.0000	48	
78	tert-Butylbenzene	119	9.658	9.658	(0.961)	297231	50.0000	46	
79	1,2,4-Trimethylbenzene	105	9.707	9.707	(0.966)	327784	50.0000	49	
M 81	Xylene (Total)	106				486537	150.000	140	
80	sec-Butylbenzene	105	9.895	9.895	(0.984)	443910	50.0000	50	
82	1,3-Dichlorobenzene	146	9.983	9.983	(0.993)	191959	50.0000	48	
83	4-Isopropyltoluene	119	10.052	10.052	(1.000)	355066	50.0000	50	
* 84	1,4-Dichlorobenzene-d4	152	10.052	10.052	(1.000)	98623	50.0000		(Q)
85	1,4-Dichlorobenzene	146	10.082	10.082	(1.003)	194578	50.0000	48	
86	n-Butylbenzene	91	10.466	10.466	(1.041)	322096	50.0000	50	
87	1,2-Dichlorobenzene	146	10.446	10.446	(1.039)	182353	50.0000	49	
88	1,2-Dibromo-3-chloropropane	75	11.195	11.195	(1.114)	12772	50.0000	52	
89	1,2,4-Trichlorobenzene	180	11.953	11.953	(1.189)	112367	50.0000	50	
90	Hexachlorobutadiene	225	12.111	12.111	(1.205)	53470	50.0000	52	
91	Naphthalene	128	12.160	12.160	(1.210)	256291	50.0000	48	
92	1,2,3-Trichlorobenzene	180	12.367	12.367	(1.230)	98350	50.0000	52	

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\130628.B\V1M2623.D
Date : 28-JUN-2013 14:16
Client ID: VSTD050B1
Instrument: V1.i
Sample Info: 5G,VSTD050B1,VSTD050B1
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628.B\V1M2624.D
Report Date: 02-Jul-2013 10:35

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628.B\V1M2624.D
Lab Smp Id: VSTD100B1 Client Smp ID: VSTD100B1
Inj Date : 28-JUN-2013 14:42
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD100B1,VSTD100B1
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628.B\v18260GH.m
Meth Date : 30-Jun-2013 10:55 wluo Quant Type: ISTD
Cal Date : 28-JUN-2013 14:42 Cal File: V1M2624.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.337	1.335	(0.290)	64671	100.000	81
2	Chloromethane	50	1.465	1.453	(0.317)	409550	100.000	100
3	Vinyl Chloride	62	1.554	1.552	(0.337)	302875	100.000	99
4	Bromomethane	94	1.790	1.788	(0.388)	170377	100.000	97
5	Chloroethane	64	1.869	1.867	(0.405)	206245	100.000	99
6	Trichlorofluoromethane	101	2.056	2.044	(0.445)	180913	100.000	100
127	Ethanol	46	2.145	2.143	(0.465)	113769	10000.0	10000
7	Ether	59	2.224	2.222	(0.482)	222325	100.000	99
8	Acrolein	56	2.302	2.310	(0.499)	217550	500.000	490
9	1,1-Dichloroethene	96	2.420	2.419	(0.524)	209114	100.000	98
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.430	2.429	(0.526)	201534	100.000	97
11	Acetone	58	2.411	2.419	(0.522)	31971	100.000	99
12	Iodomethane	142	2.539	2.537	(0.550)	279456	100.000	98
13	Carbon Disulfide	76	2.568	2.566	(0.556)	513834	100.000	94
14	Acetonitrile	40	2.608	2.606	(0.565)	237480	1000.00	910(Q)
15	Methyl Acetate	43	2.657	2.655	(0.576)	273090	100.000	100
16	Methylene Chloride	84	2.726	2.724	(0.590)	116330	100.000	89(Q)
17	tert-Butanol	59	2.805	2.803	(0.608)	39414	200.000	200
18	Acrylonitrile	53	2.893	2.891	(0.627)	97941	100.000	100
20	Methyl tert-butyl ether	73	2.933	2.941	(0.635)	495856	100.000	100
19	trans-1,2-Dichloroethene	96	2.933	2.931	(0.635)	215941	100.000	100

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	21 1,1-Dichloroethane	63	3.238	3.236	(0.701)	418016	100.000	97
	22 Vinyl acetate	43	3.277	3.295	(0.710)	855387	100.000	100
	23 Diisopropyl Ether	45	3.297	3.295	(0.714)	1096835	100.000	100
	24 Ethyl tert-butyl ether	59	3.573	3.571	(0.774)	726903	100.000	100
M	27 1,2-dichloroethene, (Total)	100				451935	200.000	200
	25 cis-1,2-Dichloroethene	96	3.681	3.679	(0.797)	235994	100.000	98
	26 2,2-Dichloropropane	77	3.691	3.679	(0.799)	124421	100.000	97
	28 2-Butanone	72	3.681	3.679	(0.797)	25110	100.000	110(Q)
	29 Bromochloromethane	128	3.868	3.867	(0.838)	120184	100.000	100(Q)
	30 Tetrahydrofuran	72	3.908	3.906	(0.846)	48607	200.000	200
	31 Chloroform	83	3.927	3.926	(0.851)	310987	100.000	98
$	32 Dibromofluoromethane	113	4.056	4.054	(0.878)	80371	50.0000	49
	33 1,1,1-Trichloroethane	97	4.085	4.083	(0.885)	197313	100.000	98
	34 Cyclohexane	56	4.144	4.142	(0.898)	444315	100.000	95
	36 Carbon Tetrachloride	117	4.223	4.221	(0.915)	182385	100.000	98
	35 1,1-Dichloropropene	110	4.223	4.221	(0.915)	91247	100.000	97
$	37 1,2-Dichloroethane-d4	102	4.331	4.320	(0.938)	21775	50.0000	48
	38 Benzene	78	4.390	4.379	(0.951)	834642	100.000	98
	39 1,2-Dichloroethane	62	4.390	4.389	(0.951)	219357	100.000	100
	40 tert-Amyl methyl ether	73	4.479	4.477	(0.970)	542715	100.000	100
*	41 Fluorobenzene	96	4.617	4.615	(1.000)	333903	50.0000	
	42 Trichloroethene	130	4.932	4.930	(1.068)	209137	100.000	95
	43 Methylcyclohexane	83	5.119	5.108	(1.109)	324716	100.000	95
	44 1,2-Dichloropropane	63	5.119	5.118	(1.109)	251416	100.000	98
	46 Dibromomethane	93	5.218	5.216	(1.130)	120536	100.000	100
	47 1,4-Dioxane	88	5.247	5.246	(1.137)	26360	2000.00	2200
	48 Bromodichloromethane	83	5.366	5.354	(1.162)	240672	100.000	100
	45 2-Chloroethyl vinyl ether	63	6.104	6.102	(1.322)	56877	100.000	94(T)
	49 cis-1,3-Dichloropropene	75	5.779	5.777	(1.252)	351128	100.000	100
	50 4-Methyl-2-pentanone	43	5.927	5.925	(1.284)	277103	100.000	100
$	51 Toluene-d8	98	6.045	6.043	(0.806)	294245	50.0000	51
	52 Toluene	91	6.104	6.112	(1.322)	766375	100.000	98
	53 trans-1,3-Dichloropropene	75	6.311	6.309	(1.367)	274729	100.000	100
	54 1,1,2-Trichloroethane	97	6.488	6.487	(1.405)	166638	100.000	99
	55 Tetrachloroethene	164	6.656	6.654	(0.887)	157390	100.000	89
	56 1,3-Dichloropropane	76	6.656	6.664	(0.887)	306063	100.000	100
	57 2-Hexanone	43	6.754	6.753	(0.900)	201700	100.000	110
	58 Dibromochloromethane	129	6.892	6.890	(0.919)	203322	100.000	100
	59 1,2-Dibromoethane	107	7.010	7.009	(0.934)	179818	100.000	100
*	60 Chlorobenzene-d5	117	7.503	7.501	(1.000)	227183	50.0000	
	63 1-Chlorohexane	91	7.523	7.521	(1.003)	270754	100.000	95(Q)
	61 Chlorobenzene	112	7.532	7.531	(1.004)	528213	100.000	100
	62 1,1,1,2-Tetrachloroethane	131	7.621	7.619	(1.016)	189615	100.000	100
	64 Ethylbenzene	106	7.660	7.659	(1.021)	262200	100.000	99
	65 m,p-Xylene	106	7.789	7.787	(1.038)	679692	200.000	200
	66 o-Xylene	106	8.222	8.220	(1.096)	336200	100.000	100
	67 Styrene	104	8.232	8.230	(1.097)	588043	100.000	100
	68 Bromoform	173	8.419	8.417	(1.122)	117943	100.000	110(T)
	69 Isopropylbenzene	105	8.636	8.634	(1.151)	821000	100.000	98
	126 trans-1,4-Dichloro-2-butene	75	8.695	8.693	(1.159)	71316	100.000	110
$	70 Bromofluorobenzene	95	8.793	8.791	(1.172)	107031	50.0000	51
	72 Bromobenzene	156	8.961	8.959	(0.891)	212832	100.000	100(Q)
	71 1,1,2,2-Tetrachloroethane	83	8.961	8.959	(0.891)	238628	100.000	100
	73 1,2,3-Trichloropropane	75	9.000	8.998	(0.895)	242120	100.000	100(Q)

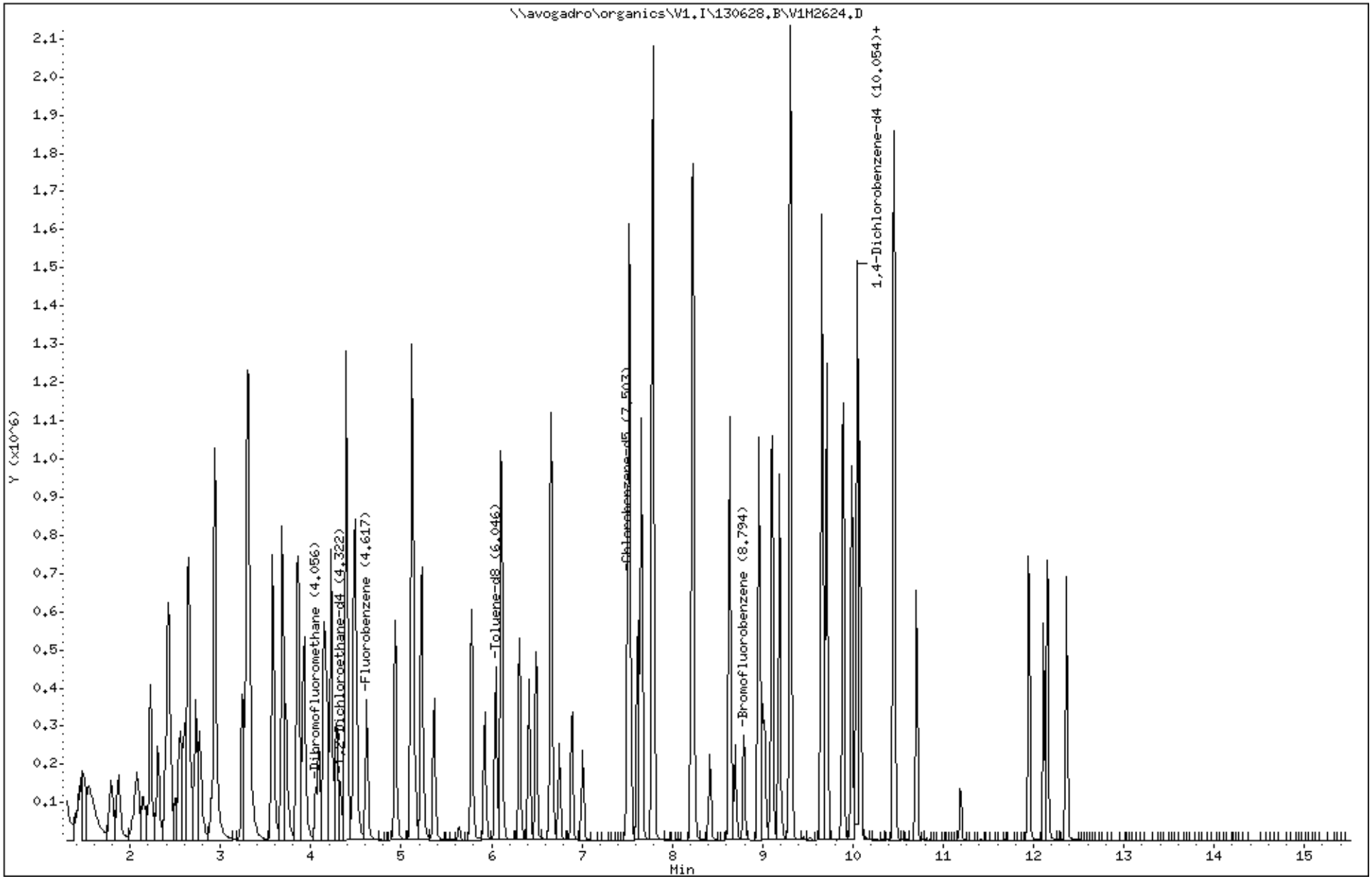
Data File: \\avogadro\organics\V1.I\130628.B\V1M2624.D
Report Date: 02-Jul-2013 10:35

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	74	n-Propylbenzene	120	9.108	9.107	(0.906)	221973	100.000	96	
	75	2-Chlorotoluene	126	9.187	9.185	(0.914)	207234	100.000	97	
	76	1,3,5-Trimethylbenzene	105	9.305	9.304	(0.926)	664998	100.000	97	
	77	4-Chlorotoluene	126	9.305	9.304	(0.926)	213341	100.000	98	
	78	tert-Butylbenzene	119	9.660	9.658	(0.961)	673729	100.000	98	
	79	1,2,4-Trimethylbenzene	105	9.709	9.707	(0.966)	692259	100.000	98	
M	81	Xylene (Total)	106				1015892	300.000	300	
	80	sec-Butylbenzene	105	9.896	9.895	(0.984)	899463	100.000	94	
	82	1,3-Dichlorobenzene	146	9.985	9.983	(0.993)	413403	100.000	98	
	83	4-Isopropyltoluene	119	10.054	10.052	(1.000)	711736	100.000	95	
*	84	1,4-Dichlorobenzene-d4	152	10.054	10.052	(1.000)	105127	50.0000	(Q)	
	85	1,4-Dichlorobenzene	146	10.083	10.082	(1.003)	429503	100.000	100	
	86	n-Butylbenzene	91	10.458	10.466	(1.040)	647680	100.000	95	
	87	1,2-Dichlorobenzene	146	10.448	10.446	(1.039)	393002	100.000	99	
	88	1,2-Dibromo-3-chloropropane	75	11.187	11.195	(1.113)	27946	100.000	100	
	89	1,2,4-Trichlorobenzene	180	11.955	11.953	(1.189)	230979	100.000	97	
	90	Hexachlorobutadiene	225	12.112	12.111	(1.205)	95922	100.000	87	
	91	Naphthalene	128	12.152	12.160	(1.209)	552436	100.000	98	
	92	1,2,3-Trichlorobenzene	180	12.369	12.367	(1.230)	203315	100.000	100	

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\130628.B\V1M2624.D
Date : 28-JUN-2013 14:42
Client ID: VSTD100B1
Instrument: V1.i
Sample Info: 5G,VSTD100B1,VSTD100B1
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628.B\V1M2625.D
Report Date: 02-Jul-2013 10:35

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628.B\V1M2625.D
Lab Smp Id: VSTD200B1 Client Smp ID: VSTD200B1
Inj Date : 28-JUN-2013 15:07
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD200B1,VSTD200B1
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628.B\v18260GH.m
Meth Date : 30-Jun-2013 10:55 wluo Quant Type: ISTD
Cal Date : 28-JUN-2013 15:07 Cal File: V1M2625.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.321	1.335	(0.286)	143381	200.000	190
2	Chloromethane	50	1.479	1.453	(0.320)	788002	200.000	210(A)
3	Vinyl Chloride	62	1.558	1.552	(0.337)	601690	200.000	210(A)
4	Bromomethane	94	1.784	1.788	(0.386)	331732	200.000	200
5	Chloroethane	64	1.873	1.867	(0.405)	403758	200.000	210(A)
6	Trichlorofluoromethane	101	2.050	2.044	(0.444)	365034	200.000	220(A)
127	Ethanol	46	2.149	2.143	(0.465)	219985	20000.0	22000
7	Ether	59	2.227	2.222	(0.482)	417103	200.000	200(A)
8	Acrolein	56	2.306	2.310	(0.499)	369227	1000.00	900
9	1,1-Dichloroethene	96	2.424	2.419	(0.525)	415410	200.000	210(A)
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.434	2.429	(0.527)	412888	200.000	210(A)
11	Acetone	58	2.415	2.419	(0.523)	55795	200.000	190(Q)
12	Iodomethane	142	2.543	2.537	(0.550)	545640	200.000	200(A)
13	Carbon Disulfide	76	2.572	2.566	(0.557)	1007324	200.000	200
14	Acetonitrile	40	2.612	2.606	(0.565)	442506	2000.00	1800(Q)
15	Methyl Acetate	43	2.661	2.655	(0.576)	501698	200.000	200(A)
16	Methylene Chloride	84	2.730	2.724	(0.591)	209908	200.000	170(Q)
17	tert-Butanol	59	2.809	2.803	(0.608)	70391	400.000	400
18	Acrylonitrile	53	2.897	2.891	(0.627)	182341	200.000	200
20	Methyl tert-butyl ether	73	2.946	2.941	(0.638)	924616	200.000	200(A)
19	trans-1,2-Dichloroethene	96	2.937	2.931	(0.636)	417657	200.000	210(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.242	3.236	(0.702)	809744	200.000	200(A)
	22 Vinyl acetate	43	3.281	3.295	(0.710)	1607844	200.000	200(A)
	23 Diisopropyl Ether	45	3.301	3.295	(0.714)	2062035	200.000	200(A)
	24 Ethyl tert-butyl ether	59	3.577	3.571	(0.774)	1365771	200.000	210(A)
M	27 1,2-dichloroethene, (Total)	100				866952	400.000	410(A)
	25 cis-1,2-Dichloroethene	96	3.685	3.679	(0.798)	449295	200.000	200
	26 2,2-Dichloropropane	77	3.695	3.679	(0.800)	229618	200.000	190
	28 2-Butanone	72	3.695	3.679	(0.800)	44609	200.000	200(AQ)
	29 Bromochloromethane	128	3.872	3.867	(0.838)	226753	200.000	210(AQ)
	30 Tetrahydrofuran	72	3.912	3.906	(0.847)	91851	400.000	410
	31 Chloroform	83	3.931	3.926	(0.851)	601302	200.000	200(A)
$	32 Dibromofluoromethane	113	4.059	4.054	(0.879)	76747	50.0000	51
	33 1,1,1-Trichloroethane	97	4.099	4.083	(0.887)	394064	200.000	210(A)
	34 Cyclohexane	56	4.148	4.142	(0.898)	921381	200.000	210(A)
	36 Carbon Tetrachloride	117	4.237	4.221	(0.917)	370135	200.000	210(A)
	35 1,1-Dichloropropene	110	4.227	4.221	(0.915)	185915	200.000	210(A)
$	37 1,2-Dichloroethane-d4	102	4.335	4.320	(0.938)	20426	50.0000	48
	38 Benzene	78	4.394	4.379	(0.951)	1591805	200.000	200(A)
	39 1,2-Dichloroethane	62	4.394	4.389	(0.951)	402681	200.000	200
	40 tert-Amyl methyl ether	73	4.493	4.477	(0.972)	1026416	200.000	210(A)
*	41 Fluorobenzene	96	4.621	4.615	(1.000)	309868	50.0000	
	42 Trichloroethene	130	4.936	4.930	(1.068)	411533	200.000	200(A)
	43 Methylcyclohexane	83	5.123	5.108	(1.109)	683081	200.000	220(A)
	44 1,2-Dichloropropane	63	5.133	5.118	(1.111)	483387	200.000	200(A)
	46 Dibromomethane	93	5.232	5.216	(1.132)	228748	200.000	200(A)
	47 1,4-Dioxane	88	5.251	5.246	(1.136)	48654	4000.00	4400(A)
	48 Bromodichloromethane	83	5.369	5.354	(1.162)	460044	200.000	210(A)
	45 2-Chloroethyl vinyl ether	63	6.118	6.102	(1.324)	114971	200.000	200(TA)
	49 cis-1,3-Dichloropropene	75	5.783	5.777	(1.251)	669772	200.000	210(A)
	50 4-Methyl-2-pentanone	43	5.931	5.925	(1.283)	518025	200.000	200(A)
$	51 Toluene-d8	98	6.049	6.043	(0.806)	273608	50.0000	50
	52 Toluene	91	6.118	6.112	(1.324)	1476526	200.000	200(A)
	53 trans-1,3-Dichloropropene	75	6.315	6.309	(1.367)	530595	200.000	210(A)
	54 1,1,2-Trichloroethane	97	6.502	6.487	(1.407)	317621	200.000	200(A)
	55 Tetrachloroethene	164	6.660	6.654	(0.887)	311740	200.000	190
	56 1,3-Dichloropropane	76	6.670	6.664	(0.888)	579843	200.000	200(A)
	57 2-Hexanone	43	6.758	6.753	(0.900)	372458	200.000	210(A)
	58 Dibromochloromethane	129	6.896	6.890	(0.919)	385408	200.000	210(A)
	59 1,2-Dibromoethane	107	7.014	7.009	(0.934)	340648	200.000	200(A)
*	60 Chlorobenzene-d5	117	7.507	7.501	(1.000)	214798	50.0000	
	63 1-Chlorohexane	91	7.527	7.521	(1.003)	554824	200.000	210(AQ)
	61 Chlorobenzene	112	7.536	7.531	(1.004)	1006273	200.000	200(A)
	62 1,1,1,2-Tetrachloroethane	131	7.625	7.619	(1.016)	363017	200.000	210(A)
	64 Ethylbenzene	106	7.664	7.659	(1.021)	519189	200.000	210(A)
	65 m,p-Xylene	106	7.792	7.787	(1.038)	1311577	400.000	400(A)
	66 o-Xylene	106	8.226	8.220	(1.096)	648166	200.000	200(A)
	67 Styrene	104	8.236	8.230	(1.097)	1116365	200.000	200(A)
	68 Bromoform	173	8.423	8.417	(1.122)	232725	200.000	220(A)
	69 Isopropylbenzene	105	8.640	8.634	(1.151)	1617501	200.000	200(A)
	126 trans-1,4-Dichloro-2-butene	75	8.699	8.693	(1.159)	142588	200.000	240(A)
$	70 Bromofluorobenzene	95	8.797	8.791	(1.172)	100127	50.0000	50
	72 Bromobenzene	156	8.965	8.959	(0.891)	405152	200.000	200(AQ)
	71 1,1,2,2-Tetrachloroethane	83	8.965	8.959	(0.891)	446676	200.000	200
	73 1,2,3-Trichloropropane	75	9.004	8.998	(0.895)	473267	200.000	210(AQ)

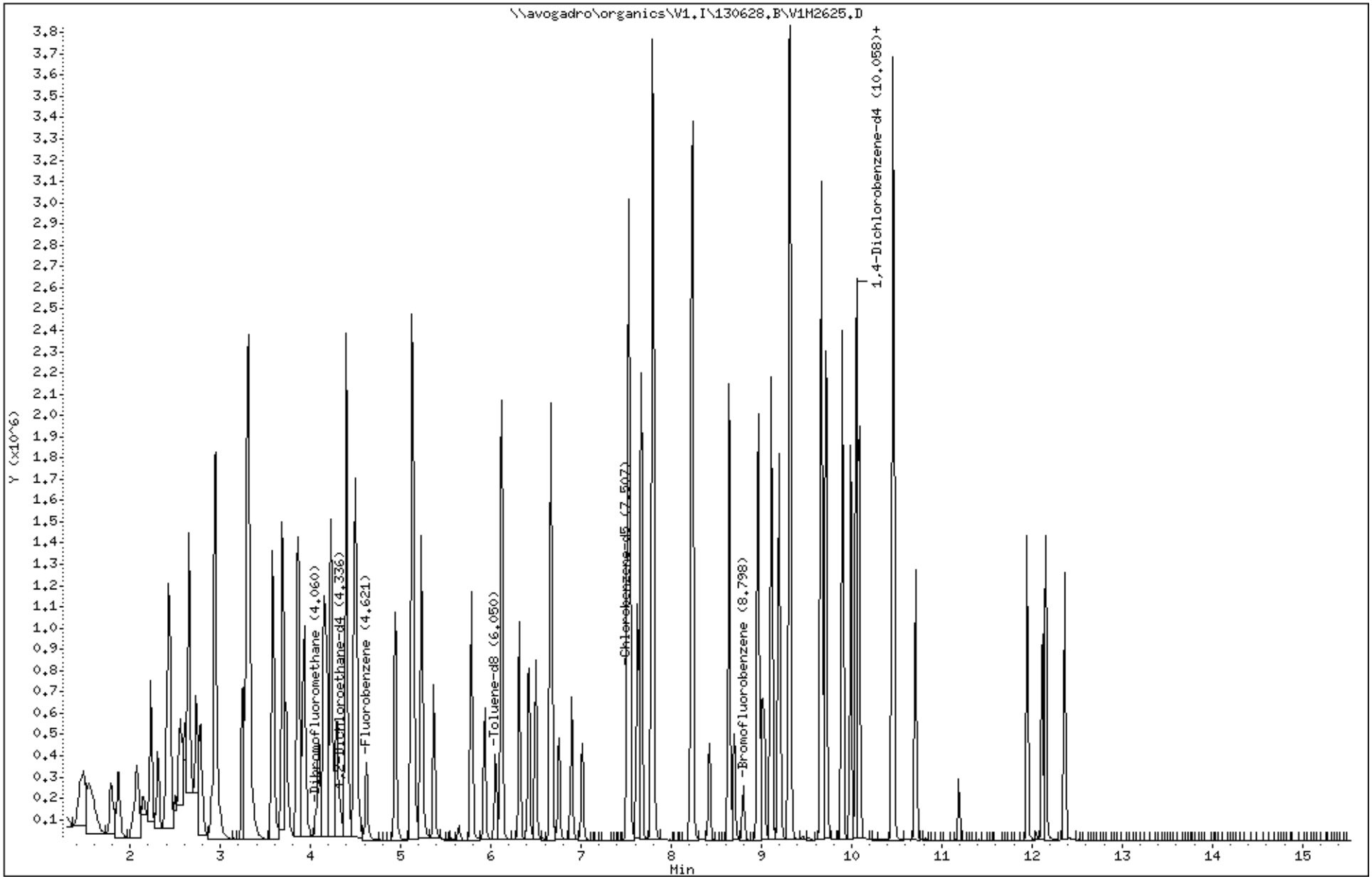
Data File: \\avogadro\organics\V1.I\130628.B\V1M2625.D
Report Date: 02-Jul-2013 10:35

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74	n-Propylbenzene	120	9.112	9.107	(0.906)	446295	200.000	200(A)
	75	2-Chlorotoluene	126	9.191	9.185	(0.914)	412885	200.000	200(A)
	76	1,3,5-Trimethylbenzene	105	9.319	9.304	(0.927)	1294204	200.000	200
	77	4-Chlorotoluene	126	9.319	9.304	(0.927)	414598	200.000	200(A)
	78	tert-Butylbenzene	119	9.664	9.658	(0.961)	1339460	200.000	200(A)
	79	1,2,4-Trimethylbenzene	105	9.713	9.707	(0.966)	1339710	200.000	200(A)
M	81	Xylene (Total)	106				1959743	600.000	610
	80	sec-Butylbenzene	105	9.900	9.895	(0.984)	1779653	200.000	200
	82	1,3-Dichlorobenzene	146	9.989	9.983	(0.993)	818940	200.000	210(A)
	83	4-Isopropyltoluene	119	10.058	10.052	(1.000)	1422367	200.000	200(A)
*	84	1,4-Dichlorobenzene-d4	152	10.058	10.052	(1.000)	99019	50.0000	(Q)
	85	1,4-Dichlorobenzene	146	10.087	10.082	(1.003)	824051	200.000	200(A)
	86	n-Butylbenzene	91	10.462	10.466	(1.040)	1261725	200.000	200
	87	1,2-Dichlorobenzene	146	10.452	10.446	(1.039)	751256	200.000	200(A)
	88	1,2-Dibromo-3-chloropropane	75	11.191	11.195	(1.113)	53578	200.000	220(A)
	89	1,2,4-Trichlorobenzene	180	11.949	11.953	(1.188)	423347	200.000	190
	90	Hexachlorobutadiene	225	12.116	12.111	(1.205)	190300	200.000	180
	91	Naphthalene	128	12.156	12.160	(1.209)	1019108	200.000	190
	92	1,2,3-Trichlorobenzene	180	12.363	12.367	(1.229)	365148	200.000	190

QC Flag Legend

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

Data File: \\avogadro\organics\V1.I\130628.B\V1M2625.D
Date : 28-JUN-2013 15:07
Client ID: VSTD200B1
Instrument: V1.i
Sample Info: 5G,VSTD200B1,VSTD200B1
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1522.D
Report Date: 25-Jun-2013 14:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1522.D
Lab Smp Id: VSTD0506B Client Smp ID: VSTD0506B
Inj Date : 20-JUN-2013 16:28
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD0506B,VSTD0506B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130620.B\v68260Gadd-6lvl.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : 19-JUN-2013 13:33 Cal File: V6I1491.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit 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	1.755	1.752	(0.311)	99838	50.0000	51
2	Freon114	85	1.885	1.882	(0.335)	112616	50.0000	51
3	Chloromethane	50	1.945	1.941	(0.345)	152998	50.0000	48
4	Vinyl Chloride	62	2.051	2.048	(0.364)	143462	50.0000	50
5	Bromomethane	94	2.371	2.379	(0.421)	66945	50.0000	40
6	Chloroethane	64	2.465	2.473	(0.437)	81545	50.0000	48
7	Trichlorofluoromethane	101	2.702	2.698	(0.479)	182883	50.0000	51
126	Ethanol	46	2.844	2.935	(0.505)	16306	5000.00	4000(A)
8	Ether	59	2.939	2.935	(0.521)	117856	50.0000	50
9	Acrolein	56	3.069	3.065	(0.544)	25629	250.000	200
10	1,1-Dichloroethene	96	3.152	3.148	(0.559)	117713	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.140	3.136	(0.557)	132944	50.0000	52
12	Acetone	58	3.199	3.207	(0.568)	10975	50.0000	40
13	Iodomethane	142	3.294	3.302	(0.584)	135879	50.0000	46
14	Carbon Disulfide	76	3.353	3.361	(0.595)	389355	50.0000	50
15	Acetonitrile	41	3.447	3.456	(0.612)	338787	500.000	450(A)
16	Allyl Chloride	39	3.447	3.456	(0.612)	145218	50.0000	50
17	Methyl Acetate	43	3.459	3.467	(0.614)	136451	50.0000	46
18	Methylene Chloride	84	3.554	3.562	(0.631)	123233	50.0000	46
19	tert-Butanol	59	3.779	3.787	(0.670)	14397	100.000	100
20	Acrylonitrile	53	3.767	3.775	(0.668)	59680	50.0000	44
21	trans-1,2-Dichloroethene	96	3.791	3.787	(0.673)	133479	50.0000	48
22	Methyl tert-butyl ether	73	3.767	3.775	(0.668)	391398	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	4.145	4.142	(0.736)	225407	50.0000	48
	24	Vinyl acetate	43	4.157	4.154	(0.738)	440950	50.0000	50
	25	Diisopropyl Ether	45	4.157	4.154	(0.738)	459806	50.0000	54
	26	2-Chloro-1,3-Butadiene	53	4.216	4.213	(0.748)	197684	50.0000	50
	27	Ethyl tert-butyl ether	59	4.465	4.461	(0.792)	431879	50.0000	52
	29	2,2-Dichloropropane	77	4.631	4.639	(0.822)	189067	50.0000	50
	28	cis-1,2-Dichloroethene	96	4.631	4.627	(0.822)	143894	50.0000	49
	30	2-Butanone	72	4.631	4.639	(0.822)	15874	50.0000	46(Q)
	32	Propionitrile	54	4.702	4.710	(0.834)	194156	500.000	390(A)
	33	Methacrylonitrile	41	4.820	4.828	(0.855)	183823	100.000	100
	34	Bromochloromethane	128	4.844	4.852	(0.859)	64158	50.0000	48(Q)
	31	Tetrahydrofuran	72	4.879	4.887	(0.866)	36766	100.000	83
	35	Chloroform	83	4.891	4.899	(0.868)	216299	50.0000	50
$	36	Dibromofluoromethane	113	5.033	5.041	(0.893)	118953	50.0000	48
	37	1,1,1-Trichloroethane	97	5.068	5.077	(0.899)	197157	50.0000	51
	38	Cyclohexane	56	5.116	5.124	(0.908)	240498	50.0000	52
	39	1,1-Dichloropropene	110	5.210	5.219	(0.924)	70926	50.0000	52
	40	Carbon Tetrachloride	117	5.222	5.219	(0.927)	188313	50.0000	52
	41	Isobutyl Alcohol	43	5.246	5.254	(0.931)	118257	1000.00	860(A)
$	42	1,2-Dichloroethane-d4	102	5.352	5.349	(0.950)	30337	50.0000	48
	43	Benzene	78	5.400	5.408	(0.958)	498412	50.0000	52
	44	1,2-Dichloroethane	62	5.412	5.420	(0.960)	170074	50.0000	49
	45	tert-Amyl methyl ether	73	5.459	5.467	(0.969)	377528	50.0000	52
M	50	1,2-Dichloroethene (Total)	96				277373	100.000	(a)
*	46	Fluorobenzene	96	5.636	5.645	(1.000)	453472	50.0000	
	47	Trichloroethene	130	5.980	5.976	(1.061)	152268	50.0000	52
	48	Methylcyclohexane	83	6.157	6.165	(1.092)	239927	50.0000	55
	49	1,2-Dichloropropane	63	6.204	6.201	(1.101)	134574	50.0000	50
	51	Methyl Methacrylate	69	6.264	6.260	(1.111)	117529	50.0000	50
	52	Dibromomethane	93	6.311	6.319	(1.120)	84223	50.0000	49
	53	1,4-Dioxane	88	6.323	6.331	(1.122)	19443	1000.00	970(A)
	54	Bromodichloromethane	83	6.453	6.449	(1.145)	168241	50.0000	50
	55	2-Chloroethyl vinyl ether	63	6.713	6.710	(1.191)	1138	50.0000	11
	56	cis-1,3-Dichloropropene	75	6.879	6.875	(1.220)	216944	50.0000	52
	57	4-Methyl-2-pentanone	43	7.021	7.017	(1.246)	167653	50.0000	48
$	58	Toluene-d8	98	7.151	7.159	(0.823)	415143	50.0000	50
	59	Toluene	91	7.222	7.218	(1.281)	514677	50.0000	51
	60	trans-1,3-Dichloropropene	75	7.435	7.431	(1.319)	202057	50.0000	52
	61	Ethyl Methacrylate	69	7.494	7.502	(1.330)	139717	50.0000	47
	62	1,1,2-Trichloroethane	97	7.636	7.633	(1.355)	121781	50.0000	51
	63	Tetrachloroethene	164	7.790	7.798	(0.897)	113937	50.0000	52
	64	1,3-Dichloropropane	76	7.814	7.822	(0.899)	196755	50.0000	51
	65	2-Hexanone	43	7.873	7.881	(0.906)	115651	50.0000	47
	66	Dibromochloromethane	129	8.062	8.070	(0.928)	153185	50.0000	53
	67	1,2-Dibromoethane	107	8.204	8.201	(0.944)	138105	50.0000	51
	69	1-Chlorohexane	91	8.666	8.674	(0.997)	186705	50.0000	49
*	68	Chlorobenzene-d5	117	8.689	8.698	(1.000)	341755	50.0000	
	70	Chlorobenzene	112	8.725	8.733	(1.004)	358234	50.0000	52
	71	1,1,1,2-Tetrachloroethane	131	8.808	8.816	(1.014)	142749	50.0000	54
	72	Ethylbenzene	106	8.831	8.840	(1.016)	193051	50.0000	50
	73	m,p-Xylene	106	8.961	8.958	(1.031)	465517	100.000	97
	74	o-Xylene	106	9.411	9.408	(1.083)	227600	50.0000	49
	75	Styrene	104	9.423	9.419	(1.084)	380698	50.0000	49
	76	Bromoform	173	9.636	9.644	(1.109)	100004	50.0000	54

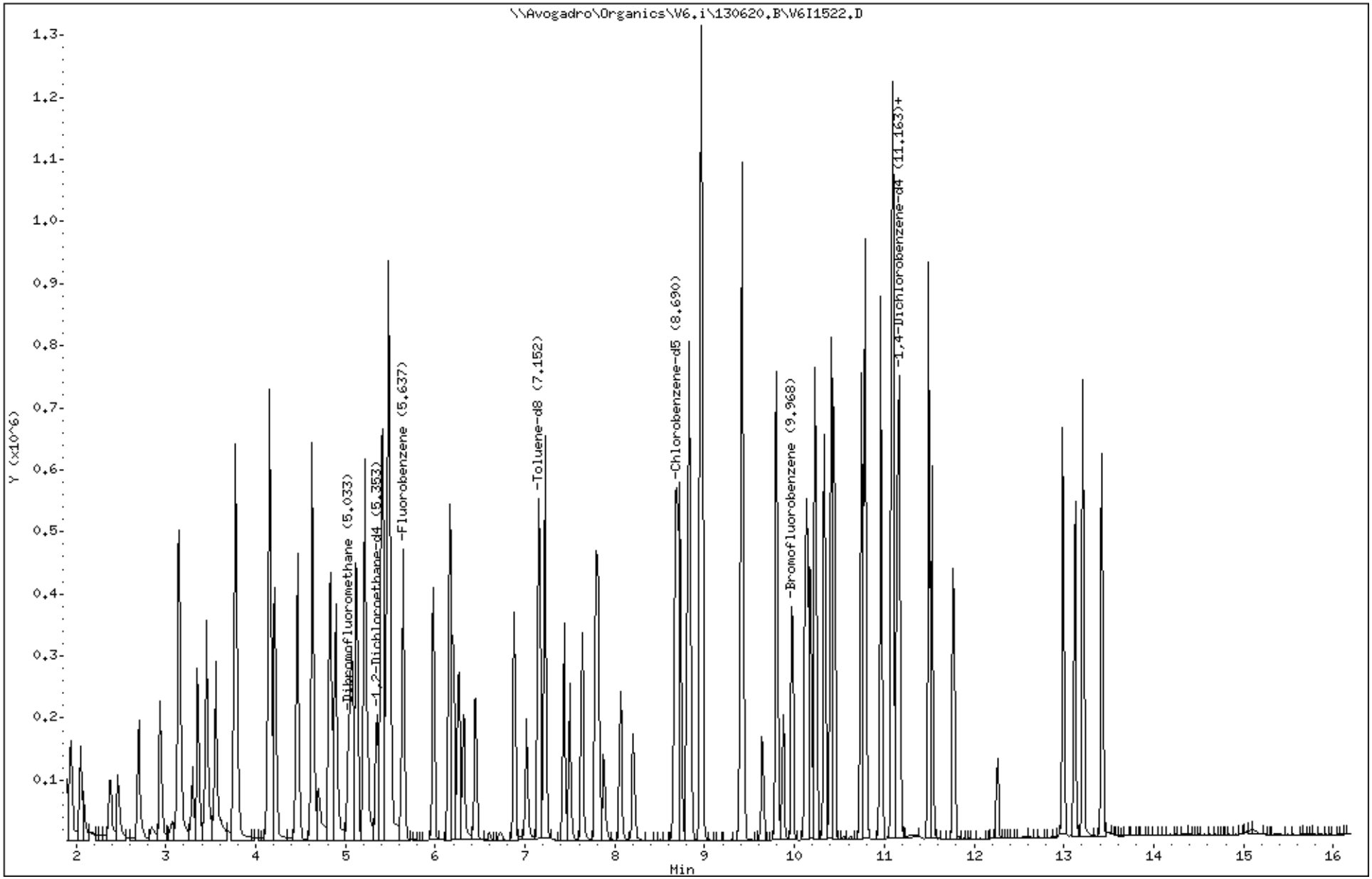
Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1522.D
Report Date: 25-Jun-2013 14:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Isopropylbenzene	105	9.802	9.798	(1.128)	576270	50.0000	49
	78 trans-1,4-Dichloro-2-butene	75	9.873	9.881	(1.136)	53044	50.0000	57
$	79 Bromofluorobenzene	95	9.967	9.975	(1.147)	157639	50.0000	48
	80 1,1,2,2-Tetrachloroethane	83	10.121	10.117	(0.908)	163277	50.0000	52
	81 Bromobenzene	156	10.145	10.141	(0.910)	156157	50.0000	53
	82 1,2,3-Trichloropropane	75	10.168	10.177	(0.912)	202599	50.0000	54
	83 n-Propylbenzene	120	10.228	10.236	(0.917)	175897	50.0000	53
	84 2-Chlorotoluene	126	10.334	10.330	(0.927)	150223	50.0000	52
	85 1,3,5-Trimethylbenzene	105	10.405	10.413	(0.933)	482061	50.0000	52
	86 4-Chlorotoluene	126	10.441	10.449	(0.936)	156294	50.0000	52
M	94 Xylene (Total)	106				693117	150.000	(a)
	87 tert-Butylbenzene	119	10.748	10.745	(0.964)	582889	50.0000	53
	88 1,2,4-Trimethylbenzene	105	10.796	10.792	(0.968)	471078	50.0000	50
	89 sec-Butylbenzene	105	10.961	10.958	(0.983)	637028	50.0000	54
	90 1,3-Dichlorobenzene	146	11.080	11.088	(0.994)	291127	50.0000	54
	91 4-Isopropyltoluene	119	11.103	11.100	(0.996)	548661	50.0000	53
*	92 1,4-Dichlorobenzene-d4	152	11.151	11.147	(1.000)	169695	50.0000	
	93 1,4-Dichlorobenzene	146	11.174	11.171	(1.002)	290493	50.0000	52
	95 n-Butylbenzene	91	11.494	11.490	(1.031)	499223	50.0000	54
	96 1,2-Dichlorobenzene	146	11.529	11.537	(1.034)	267512	50.0000	51
	97 Hexachloroethane	117	11.766	11.774	(1.055)	107026	50.0000	55
	98 1,2-Dibromo-3-chloropropane	75	12.263	12.259	(1.100)	32546	50.0000	43
	141 1,3,5-Trichlorobenzene	182	12.985	12.993	(2.304)	202635	50.0000	49(A)
	99 1,2,4-Trichlorobenzene	180	12.985	12.993	(1.164)	214283	50.0000	54
	100 Hexachlorobutadiene	225	13.127	13.123	(1.177)	101690	50.0000	55
	101 Naphthalene	128	13.209	13.206	(1.185)	551272	50.0000	52
	102 1,2,3-Trichlorobenzene	180	13.422	13.419	(1.204)	201327	50.0000	52

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\130620.B\V6I1522.D
Date : 20-JUN-2013 16:28
Client ID: VSTD0506B
Instrument: V6.i
Sample Info: 5ML,VSTD0506B,VSTD0506B
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1523.D
Report Date: 25-Jun-2013 14:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1523.D
Lab Smp Id: VSTD0206B Client Smp ID: VSTD0206B
Inj Date : 20-JUN-2013 16:52
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD0206B,VSTD0206B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130620.B\v68260Gadd-6lvl.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : 20-JUN-2013 16:52 Cal File: V6I1523.D
Als bottle: 3 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	1.753	1.752	(0.311)	39364	20.0000	20
2	Freon114	85	1.883	1.882	(0.334)	42435	20.0000	20
3	Chloromethane	50	1.942	1.941	(0.344)	57966	20.0000	20
4	Vinyl Chloride	62	2.048	2.048	(0.363)	54873	20.0000	20
5	Bromomethane	94	2.380	2.379	(0.422)	25783	20.0000	20
6	Chloroethane	64	2.463	2.473	(0.436)	32681	20.0000	20
7	Trichlorofluoromethane	101	2.699	2.698	(0.478)	70714	20.0000	20
126	Ethanol	46	2.853	2.935	(0.505)	6743	2000.00	2000(A)
8	Ether	59	2.936	2.935	(0.520)	47364	20.0000	20
9	Acrolein	56	3.066	3.065	(0.543)	11557	100.000	100
10	1,1-Dichloroethene	96	3.149	3.148	(0.558)	45978	20.0000	20
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.137	3.136	(0.556)	50268	20.0000	20
12	Acetone	58	3.196	3.207	(0.566)	3971	20.0000	20
13	Iodomethane	142	3.291	3.302	(0.583)	55448	20.0000	20
14	Carbon Disulfide	76	3.362	3.361	(0.596)	150841	20.0000	20
15	Acetonitrile	41	3.457	3.456	(0.612)	151469	200.000	200
16	Allyl Chloride	39	3.457	3.456	(0.612)	56311	20.0000	20
17	Methyl Acetate	43	3.457	3.467	(0.612)	58666	20.0000	20
18	Methylene Chloride	84	3.563	3.562	(0.631)	48075	20.0000	20
19	tert-Butanol	59	3.788	3.787	(0.671)	5000	40.0000	40
20	Acrylonitrile	53	3.764	3.775	(0.667)	26735	20.0000	20
21	trans-1,2-Dichloroethene	96	3.788	3.787	(0.671)	51808	20.0000	20

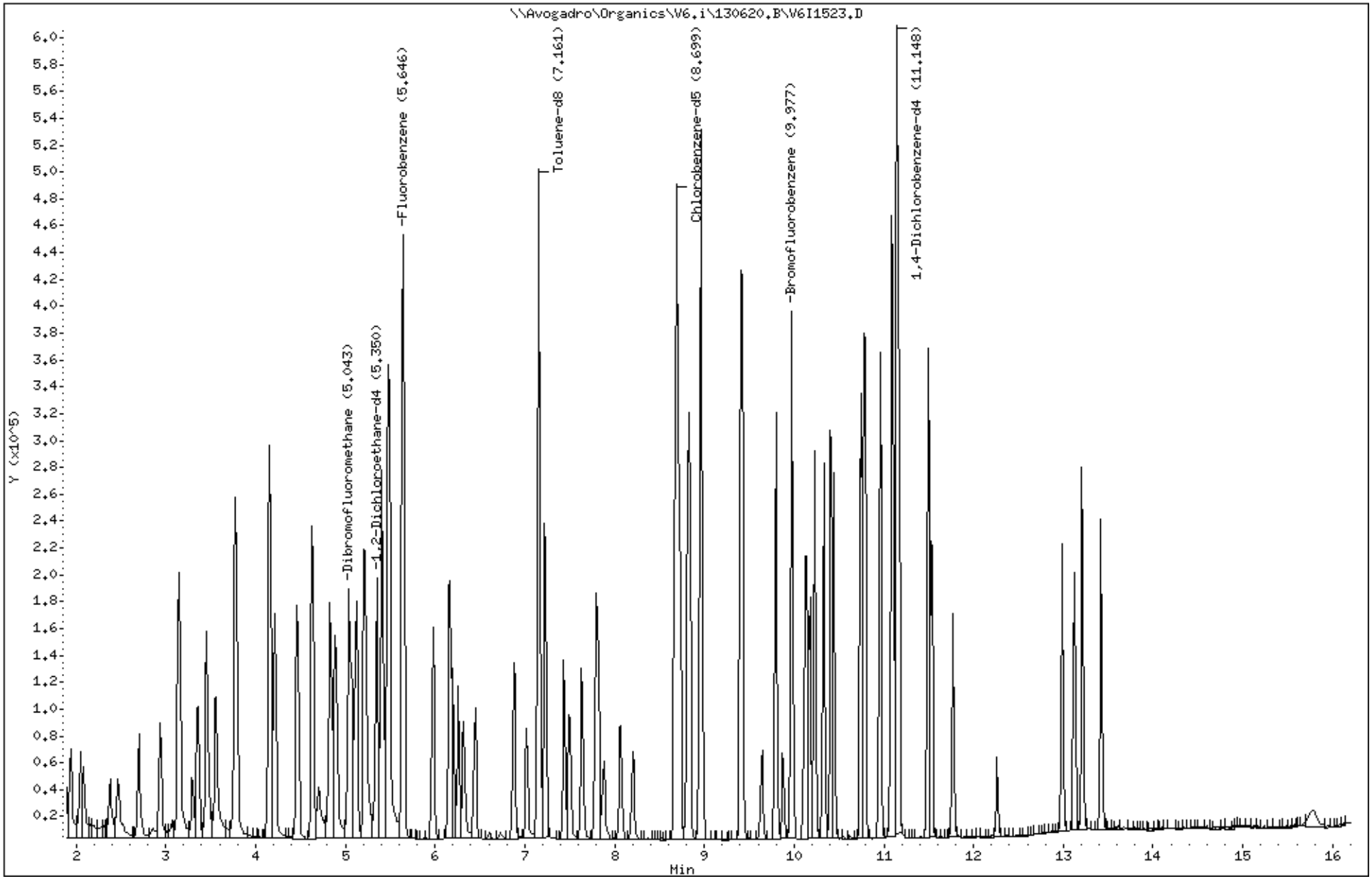
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.776	3.775	(0.669)	156984	20.0000	20
	23 1,1-Dichloroethane	63	4.143	4.142	(0.734)	91036	20.0000	20
	24 Vinyl acetate	43	4.155	4.154	(0.736)	178034	20.0000	20
	25 Diisopropyl Ether	45	4.155	4.154	(0.736)	178472	20.0000	20
	26 2-Chloro-1,3-Butadiene	53	4.214	4.213	(0.746)	75953	20.0000	20
	27 Ethyl tert-butyl ether	59	4.462	4.461	(0.790)	170599	20.0000	20
	29 2,2-Dichloropropane	77	4.640	4.639	(0.822)	73185	20.0000	20
	28 cis-1,2-Dichloroethene	96	4.628	4.627	(0.820)	53701	20.0000	20
	30 2-Butanone	72	4.628	4.639	(0.820)	7017	20.0000	20
	32 Propionitrile	54	4.699	4.710	(0.832)	97516	200.000	200
	33 Methacrylonitrile	41	4.829	4.828	(0.855)	71619	40.0000	40
	34 Bromochloromethane	128	4.841	4.852	(0.857)	25355	20.0000	20
	31 Tetrahydrofuran	72	4.877	4.887	(0.864)	17404	40.0000	40
	35 Chloroform	83	4.900	4.899	(0.868)	85069	20.0000	20
$	36 Dibromofluoromethane	113	5.042	5.041	(0.893)	114500	50.0000	50
	37 1,1,1-Trichloroethane	97	5.078	5.077	(0.899)	75979	20.0000	20
	38 Cyclohexane	56	5.125	5.124	(0.908)	91313	20.0000	20
	39 1,1-Dichloropropene	110	5.208	5.219	(0.922)	26237	20.0000	20
	40 Carbon Tetrachloride	117	5.220	5.219	(0.925)	70549	20.0000	20
	41 Isobutyl Alcohol	43	5.255	5.254	(0.931)	54509	400.000	400(A)
$	42 1,2-Dichloroethane-d4	102	5.350	5.349	(0.948)	30128	50.0000	50
	43 Benzene	78	5.409	5.408	(0.958)	189365	20.0000	20
	44 1,2-Dichloroethane	62	5.421	5.420	(0.960)	69803	20.0000	20
	45 tert-Amyl methyl ether	73	5.468	5.467	(0.969)	148551	20.0000	20
M	50 1,2-Dichloroethene (Total)	96				105509	40.0000	40
*	46 Fluorobenzene	96	5.646	5.645	(1.000)	420030	50.0000	
	47 Trichloroethene	130	5.977	5.976	(1.059)	57273	20.0000	20
	48 Methylcyclohexane	83	6.166	6.165	(1.092)	89890	20.0000	20
	49 1,2-Dichloropropane	63	6.202	6.201	(1.098)	51598	20.0000	20
	51 Methyl Methacrylate	69	6.261	6.260	(1.109)	44559	20.0000	20
	52 Dibromomethane	93	6.320	6.319	(1.119)	34365	20.0000	20
	53 1,4-Dioxane	88	6.320	6.331	(1.119)	9665	400.000	400(A)
	54 Bromodichloromethane	83	6.450	6.449	(1.143)	65102	20.0000	20
	55 2-Chloroethyl vinyl ether	63	6.722	6.710	(1.191)	485	20.0000	20(T)
	56 cis-1,3-Dichloropropene	75	6.876	6.875	(1.218)	83079	20.0000	20
	57 4-Methyl-2-pentanone	43	7.018	7.017	(1.243)	69918	20.0000	20
$	58 Toluene-d8	98	7.160	7.159	(0.823)	396699	50.0000	50
	59 Toluene	91	7.219	7.218	(1.279)	198348	20.0000	20
	60 trans-1,3-Dichloropropene	75	7.432	7.431	(1.316)	79127	20.0000	20
	61 Ethyl Methacrylate	69	7.492	7.502	(1.327)	56144	20.0000	20
	62 1,1,2-Trichloroethane	97	7.634	7.633	(1.352)	50059	20.0000	20
	63 Tetrachloroethene	164	7.787	7.798	(0.895)	44228	20.0000	20
	64 1,3-Dichloropropane	76	7.823	7.822	(0.899)	81343	20.0000	20
	65 2-Hexanone	43	7.882	7.881	(0.906)	48527	20.0000	20
	66 Dibromochloromethane	129	8.071	8.070	(0.928)	59899	20.0000	20
	67 1,2-Dibromoethane	107	8.202	8.201	(0.943)	55894	20.0000	20
	69 1-Chlorohexane	91	8.675	8.674	(0.997)	74593	20.0000	20
*	68 Chlorobenzene-d5	117	8.698	8.698	(1.000)	323981	50.0000	
	70 Chlorobenzene	112	8.722	8.733	(1.003)	140759	20.0000	20
	71 1,1,1,2-Tetrachloroethane	131	8.805	8.816	(1.012)	54590	20.0000	20
	72 Ethylbenzene	106	8.829	8.840	(1.015)	76542	20.0000	20
	73 m,p-Xylene	106	8.959	8.958	(1.030)	191883	40.0000	40
	74 o-Xylene	106	9.408	9.408	(1.082)	92987	20.0000	20
	75 Styrene	104	9.420	9.419	(1.083)	155395	20.0000	20

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.645	9.644	(1.109)	39103	20.0000	20
	77 Isopropylbenzene	105	9.799	9.798	(1.127)	240296	20.0000	20
	78 trans-1,4-Dichloro-2-butene	75	9.870	9.881	(1.135)	17002	20.0000	20
$	79 Bromofluorobenzene	95	9.976	9.975	(1.147)	158861	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	10.118	10.117	(0.908)	68091	20.0000	20
	81 Bromobenzene	156	10.142	10.141	(0.910)	63778	20.0000	20
	82 1,2,3-Trichloropropane	75	10.178	10.177	(0.913)	80795	20.0000	20
	83 n-Propylbenzene	120	10.237	10.236	(0.918)	70787	20.0000	20
	84 2-Chlorotoluene	126	10.331	10.330	(0.927)	63151	20.0000	20
	85 1,3,5-Trimethylbenzene	105	10.402	10.413	(0.933)	194260	20.0000	20
	86 4-Chlorotoluene	126	10.438	10.449	(0.936)	64084	20.0000	20
M	94 Xylene (Total)	106				284870	60.0000	60
	87 tert-Butylbenzene	119	10.746	10.745	(0.964)	234689	20.0000	20
	88 1,2,4-Trimethylbenzene	105	10.793	10.792	(0.968)	195916	20.0000	20
	89 sec-Butylbenzene	105	10.959	10.958	(0.983)	256756	20.0000	20
	90 1,3-Dichlorobenzene	146	11.089	11.088	(0.995)	116763	20.0000	20
	91 4-Isopropyltoluene	119	11.101	11.100	(0.996)	225399	20.0000	20
*	92 1,4-Dichlorobenzene-d4	152	11.148	11.147	(1.000)	163089	50.0000	
	93 1,4-Dichlorobenzene	146	11.172	11.171	(1.002)	119476	20.0000	20
	95 n-Butylbenzene	91	11.491	11.490	(1.031)	199740	20.0000	20
	96 1,2-Dichlorobenzene	146	11.538	11.537	(1.035)	111631	20.0000	20
	97 Hexachloroethane	117	11.775	11.774	(1.056)	41495	20.0000	20
	98 1,2-Dibromo-3-chloropropane	75	12.260	12.259	(1.100)	13867	20.0000	20
	141 1,3,5-Trichlorobenzene	182	12.994	12.993	(2.301)	73405	20.0000	20(A)
	99 1,2,4-Trichlorobenzene	180	12.994	12.993	(1.166)	77834	20.0000	20
	100 Hexachlorobutadiene	225	13.124	13.123	(1.177)	33005	20.0000	20
	101 Naphthalene	128	13.207	13.206	(1.185)	223782	20.0000	20
	102 1,2,3-Trichlorobenzene	180	13.420	13.419	(1.204)	73075	20.0000	20

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1523.D
Date : 20-JUN-2013 16:52
Client ID: VSTD0206B
Instrument: V6.i
Sample Info: 5ML,VSTD0206B,VSTD0206B
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1524.D
Report Date: 25-Jun-2013 14:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1524.D
Lab Smp Id: VSTD0056B Client Smp ID: VSTD0056B
Inj Date : 20-JUN-2013 17:16
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD0056B,VSTD0056B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130620.B\v68260Gadd-6lvl.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : 20-JUN-2013 17:16 Cal File: V6I1524.D
Als bottle: 4 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	1.753	1.752	(0.311)	10436	5.00000	5
2	Freon114	85	1.883	1.882	(0.334)	11097	5.00000	5
3	Chloromethane	50	1.942	1.941	(0.344)	16895	5.00000	5
4	Vinyl Chloride	62	2.049	2.048	(0.363)	15321	5.00000	5
5	Bromomethane	94	2.380	2.379	(0.422)	8594	5.00000	6
6	Chloroethane	64	2.475	2.473	(0.438)	8810	5.00000	5
7	Trichlorofluoromethane	101	2.699	2.698	(0.478)	19546	5.00000	5
126	Ethanol	46	2.865	2.935	(0.508)	1926	500.000	520(A)
8	Ether	59	2.936	2.935	(0.520)	11938	5.00000	5
9	Acrolein	56	3.066	3.065	(0.543)	2622	25.0000	23
10	1,1-Dichloroethene	96	3.149	3.148	(0.558)	14095	5.00000	5
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.137	3.136	(0.556)	13703	5.00000	5
12	Acetone	58	3.208	3.207	(0.568)	1609	5.00000	6
13	Iodomethane	142	3.303	3.302	(0.585)	15108	5.00000	5
14	Carbon Disulfide	76	3.362	3.361	(0.596)	43863	5.00000	5
15	Acetonitrile	41	3.457	3.456	(0.612)	37258	50.0000	48
16	Allyl Chloride	39	3.457	3.456	(0.612)	15690	5.00000	5
17	Methyl Acetate	43	3.457	3.467	(0.612)	16327	5.00000	5
18	Methylene Chloride	84	3.563	3.562	(0.631)	13588	5.00000	5
19	tert-Butanol	59	3.788	3.787	(0.671)	1141	10.0000	9
20	Acrylonitrile	53	3.764	3.775	(0.667)	6432	5.00000	5
21	trans-1,2-Dichloroethene	96	3.788	3.787	(0.671)	14981	5.00000	5

	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	3.776	3.775	(0.669)	40171	5.00000	5
	23 1,1-Dichloroethane	63	4.143	4.142	(0.734)	25402	5.00000	5
	24 Vinyl acetate	43	4.155	4.154	(0.736)	45750	5.00000	5
	25 Diisopropyl Ether	45	4.155	4.154	(0.736)	44772	5.00000	5
	26 2-Chloro-1,3-Butadiene	53	4.214	4.213	(0.746)	19975	5.00000	5
	27 Ethyl tert-butyl ether	59	4.462	4.461	(0.790)	42835	5.00000	5
	29 2,2-Dichloropropane	77	4.640	4.639	(0.822)	20497	5.00000	5
	28 cis-1,2-Dichloroethene	96	4.628	4.627	(0.820)	15274	5.00000	5
	30 2-Butanone	72	4.628	4.639	(0.820)	1617	5.00000	5
	32 Propionitrile	54	4.711	4.710	(0.834)	28129	50.0000	52
	33 Methacrylonitrile	41	4.829	4.828	(0.855)	19364	10.0000	10
	34 Bromochloromethane	128	4.841	4.852	(0.857)	7105	5.00000	5
	31 Tetrahydrofuran	72	4.888	4.887	(0.866)	4366	10.0000	10
	35 Chloroform	83	4.900	4.899	(0.868)	23556	5.00000	5
$	36 Dibromofluoromethane	113	5.042	5.041	(0.893)	124336	50.0000	51
	37 1,1,1-Trichloroethane	97	5.078	5.077	(0.899)	21123	5.00000	5
	38 Cyclohexane	56	5.125	5.124	(0.908)	24611	5.00000	5
	39 1,1-Dichloropropene	110	5.208	5.219	(0.922)	7109	5.00000	5
	40 Carbon Tetrachloride	117	5.220	5.219	(0.925)	19606	5.00000	5
	41 Isobutyl Alcohol	43	5.255	5.254	(0.931)	15190	100.000	100
$	42 1,2-Dichloroethane-d4	102	5.350	5.349	(0.948)	30666	50.0000	49
	43 Benzene	78	5.409	5.408	(0.958)	53192	5.00000	5
	44 1,2-Dichloroethane	62	5.421	5.420	(0.960)	18621	5.00000	5
	45 tert-Amyl methyl ether	73	5.468	5.467	(0.969)	38440	5.00000	5
M	50 1,2-Dichloroethene (Total)	96				30255	10.0000	10
*	46 Fluorobenzene	96	5.646	5.645	(1.000)	445025	50.0000	
	47 Trichloroethene	130	5.977	5.976	(1.059)	15648	5.00000	5
	48 Methylcyclohexane	83	6.166	6.165	(1.092)	22357	5.00000	5
	49 1,2-Dichloropropane	63	6.202	6.201	(1.098)	13634	5.00000	5
	51 Methyl Methacrylate	69	6.261	6.260	(1.109)	11207	5.00000	5
	52 Dibromomethane	93	6.320	6.319	(1.119)	9211	5.00000	5
	53 1,4-Dioxane	88	6.320	6.331	(1.119)	1350	100.000	69
	54 Bromodichloromethane	83	6.450	6.449	(1.143)	17324	5.00000	5
	55 2-Chloroethyl vinyl ether	63	6.723	6.710	(1.191)	198	5.00000	6(T)
	56 cis-1,3-Dichloropropene	75	6.876	6.875	(1.218)	22463	5.00000	5
	57 4-Methyl-2-pentanone	43	7.018	7.017	(1.243)	17765	5.00000	5
$	58 Toluene-d8	98	7.160	7.159	(0.823)	424325	50.0000	49
	59 Toluene	91	7.219	7.218	(1.279)	56704	5.00000	5
	60 trans-1,3-Dichloropropene	75	7.432	7.431	(1.316)	20203	5.00000	5
	61 Ethyl Methacrylate	69	7.503	7.502	(1.329)	15811	5.00000	5
	62 1,1,2-Trichloroethane	97	7.634	7.633	(1.352)	12300	5.00000	5
	63 Tetrachloroethene	164	7.799	7.798	(0.897)	12138	5.00000	5
	64 1,3-Dichloropropane	76	7.823	7.822	(0.899)	21598	5.00000	5
	65 2-Hexanone	43	7.882	7.881	(0.906)	14430	5.00000	5
	66 Dibromochloromethane	129	8.060	8.070	(0.927)	15224	5.00000	5
	67 1,2-Dibromoethane	107	8.202	8.201	(0.943)	14847	5.00000	5
	69 1-Chlorohexane	91	8.675	8.674	(0.997)	21206	5.00000	5
*	68 Chlorobenzene-d5	117	8.699	8.698	(1.000)	358716	50.0000	
	70 Chlorobenzene	112	8.722	8.733	(1.003)	40351	5.00000	5
	71 1,1,1,2-Tetrachloroethane	131	8.817	8.816	(1.014)	14850	5.00000	5
	72 Ethylbenzene	106	8.829	8.840	(1.015)	21447	5.00000	5
	73 m,p-Xylene	106	8.959	8.958	(1.030)	57141	10.0000	10
	74 o-Xylene	106	9.409	9.408	(1.082)	27127	5.00000	5
	75 Styrene	104	9.420	9.419	(1.083)	43538	5.00000	5

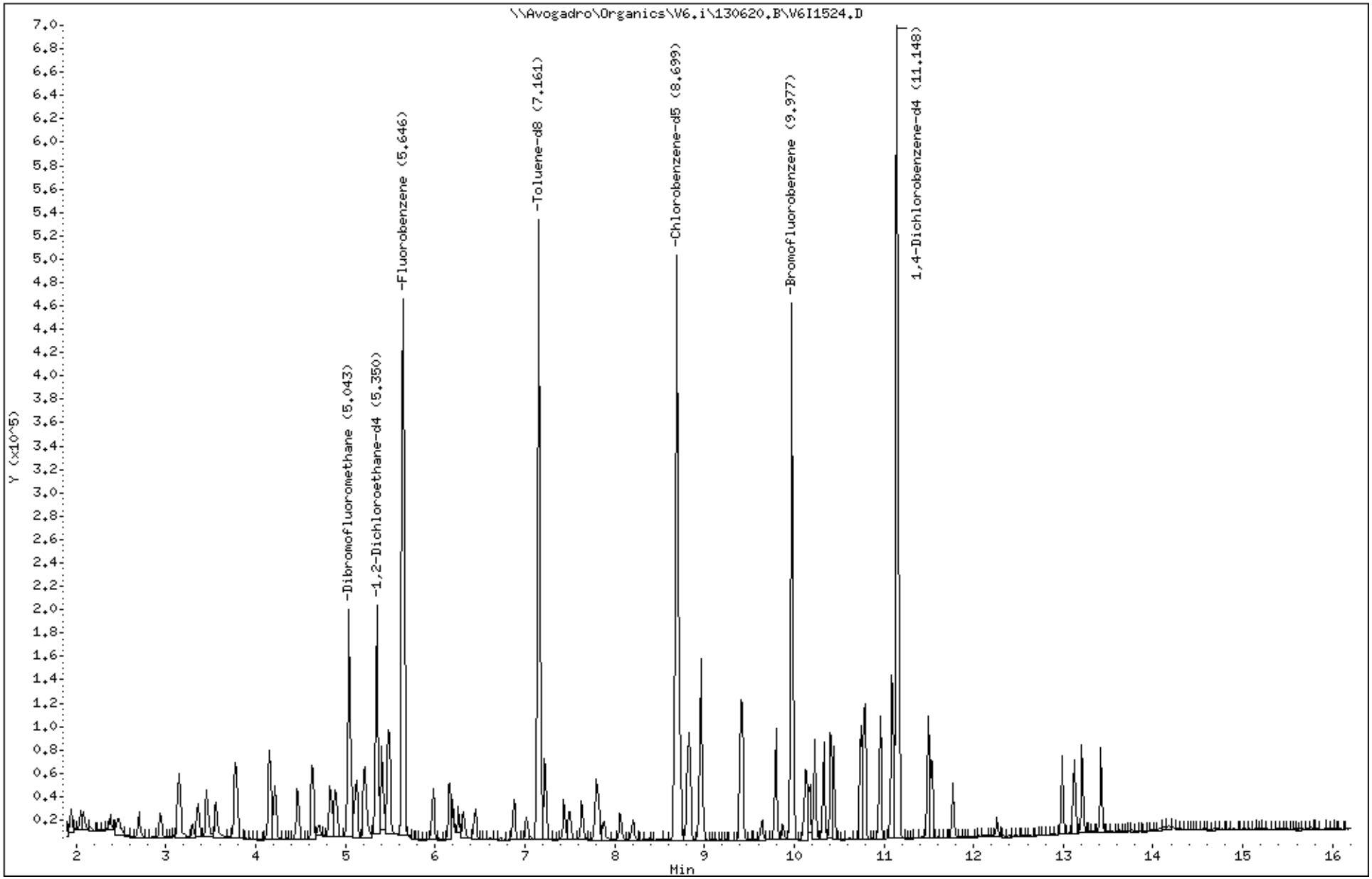
Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1524.D
Report Date: 25-Jun-2013 14:18

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.645	9.644	(1.109)	9260	5.00000	5
	77 Isopropylbenzene	105	9.799	9.798	(1.127)	70664	5.00000	5
	78 trans-1,4-Dichloro-2-butene	75	9.870	9.881	(1.135)	3694	5.00000	4
$	79 Bromofluorobenzene	95	9.977	9.975	(1.147)	179004	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	10.119	10.117	(0.908)	18350	5.00000	5
	81 Bromobenzene	156	10.142	10.141	(0.910)	18849	5.00000	5
	82 1,2,3-Trichloropropane	75	10.178	10.177	(0.913)	21277	5.00000	5
	83 n-Propylbenzene	120	10.237	10.236	(0.918)	21081	5.00000	5
	84 2-Chlorotoluene	126	10.332	10.330	(0.927)	17387	5.00000	5
	85 1,3,5-Trimethylbenzene	105	10.403	10.413	(0.933)	59522	5.00000	5
	86 4-Chlorotoluene	126	10.438	10.449	(0.936)	18130	5.00000	5
M	94 Xylene (Total)	106				84268	15.0000	15
	87 tert-Butylbenzene	119	10.746	10.745	(0.964)	70331	5.00000	5
	88 1,2,4-Trimethylbenzene	105	10.793	10.792	(0.968)	59737	5.00000	5
	89 sec-Butylbenzene	105	10.959	10.958	(0.983)	78789	5.00000	5
	90 1,3-Dichlorobenzene	146	11.089	11.088	(0.995)	34276	5.00000	5
	91 4-Isopropyltoluene	119	11.101	11.100	(0.996)	68366	5.00000	5
*	92 1,4-Dichlorobenzene-d4	152	11.148	11.147	(1.000)	194938	50.0000	
	93 1,4-Dichlorobenzene	146	11.172	11.171	(1.002)	35287	5.00000	5
	95 n-Butylbenzene	91	11.491	11.490	(1.031)	57607	5.00000	5
	96 1,2-Dichlorobenzene	146	11.538	11.537	(1.035)	34387	5.00000	5
	97 Hexachloroethane	117	11.763	11.774	(1.055)	11362	5.00000	5
	98 1,2-Dibromo-3-chloropropane	75	12.260	12.259	(1.100)	4384	5.00000	5
	141 1,3,5-Trichlorobenzene	182	12.994	12.993	(2.301)	22634	5.00000	5(A)
	99 1,2,4-Trichlorobenzene	180	12.994	12.993	(1.166)	23614	5.00000	5
	100 Hexachlorobutadiene	225	13.124	13.123	(1.177)	10982	5.00000	5
	101 Naphthalene	128	13.207	13.206	(1.185)	60386	5.00000	5
	102 1,2,3-Trichlorobenzene	180	13.420	13.419	(1.204)	22484	5.00000	5

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1524.D
Date : 20-JUN-2013 17:16
Client ID: VSTD0056B
Instrument: V6.i
Sample Info: 5ML,VSTD0056B,VSTD0056B
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1526.D
Report Date: 25-Jun-2013 14:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1526.D
Lab Smp Id: VSTD0016B Client Smp ID: VSTD0016B
Inj Date : 20-JUN-2013 18:05
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD0016B,VSTD0016B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130620.B\v68260Gadd-6lvl.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : 20-JUN-2013 18:05 Cal File: V6I1526.D
Als bottle: 6 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	1.744	1.752	(0.309)	1528	1.00000	0.8	
2	Freon114	85	1.874	1.882	(0.332)	1633	1.00000	0.8	
3	Chloromethane	50	1.933	1.941	(0.342)	3079	1.00000	1	
4	Vinyl Chloride	62	2.052	2.048	(0.363)	2374	1.00000	0.9	
5	Bromomethane	94	2.383	2.379	(0.422)	1245	1.00000	0.9(M)M3 AM 06/25	
6	Chloroethane	64	2.466	2.473	(0.437)	1561	1.00000	1	
7	Trichlorofluoromethane	101	2.691	2.698	(0.476)	2793	1.00000	0.8	
126	Ethanol	46	2.856	2.935	(0.506)	649	100.000	180	
8	Ether	59	2.939	2.935	(0.520)	2016	1.00000	0.9	
9	Acrolein	56	3.058	3.065	(0.541)	597	5.00000	5	
10	1,1-Dichloroethene	96	3.152	3.148	(0.558)	2123	1.00000	0.9	
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.140	3.136	(0.556)	2012	1.00000	0.8	
12	Acetone	58	3.200	3.207	(0.566)	408	1.00000	2	
13	Iodomethane	142	3.294	3.302	(0.583)	2539	1.00000	1.0	
14	Carbon Disulfide	76	3.353	3.361	(0.594)	6881	1.00000	1.0	
15	Acetonitrile	41	3.460	3.456	(0.613)	6867	1.00000	10	
16	Allyl Chloride	39	3.448	3.456	(0.610)	2479	1.00000	0.9	
17	Methyl Acetate	43	3.460	3.467	(0.613)	2624	1.00000	1.0	
18	Methylene Chloride	84	3.555	3.562	(0.629)	2785	1.00000	1	
19	tert-Butanol	59	3.779	3.787	(0.669)	161	1.00000	1	
20	Acrylonitrile	53	3.767	3.775	(0.667)	1199	1.00000	1.0	
21	trans-1,2-Dichloroethene	96	3.791	3.787	(0.671)	2535	1.00000	1	
22	Methyl tert-butyl ether	73	3.767	3.775	(0.667)	6685	1.00000	0.9	

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	23	1,1-Dichloroethane	63	4.146	4.142	(0.734)	4255	1.00000	1.0
	24	Vinyl acetate	43	4.158	4.154	(0.736)	7802	1.00000	1.0
	25	Diisopropyl Ether	45	4.158	4.154	(0.736)	6645	1.00000	0.8
	26	2-Chloro-1,3-Butadiene	53	4.217	4.213	(0.747)	3063	1.00000	0.8
	27	Ethyl tert-butyl ether	59	4.466	4.461	(0.791)	6693	1.00000	0.9
	29	2,2-Dichloropropane	77	4.631	4.639	(0.820)	3351	1.00000	1.0
	28	cis-1,2-Dichloroethene	96	4.631	4.627	(0.820)	2731	1.00000	1
	30	2-Butanone	72	4.619	4.639	(0.818)	295	1.00000	0.9
	32	Propionitrile	54	4.702	4.710	(0.832)	3864	1.00000	9
	33	Methacrylonitrile	41	4.821	4.828	(0.853)	5045	1.00000	3
	34	Bromochloromethane	128	4.844	4.852	(0.858)	1049	1.00000	0.9
	31	Tetrahydrofuran	72	4.892	4.887	(0.866)	676	1.00000	2
	35	Chloroform	83	4.892	4.899	(0.866)	3483	1.00000	0.9
$	36	Dibromofluoromethane	113	5.034	5.041	(0.891)	122080	1.00000	55
	37	1,1,1-Trichloroethane	97	5.069	5.077	(0.897)	3059	1.00000	0.8
	38	Cyclohexane	56	5.116	5.124	(0.906)	3584	1.00000	0.8
	39	1,1-Dichloropropene	110	5.211	5.219	(0.923)	1075	1.00000	0.8
	40	Carbon Tetrachloride	117	5.223	5.219	(0.925)	2775	1.00000	0.8
	41	Isobutyl Alcohol	43	5.258	5.254	(0.931)	1825	1.00000	15
$	42	1,2-Dichloroethane-d4	102	5.353	5.349	(0.948)	29380	1.00000	52
	43	Benzene	78	5.400	5.408	(0.956)	7748	1.00000	0.9
	44	1,2-Dichloroethane	62	5.412	5.420	(0.958)	3036	1.00000	1.0
	45	tert-Amyl methyl ether	73	5.471	5.467	(0.969)	5760	1.00000	0.8
M	50	1,2-Dichloroethene (Total)	96				5266	2.00000	2
*	46	Fluorobenzene	96	5.649	5.645	(1.000)	415031	50.0000	
	47	Trichloroethene	130	5.980	5.976	(1.059)	2066	1.00000	0.8
	48	Methylcyclohexane	83	6.158	6.165	(1.090)	3352	1.00000	0.8
	49	1,2-Dichloropropane	63	6.193	6.201	(1.096)	2228	1.00000	0.9
	51	Methyl Methacrylate	69	6.264	6.260	(1.109)	2314	1.00000	1
	52	Dibromomethane	93	6.312	6.319	(1.117)	1500	1.00000	1.0
	53	1,4-Dioxane	88	6.359	6.331	(1.126)	212	1.00000	12
	54	Bromodichloromethane	83	6.454	6.449	(1.142)	2974	1.00000	1.0
	56	cis-1,3-Dichloropropene	75	6.880	6.875	(1.218)	3275	1.00000	0.8
	57	4-Methyl-2-pentanone	43	7.022	7.017	(1.243)	3797	1.00000	1
$	58	Toluene-d8	98	7.152	7.159	(0.823)	405635	1.00000	49
	59	Toluene	91	7.223	7.218	(1.279)	8468	1.00000	0.9
	60	trans-1,3-Dichloropropene	75	7.436	7.431	(1.316)	2821	1.00000	0.8
	61	Ethyl Methacrylate	69	7.495	7.502	(1.327)	2717	1.00000	1
	62	1,1,2-Trichloroethane	97	7.637	7.633	(1.352)	1868	1.00000	0.8
	63	Tetrachloroethene	164	7.791	7.798	(0.897)	1842	1.00000	0.8
	64	1,3-Dichloropropane	76	7.826	7.822	(0.901)	3518	1.00000	0.9
	65	2-Hexanone	43	7.873	7.881	(0.906)	2906	1.00000	1
	66	Dibromochloromethane	129	8.063	8.070	(0.928)	2373	1.00000	0.8(T)
	67	1,2-Dibromoethane	107	8.205	8.201	(0.944)	2365	1.00000	0.9(T)
	69	1-Chlorohexane	91	8.666	8.674	(0.997)	3869	1.00000	1
*	68	Chlorobenzene-d5	117	8.690	8.698	(1.000)	338963	50.0000	
	70	Chlorobenzene	112	8.725	8.733	(1.004)	5846	1.00000	0.8
	71	1,1,1,2-Tetrachloroethane	131	8.808	8.816	(1.014)	1986	1.00000	0.7
	72	Ethylbenzene	106	8.832	8.840	(1.016)	3640	1.00000	1.0
	73	m,p-Xylene	106	8.962	8.958	(1.031)	9378	2.00000	2
	74	o-Xylene	106	9.412	9.408	(1.083)	4345	1.00000	0.9
	75	Styrene	104	9.424	9.419	(1.084)	6272	1.00000	0.8
	76	Bromoform	173	9.637	9.644	(1.109)	1425	1.00000	0.8(T)
	77	Isopropylbenzene	105	9.802	9.798	(1.128)	11803	1.00000	1

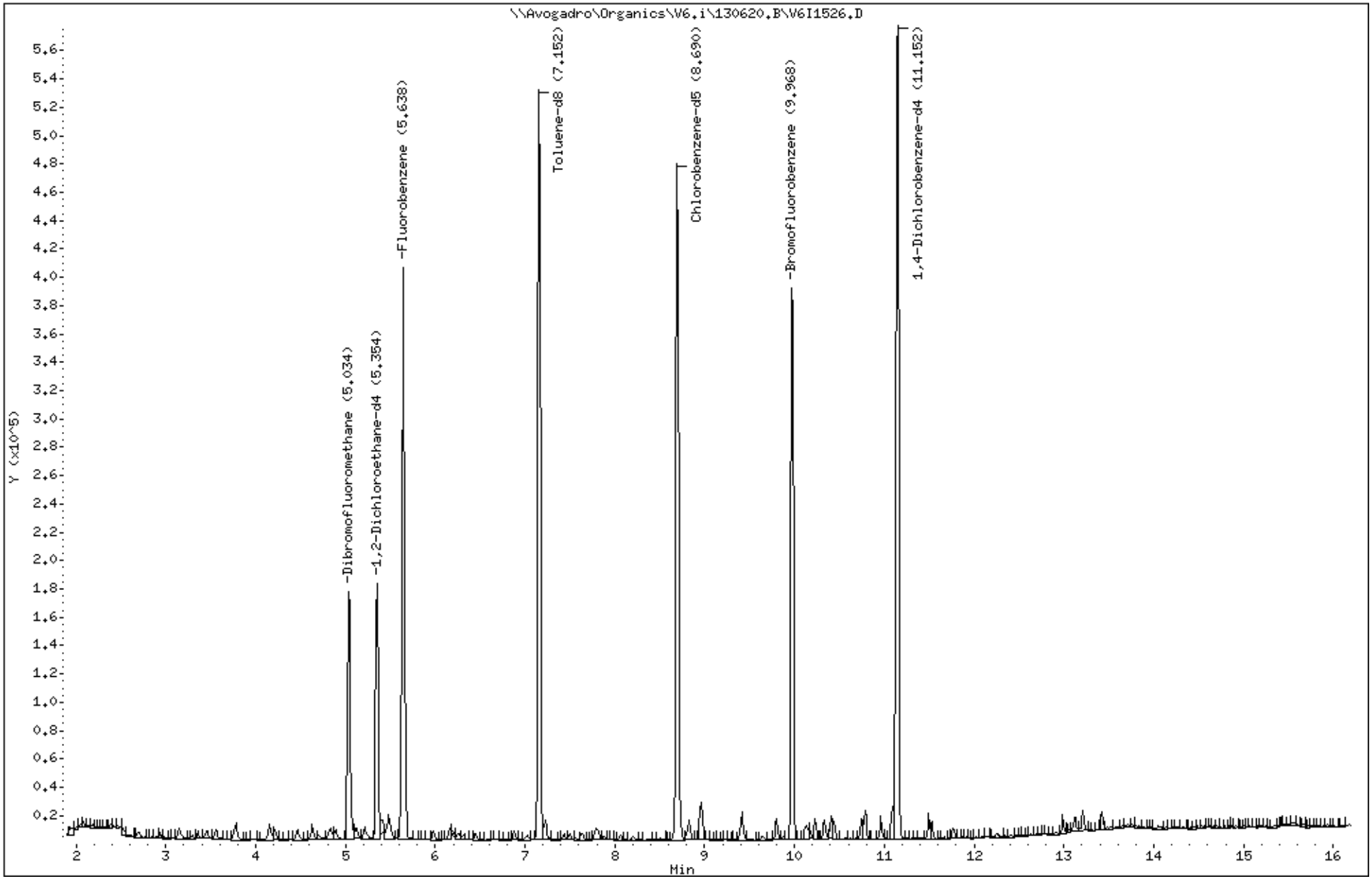
Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1526.D
Report Date: 25-Jun-2013 14:18

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	78	trans-1,4-Dichloro-2-butene	75	9.873	9.881	(1.136)	568	1.00000	0.6	
$	79	Bromofluorobenzene	95	9.968	9.975	(1.147)	165760	1.00000	51	
	80	1,1,2,2-Tetrachloroethane	83	10.122	10.117	(0.908)	3272	1.00000	1.0	
	81	Bromobenzene	156	10.134	10.141	(0.909)	2733	1.00000	0.8	
	82	1,2,3-Trichloropropane	75	10.169	10.177	(0.912)	3734	1.00000	0.9	
	83	n-Propylbenzene	120	10.228	10.236	(0.917)	2968	1.00000	0.8	
	84	2-Chlorotoluene	126	10.335	10.330	(0.927)	2667	1.00000	0.8	
	85	1,3,5-Trimethylbenzene	105	10.406	10.413	(0.933)	9925	1.00000	1.0	
	86	4-Chlorotoluene	126	10.441	10.449	(0.936)	3018	1.00000	0.9	
M	94	Xylene (Total)	106				13723	3.00000	3	
	87	tert-Butylbenzene	119	10.737	10.745	(0.963)	10668	1.00000	0.9	
	88	1,2,4-Trimethylbenzene	105	10.796	10.792	(0.968)	10133	1.00000	1	
	89	sec-Butylbenzene	105	10.962	10.958	(0.983)	11428	1.00000	0.9	
	90	1,3-Dichlorobenzene	146	11.080	11.088	(0.994)	5061	1.00000	0.8	
	91	4-Isopropyltoluene	119	11.104	11.100	(0.996)	10161	1.00000	0.9	
*	92	1,4-Dichlorobenzene-d4	152	11.151	11.147	(1.000)	182849	50.0000		
	93	1,4-Dichlorobenzene	146	11.175	11.171	(1.002)	5244	1.00000	0.9	
	95	n-Butylbenzene	91	11.494	11.490	(1.031)	9459	1.00000	0.9	
	96	1,2-Dichlorobenzene	146	11.530	11.537	(1.034)	4574	1.00000	0.8	
	97	Hexachloroethane	117	11.766	11.774	(1.055)	1669	1.00000	0.8	
	98	1,2-Dibromo-3-chloropropane	75	12.252	12.259	(1.099)	810	1.00000	1(M)M3 AM 06/25	
	141	1,3,5-Trichlorobenzene	182	12.985	12.993	(2.299)	3241	1.00000	0.8(A)	
	99	1,2,4-Trichlorobenzene	180	12.985	12.993	(1.164)	3814	1.00000	0.9	
	100	Hexachlorobutadiene	225	13.127	13.123	(1.177)	1865	1.00000	0.9	
	101	Naphthalene	128	13.210	13.206	(1.185)	11097	1.00000	1.0	
	102	1,2,3-Trichlorobenzene	180	13.423	13.419	(1.204)	4227	1.00000	1	

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1526.D
Date : 20-JUN-2013 18:05
Client ID: VSTD0016B
Instrument: V6.i
Sample Info: 5ML,VSTD0016B,VSTD0016B
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1527.D
Report Date: 25-Jun-2013 14:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1527.D
Lab Smp Id: VSTD2006B Client Smp ID: VSTD2006B
Inj Date : 20-JUN-2013 18:29
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD2006B,VSTD2006B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130620.B\v68260Gadd-6lvl.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : 20-JUN-2013 18:29 Cal File: V6I1527.D
Als bottle: 7 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	1.753	1.752	(0.311)	411788	200.000	200
2	Freon114	85	1.883	1.882	(0.334)	460734	200.000	190
3	Chloromethane	50	1.943	1.941	(0.344)	617405	200.000	180
4	Vinyl Chloride	62	2.049	2.048	(0.363)	591589	200.000	200
5	Bromomethane	94	2.380	2.379	(0.422)	281909	200.000	160
6	Chloroethane	64	2.463	2.473	(0.436)	341794	200.000	190
7	Trichlorofluoromethane	101	2.700	2.698	(0.478)	737654	200.000	190
126	Ethanol	46	2.854	2.935	(0.505)	67183	20000.0	14000(A)
8	Ether	59	2.937	2.935	(0.520)	483382	200.000	190
9	Acrolein	56	3.067	3.065	(0.543)	168058	1000.00	1200(A)
10	1,1-Dichloroethene	96	3.150	3.148	(0.558)	487515	200.000	180
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.138	3.136	(0.556)	535259	200.000	200
12	Acetone	58	3.197	3.207	(0.566)	62087	200.000	210(A)
13	Iodomethane	142	3.303	3.302	(0.585)	623319	200.000	200
14	Carbon Disulfide	76	3.363	3.361	(0.596)	1495249	200.000	180
15	Acetonitrile	41	3.457	3.456	(0.612)	1517411	2000.00	1900(A)
16	Allyl Chloride	39	3.457	3.456	(0.612)	609014	200.000	200
17	Methyl Acetate	43	3.457	3.467	(0.612)	580228	200.000	180
18	Methylene Chloride	84	3.564	3.562	(0.631)	526808	200.000	180
19	tert-Butanol	59	3.789	3.787	(0.671)	69499	400.000	480(A)
20	Acrylonitrile	53	3.765	3.775	(0.667)	293527	200.000	200
21	trans-1,2-Dichloroethene	96	3.789	3.787	(0.671)	545958	200.000	180

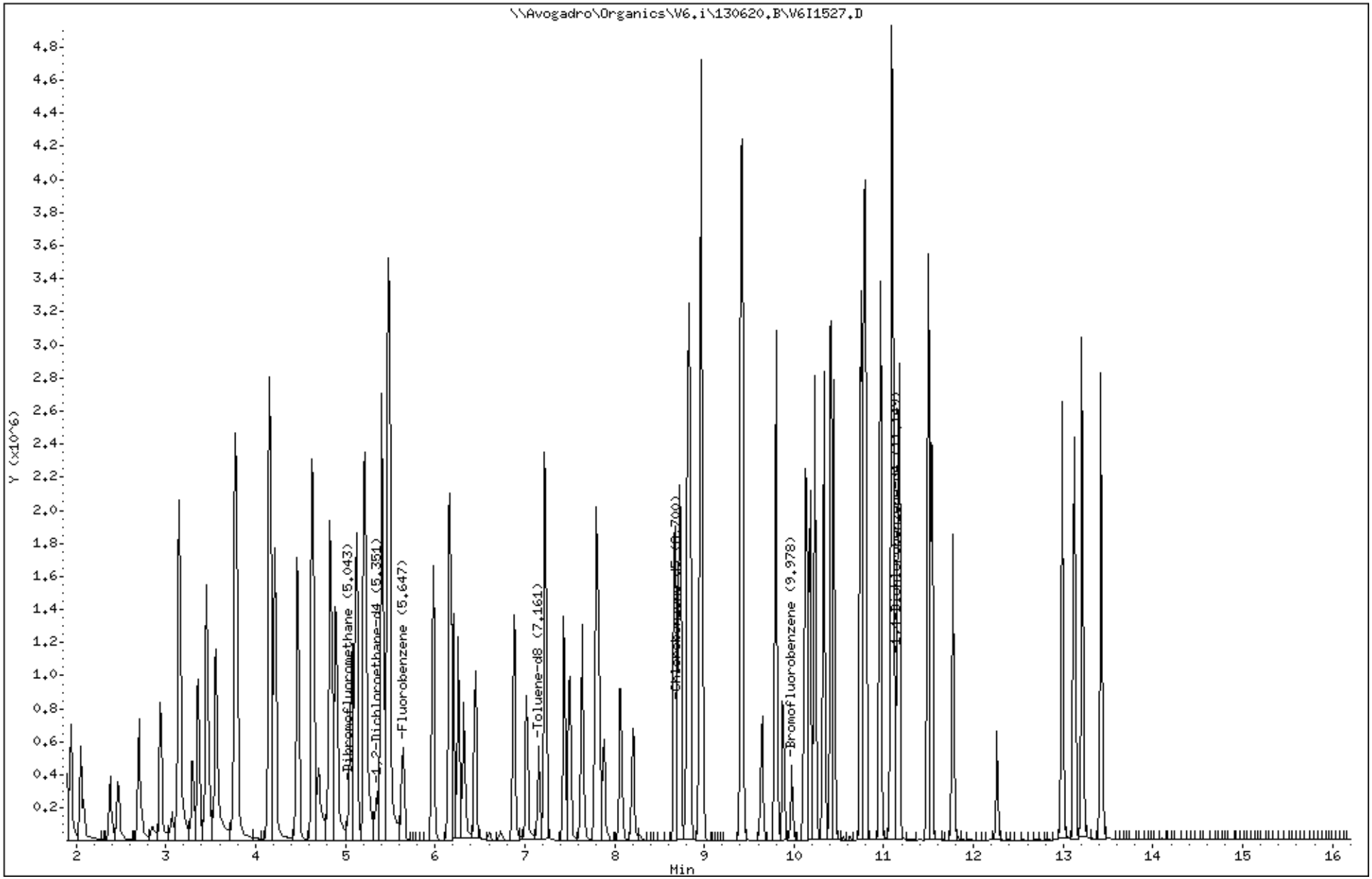
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.777	3.775	(0.669)	1515462	200.000	180
	23 1,1-Dichloroethane	63	4.144	4.142	(0.734)	906157	200.000	180
	24 Vinyl acetate	43	4.155	4.154	(0.736)	1701957	200.000	180
	25 Diisopropyl Ether	45	4.155	4.154	(0.736)	1718622	200.000	190
	26 2-Chloro-1,3-Butadiene	53	4.215	4.213	(0.746)	789262	200.000	190
	27 Ethyl tert-butyl ether	59	4.463	4.461	(0.790)	1638611	200.000	190
	29 2,2-Dichloropropane	77	4.641	4.639	(0.822)	715113	200.000	180
	28 cis-1,2-Dichloroethene	96	4.629	4.627	(0.820)	590530	200.000	190
	30 2-Butanone	72	4.629	4.639	(0.820)	81659	200.000	210(A)
	32 Propionitrile	54	4.700	4.710	(0.832)	971787	2000.00	1800(A)
	33 Methacrylonitrile	41	4.830	4.828	(0.855)	793975	400.000	390(A)
	34 Bromochloromethane	128	4.842	4.852	(0.858)	291847	200.000	210(A)
	31 Tetrahydrofuran	72	4.877	4.887	(0.864)	190227	400.000	400(A)
	35 Chloroform	83	4.901	4.899	(0.868)	854426	200.000	190
$	36 Dibromofluoromethane	113	5.043	5.041	(0.893)	127283	50.0000	49
	37 1,1,1-Trichloroethane	97	5.078	5.077	(0.899)	798485	200.000	190
	38 Cyclohexane	56	5.126	5.124	(0.908)	951110	200.000	200
	39 1,1-Dichloropropene	110	5.209	5.219	(0.922)	290363	200.000	200
	40 Carbon Tetrachloride	117	5.220	5.219	(0.925)	760096	200.000	200
	41 Isobutyl Alcohol	43	5.256	5.254	(0.931)	549590	4000.00	3600(A)
$	42 1,2-Dichloroethane-d4	102	5.351	5.349	(0.948)	33053	50.0000	49
	43 Benzene	78	5.410	5.408	(0.958)	1824545	200.000	180
	44 1,2-Dichloroethane	62	5.422	5.420	(0.960)	677315	200.000	180
	45 tert-Amyl methyl ether	73	5.469	5.467	(0.969)	1473026	200.000	190
M	50 1,2-Dichloroethene (Total)	96				1136488	400.000	370
*	46 Fluorobenzene	96	5.646	5.645	(1.000)	478540	50.0000	
	47 Trichloroethene	130	5.978	5.976	(1.059)	619431	200.000	200(A)
	48 Methylcyclohexane	83	6.167	6.165	(1.092)	945738	200.000	200
	49 1,2-Dichloropropane	63	6.202	6.201	(1.098)	557176	200.000	190
	51 Methyl Methacrylate	69	6.262	6.260	(1.109)	505709	200.000	200
	52 Dibromomethane	93	6.321	6.319	(1.119)	331190	200.000	180
	53 1,4-Dioxane	88	6.321	6.331	(1.119)	89837	4000.00	4200(A)
	54 Bromodichloromethane	83	6.451	6.449	(1.142)	688049	200.000	190
	55 2-Chloroethyl vinyl ether	63	6.711	6.710	(1.189)	4658	200.000	34
	56 cis-1,3-Dichloropropene	75	6.877	6.875	(1.218)	860731	200.000	200
	57 4-Methyl-2-pentanone	43	7.019	7.017	(1.243)	724479	200.000	190
$	58 Toluene-d8	98	7.161	7.159	(0.823)	451436	50.0000	50
	59 Toluene	91	7.220	7.218	(1.279)	1909135	200.000	180
	60 trans-1,3-Dichloropropene	75	7.433	7.431	(1.316)	816913	200.000	200
	61 Ethyl Methacrylate	69	7.504	7.502	(1.329)	588274	200.000	180
	62 1,1,2-Trichloroethane	97	7.634	7.633	(1.352)	504827	200.000	200
	63 Tetrachloroethene	164	7.800	7.798	(0.897)	475506	200.000	200
	64 1,3-Dichloropropane	76	7.824	7.822	(0.899)	815829	200.000	190
	65 2-Hexanone	43	7.883	7.881	(0.906)	505551	200.000	180
	66 Dibromochloromethane	129	8.072	8.070	(0.928)	651364	200.000	210(A)
	67 1,2-Dibromoethane	107	8.202	8.201	(0.943)	583287	200.000	200
	69 1-Chlorohexane	91	8.676	8.674	(0.997)	754553	200.000	180
*	68 Chlorobenzene-d5	117	8.699	8.698	(1.000)	372230	50.0000	
	70 Chlorobenzene	112	8.723	8.733	(1.003)	1411099	200.000	190
	71 1,1,1,2-Tetrachloroethane	131	8.818	8.816	(1.014)	602916	200.000	210(A)
	72 Ethylbenzene	106	8.829	8.840	(1.015)	792542	200.000	190
	73 m,p-Xylene	106	8.960	8.958	(1.030)	1816620	400.000	340(A)
	74 o-Xylene	106	9.409	9.408	(1.082)	939547	200.000	180
	75 Styrene	104	9.421	9.419	(1.083)	1501013	200.000	180

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.646	9.644	(1.109)	433112	200.000	220(A)
	77	Isopropylbenzene	105	9.800	9.798	(1.126)	2141997	200.000	160
	78	trans-1,4-Dichloro-2-butene	75	9.871	9.881	(1.135)	245575	200.000	250(A)
$	79	Bromofluorobenzene	95	9.977	9.975	(1.147)	176978	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	10.119	10.117	(0.908)	685359	200.000	180
	81	Bromobenzene	156	10.143	10.141	(0.910)	657496	200.000	190
	82	1,2,3-Trichloropropane	75	10.178	10.177	(0.913)	879926	200.000	200
	83	n-Propylbenzene	120	10.237	10.236	(0.918)	747381	200.000	190
	84	2-Chlorotoluene	126	10.332	10.330	(0.927)	647934	200.000	190
	85	1,3,5-Trimethylbenzene	105	10.415	10.413	(0.934)	1872332	200.000	170
	86	4-Chlorotoluene	126	10.450	10.449	(0.937)	678974	200.000	190
M	94	Xylene (Total)	106				2756167	600.000	530
	87	tert-Butylbenzene	119	10.746	10.745	(0.964)	2332282	200.000	180
	88	1,2,4-Trimethylbenzene	105	10.794	10.792	(0.968)	1876003	200.000	170
	89	sec-Butylbenzene	105	10.959	10.958	(0.983)	2332788	200.000	160
	90	1,3-Dichlorobenzene	146	11.089	11.088	(0.995)	1192371	200.000	180
	91	4-Isopropyltoluene	119	11.101	11.100	(0.996)	2075702	200.000	170
*	92	1,4-Dichlorobenzene-d4	152	11.149	11.147	(1.000)	200970	50.0000	
	93	1,4-Dichlorobenzene	146	11.172	11.171	(1.002)	1210289	200.000	180
	95	n-Butylbenzene	91	11.492	11.490	(1.031)	1844592	200.000	170
	96	1,2-Dichlorobenzene	146	11.539	11.537	(1.035)	1141692	200.000	180
	97	Hexachloroethane	117	11.764	11.774	(1.055)	475533	200.000	210(A)
	98	1,2-Dibromo-3-chloropropane	75	12.261	12.259	(1.100)	153307	200.000	160
	141	1,3,5-Trichlorobenzene	182	12.994	12.993	(2.301)	899861	200.000	210(A)
	99	1,2,4-Trichlorobenzene	180	12.994	12.993	(1.166)	922526	200.000	200
	100	Hexachlorobutadiene	225	13.125	13.123	(1.177)	433996	200.000	200
	101	Naphthalene	128	13.207	13.206	(1.185)	2287093	200.000	180
	102	1,2,3-Trichlorobenzene	180	13.420	13.419	(1.204)	898188	200.000	200

QC Flag Legend

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

Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1527.D
Date : 20-JUN-2013 18:29
Client ID: VSTD2006B
Instrument: V6.i
Sample Info: 5ML,VSTD2006B,VSTD2006B
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1528.D
Report Date: 25-Jun-2013 14:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1528.D
Lab Smp Id: VSTD1006B Client Smp ID: VSTD1006B
Inj Date : 20-JUN-2013 18:53
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD1006B,VSTD1006B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130620.B\v68260Gadd-6lvl.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : 20-JUN-2013 18:53 Cal File: V6I1528.D
Als bottle: 8 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	1.755	1.752	(0.311)	211805	100.000	98
2	Freon114	85	1.885	1.882	(0.334)	229712	100.000	94
3	Chloromethane	50	1.944	1.941	(0.344)	338160	100.000	96
4	Vinyl Chloride	62	2.051	2.048	(0.363)	316961	100.000	100
5	Bromomethane	94	2.382	2.379	(0.422)	159721	100.000	88
6	Chloroethane	64	2.465	2.473	(0.436)	178711	100.000	95
7	Trichlorofluoromethane	101	2.702	2.698	(0.478)	396183	100.000	100
126	Ethanol	46	2.855	2.935	(0.506)	30794	10000.0	6800(A)
8	Ether	59	2.938	2.935	(0.520)	252506	100.000	97
9	Acrolein	56	3.068	3.065	(0.543)	62275	500.000	440
10	1,1-Dichloroethene	96	3.151	3.148	(0.558)	262230	100.000	96
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.139	3.136	(0.556)	275387	100.000	98
12	Acetone	58	3.199	3.207	(0.566)	27107	100.000	91
13	Iodomethane	142	3.293	3.302	(0.583)	321713	100.000	99
14	Carbon Disulfide	76	3.352	3.361	(0.594)	840529	100.000	97
15	Acetonitrile	41	3.459	3.456	(0.612)	751809	1000.00	920(A)
16	Allyl Chloride	39	3.459	3.456	(0.612)	310157	100.000	96
17	Methyl Acetate	43	3.459	3.467	(0.612)	290103	100.000	89
18	Methylene Chloride	84	3.554	3.562	(0.629)	278997	100.000	94
19	tert-Butanol	59	3.778	3.787	(0.669)	35396	200.000	220(A)
20	Acrylonitrile	53	3.767	3.775	(0.667)	134568	100.000	91
21	trans-1,2-Dichloroethene	96	3.790	3.787	(0.671)	291161	100.000	95

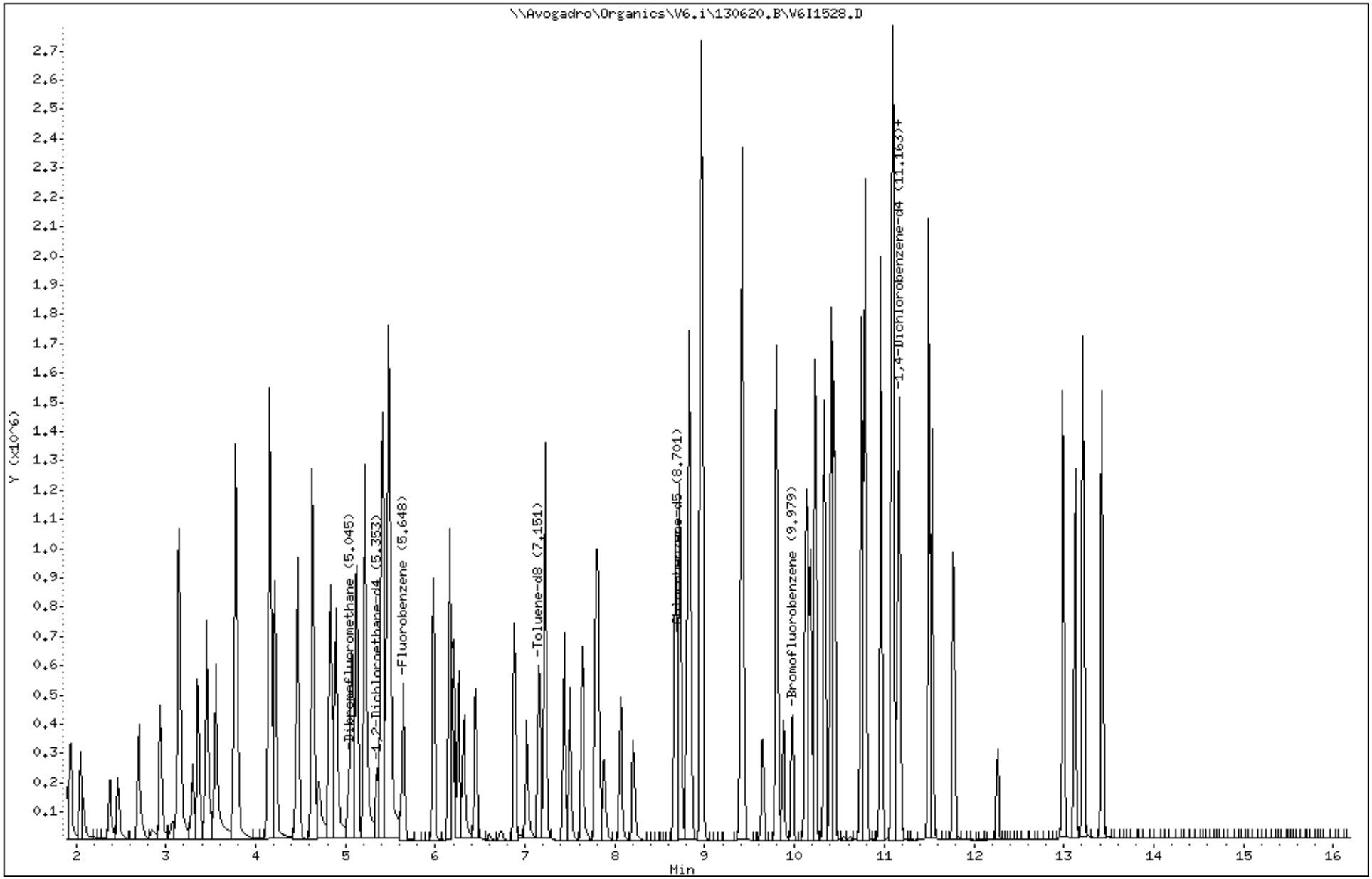
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.767	3.775	(0.667)	837508	100.000	98
	23 1,1-Dichloroethane	63	4.145	4.142	(0.734)	489079	100.000	94
	24 Vinyl acetate	43	4.157	4.154	(0.736)	927468	100.000	96
	25 Diisopropyl Ether	45	4.157	4.154	(0.736)	962417	100.000	100
	26 2-Chloro-1,3-Butadiene	53	4.216	4.213	(0.747)	428275	100.000	98
	27 Ethyl tert-butyl ether	59	4.465	4.461	(0.791)	906906	100.000	100
	29 2,2-Dichloropropane	77	4.630	4.639	(0.820)	386285	100.000	94
	28 cis-1,2-Dichloroethene	96	4.630	4.627	(0.820)	311820	100.000	97
	30 2-Butanone	72	4.630	4.639	(0.820)	32135	100.000	84
	32 Propionitrile	54	4.701	4.710	(0.832)	455717	1000.00	840(A)
	33 Methacrylonitrile	41	4.820	4.828	(0.853)	348944	200.000	170
	34 Bromochloromethane	128	4.843	4.852	(0.858)	144724	100.000	99
	31 Tetrahydrofuran	72	4.879	4.887	(0.864)	87241	200.000	180
	35 Chloroform	83	4.891	4.899	(0.866)	462346	100.000	98
$	36 Dibromofluoromethane	113	5.045	5.041	(0.893)	132008	50.0000	49
	37 1,1,1-Trichloroethane	97	5.068	5.077	(0.897)	428544	100.000	100
	38 Cyclohexane	56	5.127	5.124	(0.908)	499933	100.000	99
	39 1,1-Dichloropropene	110	5.210	5.219	(0.922)	154789	100.000	100
	40 Carbon Tetrachloride	117	5.222	5.219	(0.925)	406936	100.000	100
	41 Isobutyl Alcohol	43	5.258	5.254	(0.931)	253970	2000.00	1700(A)
$	42 1,2-Dichloroethane-d4	102	5.352	5.349	(0.948)	33004	50.0000	48
	43 Benzene	78	5.411	5.408	(0.958)	1035774	100.000	99
	44 1,2-Dichloroethane	62	5.423	5.420	(0.960)	361192	100.000	94
	45 tert-Amyl methyl ether	73	5.470	5.467	(0.969)	806178	100.000	100
M	50 1,2-Dichloroethene (Total)	96				602981	200.000	190
*	46 Fluorobenzene	96	5.648	5.645	(1.000)	499455	50.0000	
	47 Trichloroethene	130	5.979	5.976	(1.059)	333869	100.000	100
	48 Methylcyclohexane	83	6.157	6.165	(1.090)	481578	100.000	100
	49 1,2-Dichloropropane	63	6.204	6.201	(1.098)	291338	100.000	98
	51 Methyl Methacrylate	69	6.263	6.260	(1.109)	253475	100.000	98
	52 Dibromomethane	93	6.311	6.319	(1.117)	175728	100.000	93
	53 1,4-Dioxane	88	6.322	6.331	(1.119)	41310	2000.00	1900(A)
	54 Bromodichloromethane	83	6.453	6.449	(1.142)	360418	100.000	97
	55 2-Chloroethyl vinyl ether	63	6.713	6.710	(1.189)	2460	100.000	21
	56 cis-1,3-Dichloropropene	75	6.879	6.875	(1.218)	460021	100.000	100
	57 4-Methyl-2-pentanone	43	7.021	7.017	(1.243)	351293	100.000	91
$	58 Toluene-d8	98	7.151	7.159	(0.822)	469934	50.0000	50
	59 Toluene	91	7.222	7.218	(1.279)	1083909	100.000	98
	60 trans-1,3-Dichloropropene	75	7.435	7.431	(1.316)	425851	100.000	100
	61 Ethyl Methacrylate	69	7.494	7.502	(1.327)	301316	100.000	93
	62 1,1,2-Trichloroethane	97	7.636	7.633	(1.352)	255524	100.000	97
	63 Tetrachloroethene	164	7.790	7.798	(0.895)	253713	100.000	100
	64 1,3-Dichloropropane	76	7.825	7.822	(0.899)	415604	100.000	95
	65 2-Hexanone	43	7.884	7.881	(0.906)	242854	100.000	88
	66 Dibromochloromethane	129	8.062	8.070	(0.927)	332896	100.000	100
	67 1,2-Dibromoethane	107	8.204	8.201	(0.943)	292547	100.000	97
	69 1-Chlorohexane	91	8.665	8.674	(0.996)	404872	100.000	95
*	68 Chlorobenzene-d5	117	8.701	8.698	(1.000)	383959	50.0000	
	70 Chlorobenzene	112	8.725	8.733	(1.003)	778478	100.000	100
	71 1,1,1,2-Tetrachloroethane	131	8.807	8.816	(1.012)	311760	100.000	100
	72 Ethylbenzene	106	8.831	8.840	(1.015)	434018	100.000	100
	73 m,p-Xylene	106	8.961	8.958	(1.030)	1008254	200.000	190
	74 o-Xylene	106	9.411	9.408	(1.082)	510167	100.000	97
	75 Styrene	104	9.423	9.419	(1.083)	831265	100.000	96

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.647	9.644	(1.109)	216231	100.000	100
	77	Isopropylbenzene	105	9.801	9.798	(1.126)	1240889	100.000	94
	78	trans-1,4-Dichloro-2-butene	75	9.872	9.881	(1.135)	113887	100.000	110
$	79	Bromofluorobenzene	95	9.967	9.975	(1.146)	182344	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	10.121	10.117	(0.908)	350098	100.000	92
	81	Bromobenzene	156	10.144	10.141	(0.910)	349663	100.000	97
	82	1,2,3-Trichloropropane	75	10.180	10.177	(0.913)	437431	100.000	96
	83	n-Propylbenzene	120	10.227	10.236	(0.917)	398895	100.000	99
	84	2-Chlorotoluene	126	10.334	10.330	(0.927)	351511	100.000	100
	85	1,3,5-Trimethylbenzene	105	10.405	10.413	(0.933)	1074738	100.000	95
	86	4-Chlorotoluene	126	10.440	10.449	(0.936)	365552	100.000	99
M	94	Xylene (Total)	106				1518421	300.000	280
	87	tert-Butylbenzene	119	10.748	10.745	(0.964)	1309303	100.000	98
	88	1,2,4-Trimethylbenzene	105	10.795	10.792	(0.968)	1087184	100.000	95
	89	sec-Butylbenzene	105	10.961	10.958	(0.983)	1383284	100.000	96
	90	1,3-Dichlorobenzene	146	11.079	11.088	(0.994)	664061	100.000	100
	91	4-Isopropyltoluene	119	11.103	11.100	(0.996)	1235156	100.000	97
*	92	1,4-Dichlorobenzene-d4	152	11.150	11.147	(1.000)	207487	50.0000	
	93	1,4-Dichlorobenzene	146	11.174	11.171	(1.002)	682939	100.000	100
	95	n-Butylbenzene	91	11.493	11.490	(1.031)	1100794	100.000	98
	96	1,2-Dichlorobenzene	146	11.529	11.537	(1.034)	635127	100.000	100
	97	Hexachloroethane	117	11.766	11.774	(1.055)	253999	100.000	110
	98	1,2-Dibromo-3-chloropropane	75	12.263	12.259	(1.100)	76826	100.000	83
	141	1,3,5-Trichlorobenzene	182	12.996	12.993	(2.301)	478333	100.000	100(A)
	99	1,2,4-Trichlorobenzene	180	12.984	12.993	(1.164)	496783	100.000	100
	100	Hexachlorobutadiene	225	13.126	13.123	(1.177)	234624	100.000	100
	101	Naphthalene	128	13.209	13.206	(1.185)	1297577	100.000	100
	102	1,2,3-Trichlorobenzene	180	13.422	13.419	(1.204)	486863	100.000	100

QC Flag Legend

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

Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1528.D
Date : 20-JUN-2013 18:53
Client ID: VSTD1006B
Instrument: V6.i
Sample Info: 5ML,VSTD1006B,VSTD1006B
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V1 Calibration Date: 06/28/2013 Time: 15:58

Lab File ID: V1M2628.D Init. Calib. Date(s): 06/28/2013 06/28/2013

EPA Sample No.(VSTD#####) VSTD050C1 Init. Calib. Time(s): 13:25 15:07

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.120	0.124	0.100	3.5	20.0
Chloromethane	0.600	0.570	0.100	-4.9	20.0
Vinyl chloride	0.458	0.426	0.100	-6.9	20.0
Bromomethane	0.262	0.234	0.100	-10.6	20.0
Chloroethane	0.312	0.284	0.100	-8.9	20.0
Trichlorofluoromethane	0.266	0.252	0.100	-5.0	20.0
1,1-Dichloroethene	0.318	0.292	0.100	-8.3	20.0
Acetone	0.048	0.049	0.100	1.3	20.0
Iodomethane	0.429	0.370	0.100	-13.6	20.0
Carbon disulfide	0.817	0.781	0.100	-4.3	20.0
Methylene chloride	0.195	0.189	0.100	-2.8	20.0
trans-1,2-Dichloroethene	0.325	0.304	0.100	-6.3	20.0
Methyl tert-butyl ether	0.735	0.707	0.100	-3.9	20.0
1,1-Dichloroethane	0.644	0.595	0.200	-7.6	20.0
Vinyl acetate	1.268	1.079	0.100	-14.9	20.0
2-Butanone	0.035	0.038	0.100	8.9	20.0
cis-1,2-Dichloroethene	0.361	0.326	0.100	-9.8	20.0
2,2-Dichloropropane	0.191	0.179	0.100	-6.4	20.0
Bromochloromethane	0.174	0.171	0.100	-1.8	20.0
Chloroform	0.474	0.440	0.200	-7.2	20.0
1,1,1-Trichloroethane	0.302	0.276	0.100	-8.5	20.0
1,1-Dichloropropene	0.141	0.130	0.100	-7.7	20.0
Carbon tetrachloride	0.278	0.266	0.100	-4.3	20.0
1,2-Dichloroethane	0.328	0.316	0.100	-3.7	20.0
Benzene	1.270	1.170	0.500	-7.9	20.0
Trichloroethene	0.329	0.308	0.200	-6.4	20.0
1,2-Dichloropropane	0.382	0.352	0.100	-8.1	20.0
Dibromomethane	0.181	0.169	0.100	-6.4	20.0
Bromodichloromethane	0.356	0.334	0.200	-6.2	20.0
cis-1,3-Dichloropropene	0.515	0.479	0.200	-7.2	20.0
4-Methyl-2-pentanone	0.406	0.411	0.100	1.0	20.0
Toluene	1.170	1.101	0.400	-5.9	20.0
trans-1,3-Dichloropropene	0.400	0.376	0.100	-6.1	20.0
1,1,2-Trichloroethane	0.252	0.234	0.100	-7.1	20.0
1,3-Dichloropropane	0.669	0.622	0.100	-7.0	20.0
Tetrachloroethene	0.388	0.465	0.200	19.8	20.0
2-Hexanone	0.417	0.424	0.100	1.7	20.0
Dibromochloromethane	0.424	0.384	0.100	-9.5	20.0
1,2-Dibromoethane	0.389	0.361	0.100	-7.2	20.0
Chlorobenzene	1.158	1.057	0.500	-8.7	20.0

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V1 Calibration Date: 06/28/2013 Time: 15:58

Lab File ID: V1M2628.D Init. Calib. Date(s): 06/28/2013 06/28/2013

EPA Sample No.(VSTD#####) VSTD050C1 Init. Calib. Time(s): 13:25 15:07

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.404	0.365	0.100	-9.5	20.0
Ethylbenzene	0.584	0.532	0.100	-8.8	20.0
m,p-Xylene	0.756	0.685	0.100	-9.3	20.0
o-Xylene	0.740	0.667	0.300	-9.9	20.0
Xylene (Total)	0.751	0.679	0.000	-9.5	20.0
Styrene	1.265	1.157	0.300	-8.5	20.0
Bromoform	0.241	0.223	0.100	-7.3	20.0
Isopropylbenzene	1.842	1.663	0.100	-9.7	20.0
1,1,2,2-Tetrachloroethane	1.139	1.050	0.300	-7.8	20.0
Bromobenzene	1.011	0.931	0.100	-7.9	20.0
1,2,3-Trichloropropane	1.116	1.085	0.100	-2.8	20.0
n-Propylbenzene	1.098	0.991	0.100	-9.8	20.0
2-Chlorotoluene	1.016	0.929	0.100	-8.6	20.0
1,3,5-Trimethylbenzene	3.269	3.110	0.100	-4.9	20.0
4-Chlorotoluene	1.037	0.982	0.100	-5.3	20.0
tert-Butylbenzene	3.286	2.782	0.100	-15.4	20.0
1,2,4-Trimethylbenzene	3.369	3.145	0.100	-6.7	20.0
sec-Butylbenzene	4.536	4.220	0.100	-7.0	20.0
4-Isopropyltoluene	3.565	3.321	0.100	-6.8	20.0
1,3-Dichlorobenzene	2.004	1.866	0.600	-6.9	20.0
1,4-Dichlorobenzene	2.030	1.861	0.500	-8.3	20.0
n-Butylbenzene	3.251	3.036	0.100	-6.6	20.0
1,2-Dichlorobenzene	1.890	1.765	0.400	-6.6	20.0
1,2-Dibromo-3-chloropropane	0.125	0.122	0.050	-2.4	20.0
1,2,4-Trichlorobenzene	1.135	1.061	0.200	-6.6	20.0
Hexachlorobutadiene	0.525	0.495	0.100	-5.6	20.0
1,2,3-Trichlorobenzene	0.960	0.934	0.100	-2.7	20.0
Naphthalene	2.683	2.492	0.100	-7.1	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V1 Calibration Date: 06/28/2013 Time: 15:58

Lab File ID: V1M2628.D Init. Calib. Date(s): 06/28/2013 06/28/2013

EPA Sample No.(VSTD#####) VSTD050C1 Init. Calib. Time(s): 13:25 15:07

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.245	0.250	0.100	2.1	20.0
1,2-Dichloroethane-d4	0.068	0.069	0.100	0.3	20.0
Toluene-d8	1.275	1.251	0.100	-1.8	20.0
Bromofluorobenzene	0.463	0.461	0.100	-0.4	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date: 07/01/2013 Time: 8:18

Lab File ID: V6I1691.D Init. Calib. Date(s): 06/20/2013 06/20/2013

EPA Sample No.(VSTD#####) VSTD0506I Init. Calib. Time(s): 16:28 18:53

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	0.217	0.240	0.100	10.7	20.0
Chloromethane	0.349	0.336	0.100	-3.8	20.0
Vinyl chloride	0.317	0.340	0.100	7.5	20.0
Bromomethane	0.159	0.143	0.100	-9.9	20.0
Chloroethane	0.186	0.208	0.100	11.7	20.0
Trichlorofluoromethane	0.397	0.395	0.100	-0.4	20.0
1,1-Dichloroethene	0.270	0.284	0.100	4.8	20.0
Acetone	0.029	0.033	0.100	15.8	20.0
Iodomethane	0.320	0.243	0.100	-24.3	20.0
Carbon disulfide	0.866	0.865	0.100	0.0	20.0
Methylene chloride	0.292	0.297	0.100	1.5	20.0
trans-1,2-Dichloroethene	0.304	0.305	0.100	0.6	20.0
Methyl tert-butyl ether	0.856	0.867	0.100	1.2	20.0
1,1-Dichloroethane	0.514	0.510	0.200	-0.9	20.0
Vinyl acetate	0.970	0.867	0.100	-10.6	20.0
2-Butanone	0.038	0.032	0.100	-16.0	20.0
cis-1,2-Dichloroethene	0.322	0.343	0.100	6.5	20.0
2,2-Dichloropropane	0.413	0.436	0.100	5.7	20.0
Bromochloromethane	0.146	0.175	0.100	19.7	20.0
Chloroform	0.474	0.495	0.200	4.4	20.0
1,1,1-Trichloroethane	0.429	0.445	0.100	3.7	20.0
1,1-Dichloropropene	0.151	0.161	0.100	6.1	20.0
Carbon tetrachloride	0.402	0.436	0.100	8.4	20.0
1,2-Dichloroethane	0.382	0.360	0.100	-5.7	20.0
Benzene	1.057	1.116	0.500	5.5	20.0
Trichloroethene	0.323	0.364	0.200	12.9	20.0
1,2-Dichloropropane	0.294	0.317	0.100	7.8	20.0
Dibromomethane	0.188	0.182	0.100	-3.3	20.0
Bromodichloromethane	0.371	0.389	0.200	4.7	20.0
cis-1,3-Dichloropropene	0.464	0.508	0.200	9.5	20.0
4-Methyl-2-pentanone	0.383	0.329	0.100	-14.1	20.0
Toluene	1.115	1.277	0.400	14.4	20.0
trans-1,3-Dichloropropene	0.427	0.465	0.100	8.8	20.0
1,1,2-Trichloroethane	0.265	0.280	0.100	5.8	20.0
1,3-Dichloropropane	0.569	0.575	0.100	1.1	20.0
Tetrachloroethene	0.322	0.387	0.200	20.2	20.0
2-Hexanone	0.354	0.285	0.100	-19.5	20.0
Dibromochloromethane	0.426	0.423	0.100	-0.8	20.0
1,2-Dibromoethane	0.395	0.393	0.100	-0.4	20.0
Chlorobenzene	1.014	1.114	0.500	9.9	20.0

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date: 07/01/2013 Time: 8:18

Lab File ID: V6I1691.D Init. Calib. Date(s): 06/20/2013 06/20/2013

EPA Sample No.(VSTD#####) VSTD0506I Init. Calib. Time(s): 16:28 18:53

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	0.393	0.419	0.100	6.8	20.0
Ethylbenzene	0.565	0.620	0.100	9.7	20.0
m,p-Xylene	0.696	0.758	0.100	8.9	20.0
o-Xylene	0.679	0.733	0.300	7.9	20.0
Xylene (Total)	0.690	0.750	0.000	8.6	20.0
Styrene	1.090	1.191	0.300	9.2	20.0
Bromoform	0.273	0.275	0.100	0.8	20.0
Isopropylbenzene	1.718	1.927	0.100	12.2	20.0
1,1,2,2-Tetrachloroethane	0.923	0.857	0.300	-7.2	20.0
Bromobenzene	0.879	0.900	0.100	2.5	20.0
1,2,3-Trichloropropane	1.116	1.094	0.100	-1.9	20.0
n-Propylbenzene	0.984	1.101	0.100	11.8	20.0
2-Chlorotoluene	0.855	0.897	0.100	4.9	20.0
1,3,5-Trimethylbenzene	2.751	2.993	0.100	8.8	20.0
4-Chlorotoluene	0.897	0.946	0.100	5.4	20.0
tert-Butylbenzene	3.269	3.542	0.100	8.4	20.0
1,2,4-Trimethylbenzene	2.761	3.044	0.100	10.2	20.0
sec-Butylbenzene	3.515	4.053	0.100	15.3	20.0
4-Isopropyltoluene	3.089	3.561	0.100	15.3	20.0
1,3-Dichlorobenzene	1.622	1.775	0.600	9.4	20.0
1,4-Dichlorobenzene	1.656	1.808	0.500	9.1	20.0
n-Butylbenzene	2.749	3.242	0.100	18.0	20.0
1,2-Dichlorobenzene	1.542	1.660	0.400	7.6	20.0
1,2-Dibromo-3-chloropropane	0.204	0.162	0.050	-20.9	20.0
1,2,4-Trichlorobenzene	1.176	1.378	0.200	17.2	20.0
Hexachlorobutadiene	0.547	0.639	0.100	16.8	20.0
1,2,3-Trichlorobenzene	1.151	1.295	0.100	12.5	20.0
Naphthalene	3.131	3.391	0.100	8.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: V6 Calibration Date: 07/01/2013 Time: 8:18

Lab File ID: V6I1691.D Init. Calib. Date(s): 06/20/2013 06/20/2013

EPA Sample No.(VSTD#####) VSTD0506I Init. Calib. Time(s): 16:28 18:53

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	0.269	0.240	0.100	-10.9	20.0
1,2-Dichloroethane-d4	0.069	0.059	0.100	-14.4	20.0
Toluene-d8	1.212	1.220	0.100	0.7	20.0
Bromofluorobenzene	0.480	0.473	0.100	-1.5	20.0

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2628.D
Report Date: 02-Jul-2013 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628A.B\V1M2628.D
Lab Smp Id: VSTD050C1 Client Smp ID: VSTD050C1
Inj Date : 28-JUN-2013 15:58
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD050C1,VSTD050C1
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628A.B\v18260GH.m
Meth Date : 30-Jun-2013 11:23 V1.i Quant Type: ISTD
Cal Date : 28-JUN-2013 13:25 Cal File: V1M2621.D
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.331	1.331	(0.289)	40277	50.0000	52
2	Chloromethane	50	1.460	1.460	(0.317)	185489	50.0000	48
3	Vinyl Chloride	62	1.558	1.558	(0.338)	138719	50.0000	46
4	Bromomethane	94	1.785	1.785	(0.387)	76197	50.0000	45
5	Chloroethane	64	1.863	1.863	(0.404)	92463	50.0000	46
6	Trichlorofluoromethane	101	2.041	2.041	(0.443)	82082	50.0000	47
127	Ethanol	46	2.139	2.139	(0.464)	37069	5000.00	3500(Q)
7	Ether	59	2.228	2.228	(0.483)	103734	50.0000	48
8	Acrolein	56	2.307	2.307	(0.500)	100594	250.000	230
9	1,1-Dichloroethene	96	2.415	2.415	(0.524)	95033	50.0000	46
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.425	2.425	(0.526)	87823	50.0000	43
11	Acetone	58	2.415	2.415	(0.524)	15963	50.0000	51
12	Iodomethane	142	2.533	2.533	(0.549)	120571	50.0000	43
13	Carbon Disulfide	76	2.573	2.573	(0.558)	254315	50.0000	48
14	Acetonitrile	40	2.602	2.602	(0.564)	114298	500.000	450(Q)
15	Methyl Acetate	43	2.651	2.651	(0.575)	129834	50.0000	50
16	Methylene Chloride	84	2.730	2.730	(0.592)	61571	50.0000	48
17	tert-Butanol	59	2.799	2.799	(0.607)	17284	100.000	92
18	Acrylonitrile	53	2.898	2.898	(0.628)	47461	50.0000	49
20	Methyl tert-butyl ether	73	2.937	2.937	(0.637)	230020	50.0000	48
19	trans-1,2-Dichloroethene	96	2.937	2.937	(0.637)	98991	50.0000	47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.242	3.242	(0.703)	193786	50.0000	46
	22 Vinyl acetate	43	3.292	3.292	(0.714)	351238	50.0000	42
	23 Diisopropyl Ether	45	3.292	3.292	(0.714)	518211	50.0000	48
	24 Ethyl tert-butyl ether	59	3.567	3.567	(0.774)	334790	50.0000	48
M	27 1,2-dichloroethene, (Total)	100				204962	100.000	(a)
	25 cis-1,2-Dichloroethene	96	3.676	3.676	(0.797)	105971	50.0000	45
	26 2,2-Dichloropropane	77	3.686	3.686	(0.799)	58211	50.0000	47
	28 2-Butanone	72	3.686	3.686	(0.799)	12466	50.0000	54(Q)
	29 Bromochloromethane	128	3.863	3.863	(0.838)	55551	50.0000	49
	30 Tetrahydrofuran	72	3.912	3.912	(0.848)	22848	100.000	96
	31 Chloroform	83	3.932	3.932	(0.853)	143155	50.0000	46
$	32 Dibromofluoromethane	113	4.050	4.050	(0.878)	81304	50.0000	51
	33 1,1,1-Trichloroethane	97	4.089	4.089	(0.887)	89876	50.0000	46
	34 Cyclohexane	56	4.148	4.148	(0.900)	195123	50.0000	43
	36 Carbon Tetrachloride	117	4.227	4.227	(0.917)	86568	50.0000	48
	35 1,1-Dichloropropene	110	4.217	4.217	(0.915)	42408	50.0000	46
$	37 1,2-Dichloroethane-d4	102	4.326	4.326	(0.938)	22297	50.0000	50
	38 Benzene	78	4.385	4.385	(0.951)	380784	50.0000	46
	39 1,2-Dichloroethane	62	4.385	4.385	(0.951)	102854	50.0000	48
	40 tert-Amyl methyl ether	73	4.483	4.483	(0.972)	247488	50.0000	48
*	41 Fluorobenzene	96	4.611	4.611	(1.000)	325481	50.0000	
	42 Trichloroethene	130	4.927	4.927	(1.068)	100149	50.0000	47
	43 Methylcyclohexane	83	5.114	5.114	(1.109)	142725	50.0000	43
	44 1,2-Dichloropropane	63	5.124	5.124	(1.111)	114448	50.0000	46
	46 Dibromomethane	93	5.222	5.222	(1.132)	54994	50.0000	47
	47 1,4-Dioxane	88	5.242	5.242	(1.137)	6976	1000.00	600
	48 Bromodichloromethane	83	5.360	5.360	(1.162)	108811	50.0000	47
	45 2-Chloroethyl vinyl ether	63	6.109	6.109	(1.325)	27641	50.0000	47
	49 cis-1,3-Dichloropropene	75	5.784	5.784	(1.254)	155774	50.0000	46
	50 4-Methyl-2-pentanone	43	5.921	5.921	(1.284)	133620	50.0000	50
$	51 Toluene-d8	98	6.049	6.049	(0.806)	285920	50.0000	49
	52 Toluene	91	6.109	6.109	(1.325)	358221	50.0000	47
	53 trans-1,3-Dichloropropene	75	6.315	6.315	(1.369)	122315	50.0000	47
	54 1,1,2-Trichloroethane	97	6.493	6.493	(1.408)	76077	50.0000	46
	55 Tetrachloroethene	164	6.660	6.660	(0.887)	106335	50.0000	60
	56 1,3-Dichloropropane	76	6.660	6.660	(0.887)	142082	50.0000	46
	57 2-Hexanone	43	6.749	6.749	(0.899)	96799	50.0000	51
	58 Dibromochloromethane	129	6.887	6.887	(0.917)	87635	50.0000	45(T)
	59 1,2-Dibromoethane	107	7.005	7.005	(0.933)	82521	50.0000	46
*	60 Chlorobenzene-d5	117	7.507	7.507	(1.000)	228463	50.0000	
	63 1-Chlorohexane	91	7.527	7.527	(1.003)	126478	50.0000	44
	61 Chlorobenzene	112	7.537	7.537	(1.004)	241490	50.0000	46
	62 1,1,1,2-Tetrachloroethane	131	7.625	7.625	(1.016)	83440	50.0000	45
	64 Ethylbenzene	106	7.655	7.655	(1.020)	121605	50.0000	46
	65 m,p-Xylene	106	7.793	7.793	(1.038)	313173	100.000	91
	66 o-Xylene	106	8.216	8.216	(1.094)	152389	50.0000	45
	67 Styrene	104	8.236	8.236	(1.097)	264440	50.0000	46
	68 Bromoform	173	8.413	8.413	(1.121)	51023	50.0000	46
	69 Isopropylbenzene	105	8.640	8.640	(1.151)	379856	50.0000	45
	126 trans-1,4-Dichloro-2-butene	75	8.699	8.699	(1.159)	29431	50.0000	46
$	70 Bromofluorobenzene	95	8.797	8.797	(1.172)	105245	50.0000	50
	72 Bromobenzene	156	8.955	8.955	(0.890)	93330	50.0000	46
	71 1,1,2,2-Tetrachloroethane	83	8.955	8.955	(0.890)	105239	50.0000	46
	73 1,2,3-Trichloropropane	75	9.004	9.004	(0.895)	108740	50.0000	49

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2628.D
Report Date: 02-Jul-2013 10:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	n-Propylbenzene	120	9.103	9.103	(0.905)	99288	50.0000	45
75	2-Chlorotoluene	126	9.191	9.191	(0.914)	93110	50.0000	46
76	1,3,5-Trimethylbenzene	105	9.310	9.310	(0.926)	311740	50.0000	48
77	4-Chlorotoluene	126	9.310	9.310	(0.926)	98418	50.0000	47
78	tert-Butylbenzene	119	9.664	9.664	(0.961)	278824	50.0000	42
79	1,2,4-Trimethylbenzene	105	9.714	9.714	(0.966)	315176	50.0000	47
M 81	Xylene (Total)	106				465562	150.000	(a)
80	sec-Butylbenzene	105	9.901	9.901	(0.984)	422983	50.0000	46
82	1,3-Dichlorobenzene	146	9.989	9.989	(0.993)	187042	50.0000	46
83	4-Isopropyltoluene	119	10.058	10.058	(1.000)	332852	50.0000	46
* 84	1,4-Dichlorobenzene-d4	152	10.058	10.058	(1.000)	100228	50.0000	
85	1,4-Dichlorobenzene	146	10.088	10.088	(1.003)	186544	50.0000	46
86	n-Butylbenzene	91	10.462	10.462	(1.040)	304260	50.0000	47
87	1,2-Dichlorobenzene	146	10.452	10.452	(1.039)	176889	50.0000	47
88	1,2-Dibromo-3-chloropropane	75	11.191	11.191	(1.113)	12269	50.0000	49
89	1,2,4-Trichlorobenzene	180	11.959	11.959	(1.189)	106335	50.0000	47
90	Hexachlorobutadiene	225	12.117	12.117	(1.205)	49656	50.0000	47
91	Naphthalene	128	12.156	12.156	(1.209)	249736	50.0000	46
92	1,2,3-Trichlorobenzene	180	12.373	12.373	(1.230)	93623	50.0000	49

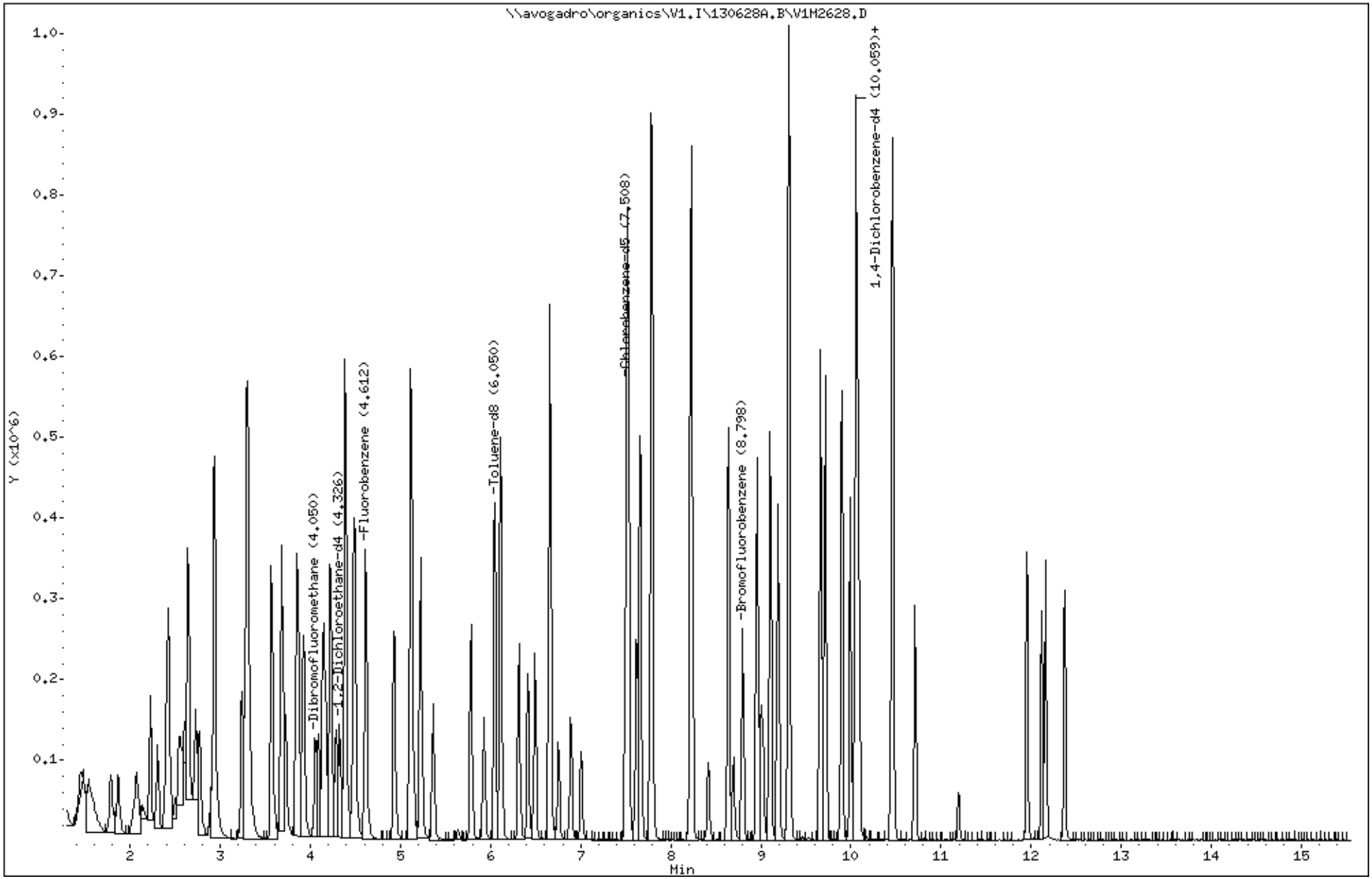
QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2628.D
Date : 28-JUN-2013 15:58
Client ID: VSTD050C1
Sample Info: 5G,VSTD050C1,VSTD050C1

Instrument: V1.i

Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\130701.B\V6I1691.D
Report Date: 02-Jul-2013 11:26

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\130701.B\V6I1691.D
Lab Smp Id: VSTD0506I Client Smp ID: VSTD0506I
Inj Date : 01-JUL-2013 08:18
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,VSTD0506I,VSTD0506I
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130701.B\v68260Gadd-6lvl.m
Meth Date : 02-Jul-2013 11:24 wluo Quant Type: ISTD
Cal Date : 20-JUN-2013 18:05 Cal File: V6I1526.D
Als bottle: 3 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	1.756	1.756	(0.311)	87709	50.0000	55
2	Freon114	85	1.886	1.886	(0.334)	105131	50.0000	59
3	Chloromethane	50	1.945	1.945	(0.344)	122688	50.0000	48
4	Vinyl Chloride	62	2.052	2.052	(0.363)	124445	50.0000	54
5	Bromomethane	94	2.383	2.383	(0.422)	52213	50.0000	45
6	Chloroethane	64	2.466	2.466	(0.437)	76055	50.0000	56
7	Trichlorofluoromethane	101	2.703	2.703	(0.478)	144458	50.0000	50
126	Ethanol	46	2.845	2.845	(0.504)	6281	5000.00	2000(AQ)
8	Ether	59	2.939	2.939	(0.520)	91431	50.0000	48(Q)
9	Acrolein	56	2.738	2.738	(0.485)	381	250.000	4
10	1,1-Dichloroethene	96	3.152	3.152	(0.558)	103643	50.0000	52
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.141	3.141	(0.556)	106864	50.0000	52
12	Acetone	58	3.212	3.212	(0.569)	12150	50.0000	58
13	Iodomethane	142	3.294	3.294	(0.583)	88721	50.0000	38
14	Carbon Disulfide	76	3.354	3.354	(0.594)	316287	50.0000	50
15	Acetonitrile	41	3.460	3.460	(0.613)	257450	500.000	440(AQ)
16	Allyl Chloride	39	3.460	3.460	(0.613)	101902	50.0000	43(Q)
17	Methyl Acetate	43	3.460	3.460	(0.613)	92545	50.0000	39
18	Methylene Chloride	84	3.555	3.555	(0.629)	108372	50.0000	51
19	tert-Butanol	59	3.780	3.780	(0.669)	9500	100.000	82
20	Acrylonitrile	53	3.768	3.768	(0.667)	45650	50.0000	43
21	trans-1,2-Dichloroethene	96	3.791	3.791	(0.671)	111658	50.0000	50
22	Methyl tert-butyl ether	73	3.768	3.768	(0.667)	316755	50.0000	51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	4.146	4.146	(0.734)	186318	50.0000	50
	24 Vinyl acetate	43	4.158	4.158	(0.736)	316878	50.0000	45
	25 Diisopropyl Ether	45	4.158	4.158	(0.736)	366297	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	4.217	4.217	(0.747)	151796	50.0000	48
	27 Ethyl tert-butyl ether	59	4.466	4.466	(0.791)	342631	50.0000	51
	29 2,2-Dichloropropane	77	4.632	4.632	(0.820)	159429	50.0000	53
	28 cis-1,2-Dichloroethene	96	4.632	4.632	(0.820)	125219	50.0000	53(Q)
	30 2-Butanone	72	4.632	4.632	(0.820)	11546	50.0000	42(Q)
	32 Propionitrile	54	4.703	4.703	(0.832)	165901	500.000	440(A)
	33 Methacrylonitrile	41	4.821	4.821	(0.853)	114724	100.000	77
	34 Bromochloromethane	128	4.845	4.845	(0.858)	63865	50.0000	60
	31 Tetrahydrofuran	72	4.880	4.880	(0.864)	25326	100.000	74
	35 Chloroform	83	4.892	4.892	(0.866)	180755	50.0000	52
$	36 Dibromofluoromethane	113	5.034	5.034	(0.891)	87540	50.0000	44
	37 1,1,1-Trichloroethane	97	5.069	5.069	(0.897)	162723	50.0000	52
	38 Cyclohexane	56	5.128	5.128	(0.908)	198126	50.0000	53
	39 1,1-Dichloropropene	110	5.211	5.211	(0.923)	58720	50.0000	53
	40 Carbon Tetrachloride	117	5.223	5.223	(0.925)	159451	50.0000	54
	41 Isobutyl Alcohol	43	5.259	5.259	(0.931)	66883	1000.00	620(A)
$	42 1,2-Dichloroethane-d4	102	5.353	5.353	(0.948)	21438	50.0000	43
	43 Benzene	78	5.401	5.401	(0.956)	407846	50.0000	53
	44 1,2-Dichloroethane	62	5.412	5.412	(0.958)	131489	50.0000	47
	45 tert-Amyl methyl ether	73	5.472	5.472	(0.969)	308900	50.0000	52
M	50 1,2-Dichloroethene (Total)	96				236877	100.000	(a)
*	46 Fluorobenzene	96	5.649	5.649	(1.000)	365501	50.0000	
	47 Trichloroethene	130	5.980	5.980	(1.059)	133115	50.0000	56
	48 Methylcyclohexane	83	6.158	6.158	(1.090)	197260	50.0000	55
	49 1,2-Dichloropropane	63	6.205	6.205	(1.098)	115707	50.0000	53
	51 Methyl Methacrylate	69	6.264	6.264	(1.109)	94158	50.0000	50
	52 Dibromomethane	93	6.324	6.324	(1.119)	66368	50.0000	48
	53 1,4-Dioxane	88	6.324	6.324	(1.119)	9188	1000.00	570(AQ)
	54 Bromodichloromethane	83	6.454	6.454	(1.142)	142046	50.0000	52
	55 2-Chloroethyl vinyl ether	63	6.714	6.714	(1.189)	303	50.0000	14(TQ)
	56 cis-1,3-Dichloropropene	75	6.880	6.880	(1.218)	185524	50.0000	55
	57 4-Methyl-2-pentanone	43	7.022	7.022	(1.243)	120278	50.0000	43
$	58 Toluene-d8	98	7.152	7.152	(0.822)	358936	50.0000	50
	59 Toluene	91	7.223	7.223	(1.279)	466585	50.0000	57
	60 trans-1,3-Dichloropropene	75	7.436	7.436	(1.316)	169971	50.0000	54
	61 Ethyl Methacrylate	69	7.495	7.495	(1.327)	115652	50.0000	49
	62 1,1,2-Trichloroethane	97	7.637	7.637	(1.352)	102269	50.0000	53
	63 Tetrachloroethene	164	7.791	7.791	(0.895)	114016	50.0000	60
	64 1,3-Dichloropropane	76	7.826	7.826	(0.899)	169187	50.0000	50
	65 2-Hexanone	43	7.886	7.886	(0.906)	83916	50.0000	40
	66 Dibromochloromethane	129	8.063	8.063	(0.927)	124350	50.0000	50
	67 1,2-Dibromoethane	107	8.205	8.205	(0.943)	115757	50.0000	50
	69 1-Chlorohexane	91	8.678	8.678	(0.997)	171773	50.0000	53
*	68 Chlorobenzene-d5	117	8.702	8.702	(1.000)	294236	50.0000	
	70 Chlorobenzene	112	8.726	8.726	(1.003)	327902	50.0000	55
	71 1,1,1,2-Tetrachloroethane	131	8.808	8.808	(1.012)	123386	50.0000	53(Q)
	72 Ethylbenzene	106	8.832	8.832	(1.015)	182290	50.0000	55
	73 m,p-Xylene	106	8.962	8.962	(1.030)	445895	100.000	110
	74 o-Xylene	106	9.412	9.412	(1.082)	215737	50.0000	54
	75 Styrene	104	9.424	9.424	(1.083)	350517	50.0000	53
	76 Bromoform	173	9.649	9.649	(1.109)	80869	50.0000	50

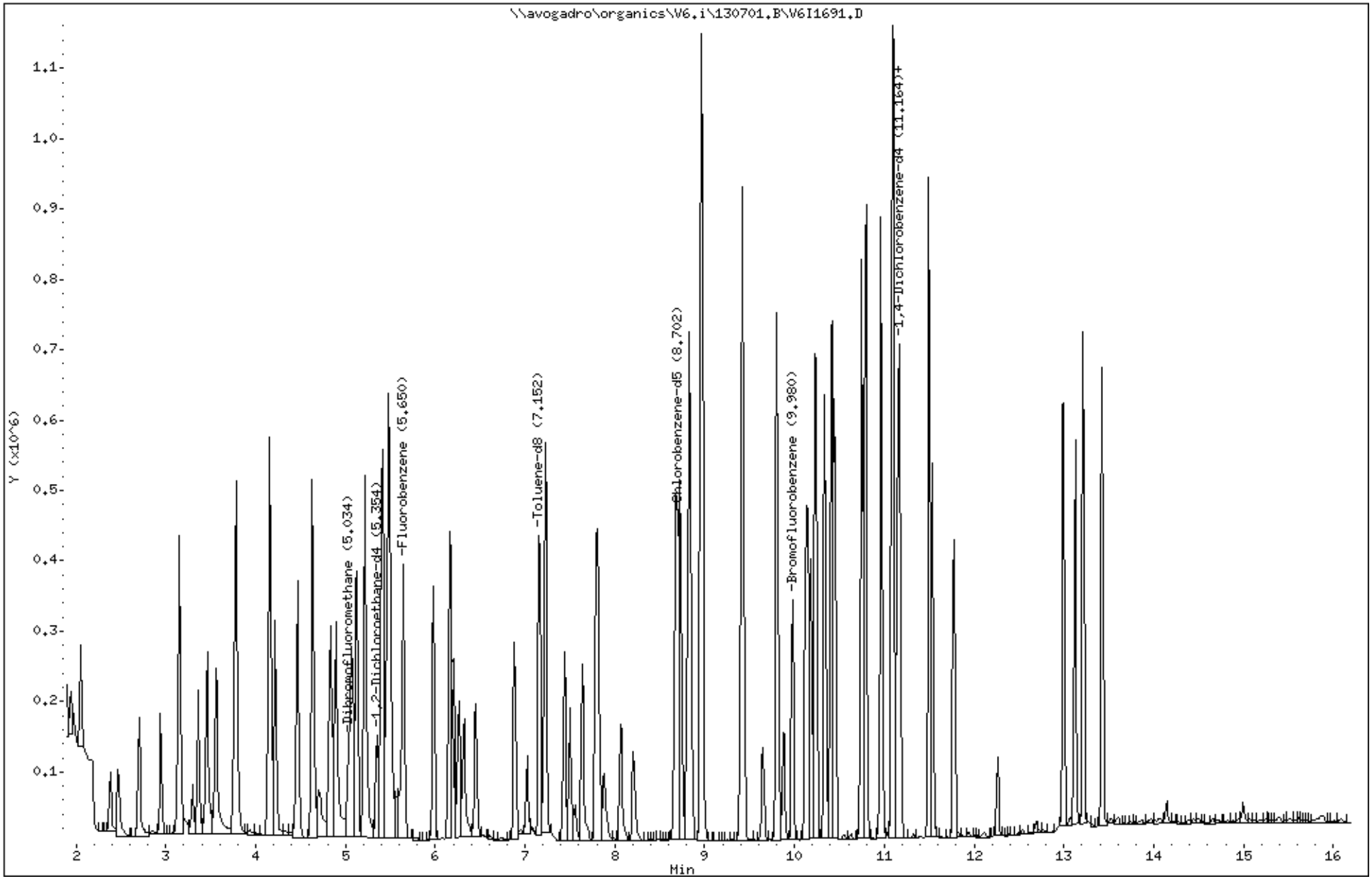
Data File: \\avogadro\organics\V6.i\130701.B\V6I1691.D
Report Date: 02-Jul-2013 11:26

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.802	9.802	(1.126)	567043	50.0000	56
	78	trans-1,4-Dichloro-2-butene	75	9.885	9.885	(1.136)	48851	50.0000	59(Q)
$	79	Bromofluorobenzene	95	9.980	9.980	(1.147)	139137	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	10.122	10.122	(0.908)	138168	50.0000	46
	81	Bromobenzene	156	10.146	10.146	(0.910)	145248	50.0000	51
	82	1,2,3-Trichloropropane	75	10.181	10.181	(0.913)	176481	50.0000	49
	83	n-Propylbenzene	120	10.240	10.240	(0.918)	177568	50.0000	56
	84	2-Chlorotoluene	126	10.335	10.335	(0.927)	144640	50.0000	52
	85	1,3,5-Trimethylbenzene	105	10.418	10.418	(0.934)	482790	50.0000	54
	86	4-Chlorotoluene	126	10.441	10.441	(0.936)	152634	50.0000	53
M	94	Xylene (Total)	106				661632	150.000	(a)
	87	tert-Butylbenzene	119	10.749	10.749	(0.964)	571442	50.0000	54
	88	1,2,4-Trimethylbenzene	105	10.796	10.796	(0.968)	491066	50.0000	55
	89	sec-Butylbenzene	105	10.962	10.962	(0.983)	653744	50.0000	58
	90	1,3-Dichlorobenzene	146	11.092	11.092	(0.995)	286271	50.0000	55
	91	4-Isopropyltoluene	119	11.104	11.104	(0.996)	574436	50.0000	58
*	92	1,4-Dichlorobenzene-d4	152	11.151	11.151	(1.000)	161316	50.0000	
	93	1,4-Dichlorobenzene	146	11.175	11.175	(1.002)	291607	50.0000	54
	95	n-Butylbenzene	91	11.495	11.495	(1.031)	523037	50.0000	59
	96	1,2-Dichlorobenzene	146	11.542	11.542	(1.035)	267710	50.0000	54
	97	Hexachloroethane	117	11.779	11.779	(1.056)	108010	50.0000	57
	98	1,2-Dibromo-3-chloropropane	75	12.264	12.264	(1.100)	26092	50.0000	40(Q)
	141	1,3,5-Trichlorobenzene	182	12.997	12.997	(2.301)	210538	50.0000	63(A)
	99	1,2,4-Trichlorobenzene	180	12.997	12.997	(1.166)	222213	50.0000	58
	100	Hexachlorobutadiene	225	13.127	13.127	(1.177)	103133	50.0000	58
	101	Naphthalene	128	13.210	13.210	(1.185)	547027	50.0000	54
	102	1,2,3-Trichlorobenzene	180	13.423	13.423	(1.204)	208857	50.0000	56

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\130701.B\V6I1691.D
Date : 01-JUL-2013 08:18
Client ID: VSTD0506I
Instrument: V6.i
Sample Info: 5ML,VSTD0506I,VSTD0506I
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V1.I\130628.B\V1M2620.D
Lab Smp Id: BFBB1 Client Smp ID: BFBB1
Inj Date : 28-JUN-2013 12:35
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 2UL,BFBB1,BFBB1
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\130628.B\bfb8260.m
Meth Date : 07-Jun-2013 09:23 wluo Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * Vf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.792	9.000	(0.000)	95	50752			0.00- 100.00	100.00
8.792	9.000	(0.000)	50	10071			15.00- 40.00	19.84
8.792	9.000	(0.000)	75	20448			30.00- 60.00	40.29
8.792	9.000	(0.000)	96	3615			5.00- 9.00	7.12
8.792	9.000	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
8.792	9.000	(0.000)	174	39688			50.00- 0.00	78.20
8.792	9.000	(0.000)	175	2874			5.00- 9.00	7.24
8.792	9.000	(0.000)	176	38488			95.00- 101.00	96.98
8.792	9.000	(0.000)	177	2617			5.00- 9.00	6.80

Data File: \\avogadro\organics\V1.I\130628.B\V1M2620.D

Date : 28-JUN-2013 12:35

Client ID: BFBB1

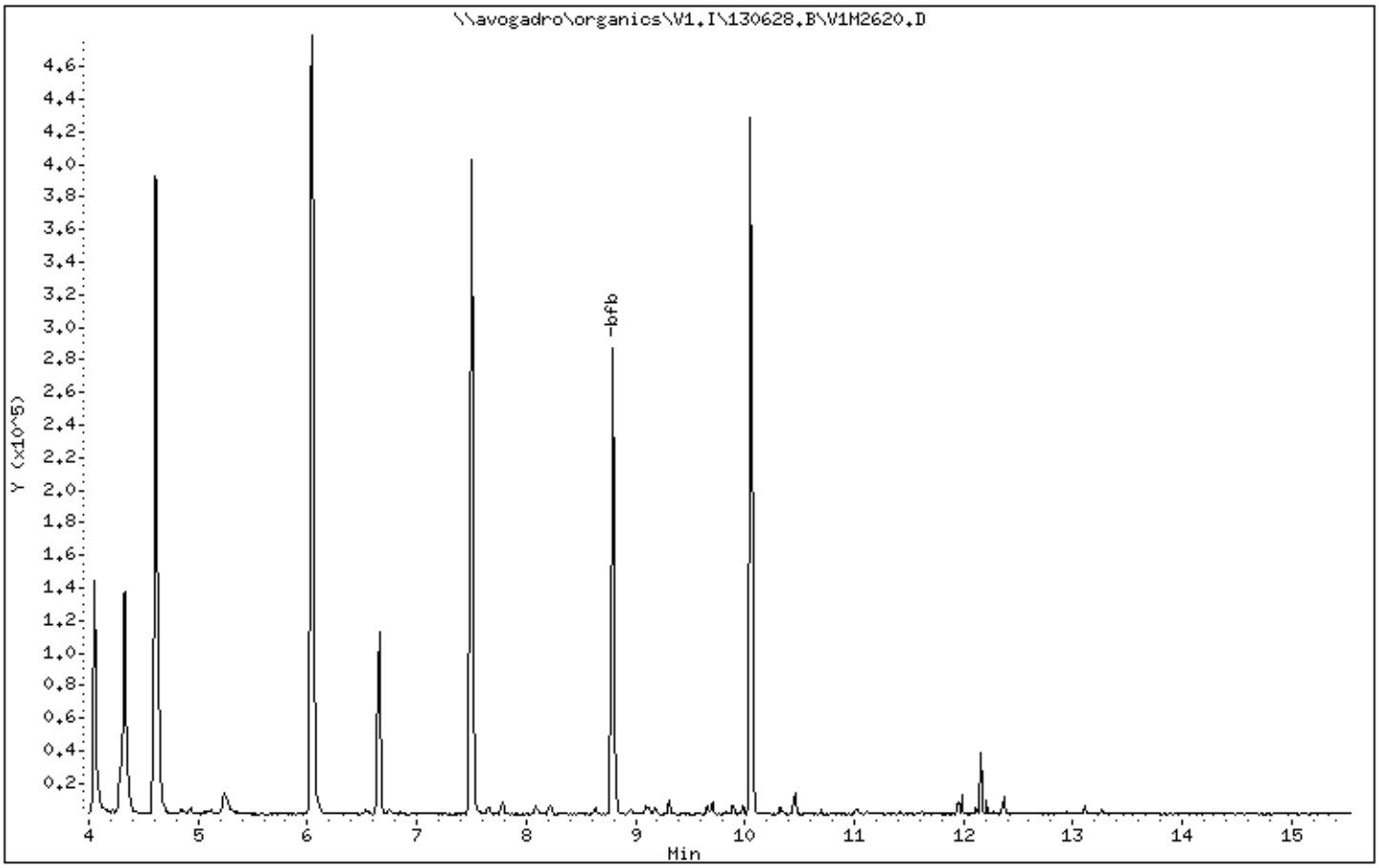
Instrument: V1.i

Sample Info: 2UL,BFBB1,BFBB1

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628.B\V1M2620.D

Date : 28-JUN-2013 12:35

Client ID: BFBB1

Instrument: V1.i

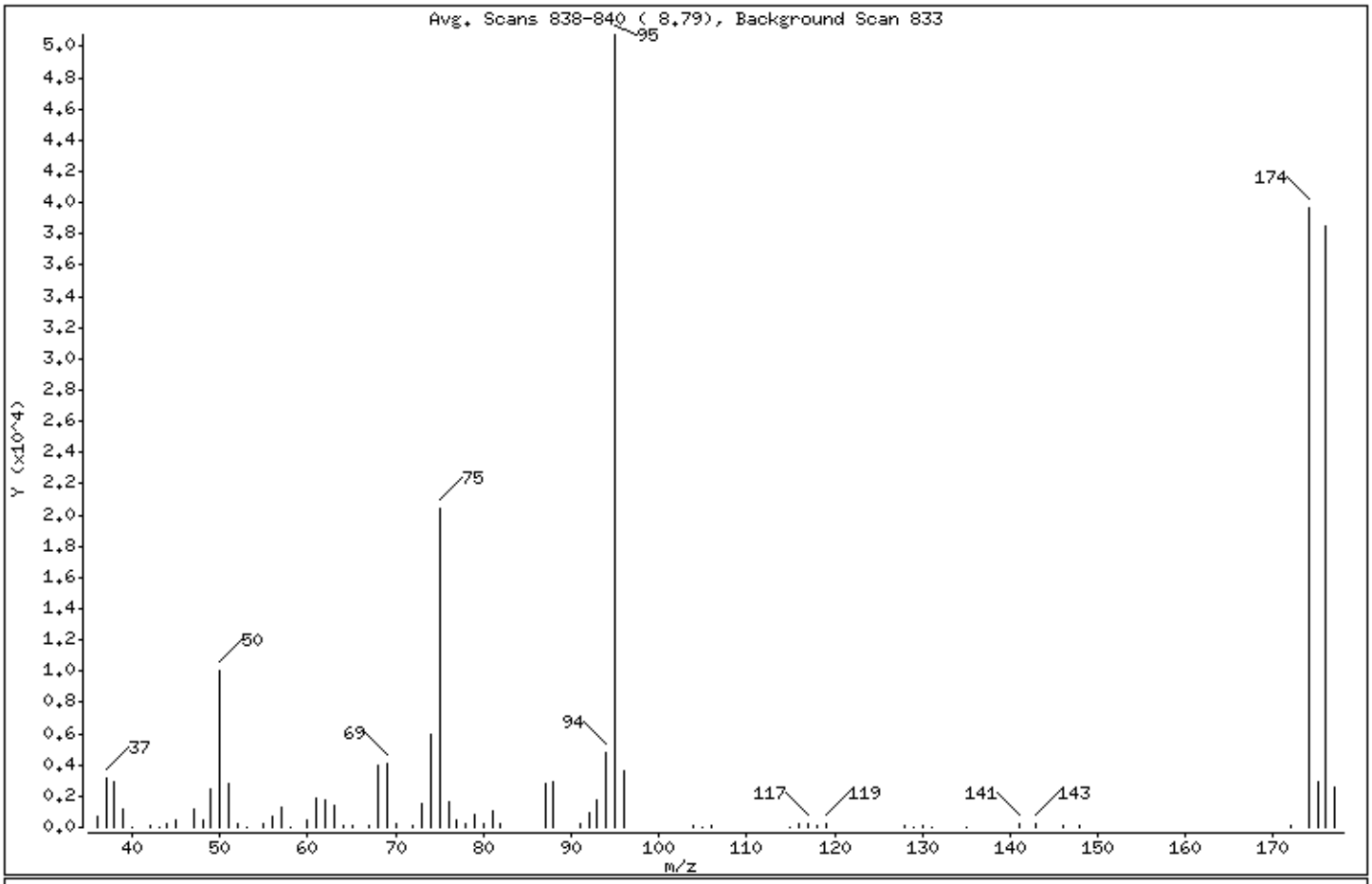
Sample Info: 2UL,BFBB1,BFBB1

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.84
75	30.00 - 60.00% of mass 95	40.29
96	5.00 - 9.00% of mass 95	7.12
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	78.20
175	5.00 - 9.00% of mass 174	5.66 (7.24)
176	95.00 - 101.00% of mass 174	75.84 (96.98)
177	5.00 - 9.00% of mass 176	5.16 (6.80)

Date : 28-JUN-2013 12:35

Client ID: BFBB1 Instrument: V1.i

Sample Info: 2UL,BFBB1,BFBB1

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M2620.D
Spectrum: Avg. Scans 838-840 (8.79), Background Scan 833
Location of Maximum: 95.00
Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	646	57.00	1262	78.00	290	117.00	240
37.00	3187	58.00	34	79.00	817	118.00	79
38.00	2966	60.00	417	80.00	282	119.00	216
39.00	1184	61.00	1843	81.00	999	128.00	95
40.00	14	62.00	1758	82.00	221	129.00	46
42.00	71	63.00	1456	87.00	2794	130.00	102
43.00	36	64.00	137	88.00	2953	131.00	36
44.00	212	65.00	88	91.00	180	135.00	36
45.00	457	67.00	88	92.00	985	141.00	261
47.00	1109	68.00	4006	93.00	1787	143.00	254
48.00	471	69.00	4089	94.00	4808	146.00	89
49.00	2395	70.00	275	95.00	50752	148.00	93
50.00	10071	72.00	141	96.00	3615	172.00	67
51.00	2790	73.00	1527	104.00	137	174.00	39688
52.00	183	74.00	5972	105.00	44	175.00	2874
53.00	34	75.00	20448	106.00	80	176.00	38488
55.00	187	76.00	1677	115.00	34	177.00	2617
56.00	655	77.00	438	116.00	180		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V1.I\130628A.B\V1M2627.D
Lab Smp Id: BFBC1 Client Smp ID: BFBC1
Inj Date : 28-JUN-2013 15:33
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 2UL,BFBC1,BFBC1
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\130628A.B\bfb8260.m
Meth Date : 07-Jun-2013 09:23 wluo Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * Vf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.801	9.000	(0.000)	95	45440			0.00- 100.00	100.00
8.801	9.000	(0.000)	50	8409			15.00- 40.00	18.51
8.801	9.000	(0.000)	75	17600			30.00- 60.00	38.73
8.801	9.000	(0.000)	96	3101			5.00- 9.00	6.82
8.801	9.000	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
8.801	9.000	(0.000)	174	34280			50.00- 0.00	75.44
8.801	9.000	(0.000)	175	2398			5.00- 9.00	7.00
8.801	9.000	(0.000)	176	34256			95.00- 101.00	99.93
8.801	9.000	(0.000)	177	1995			5.00- 9.00	5.82

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2627.D

Date : 28-JUN-2013 15:33

Client ID: BFBC1

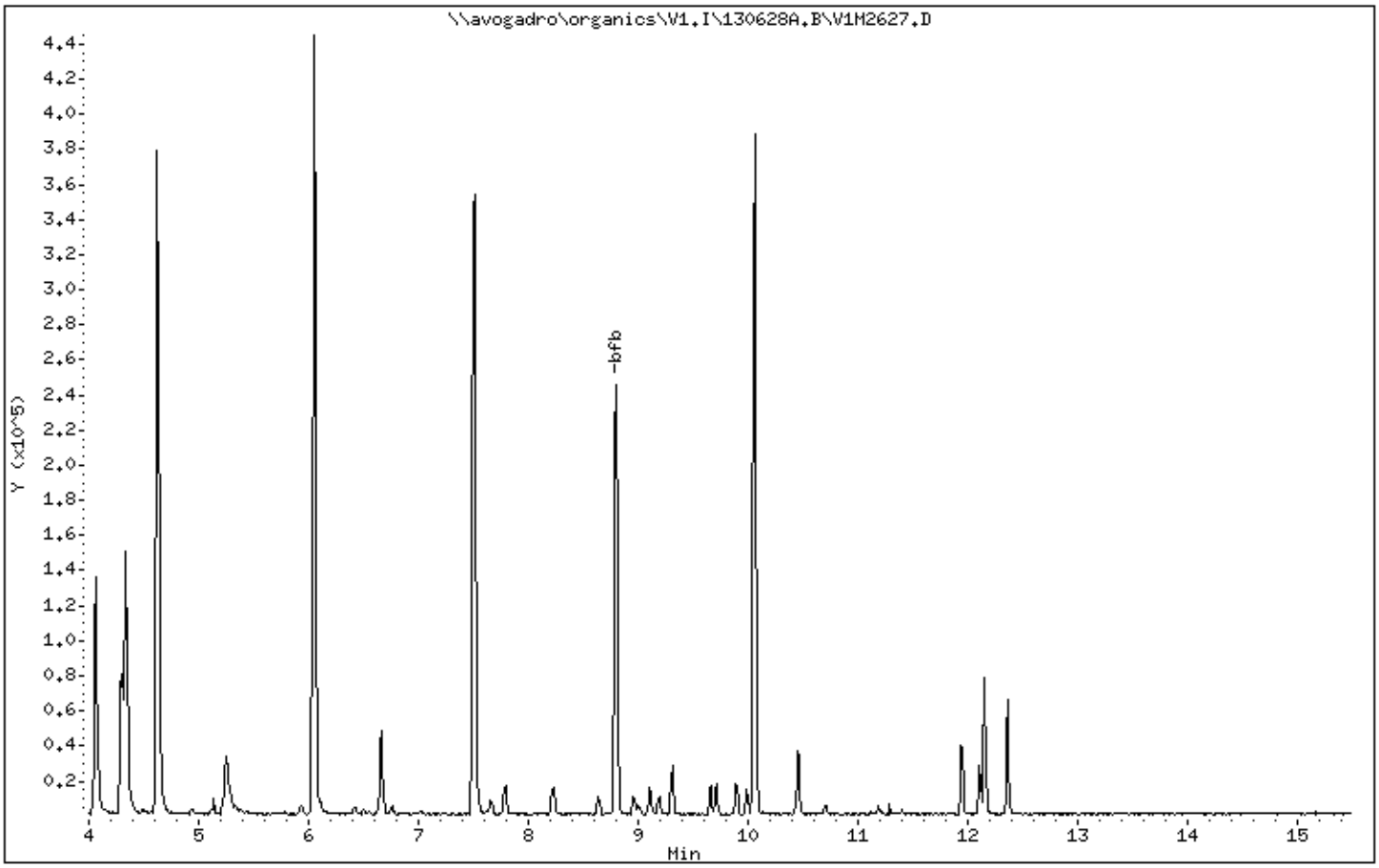
Instrument: V1.i

Sample Info: 2UL,BFBC1,BFBC1

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\130628A.B\V1M2627.D

Date : 28-JUN-2013 15:33

Client ID: BFBC1

Instrument: V1.i

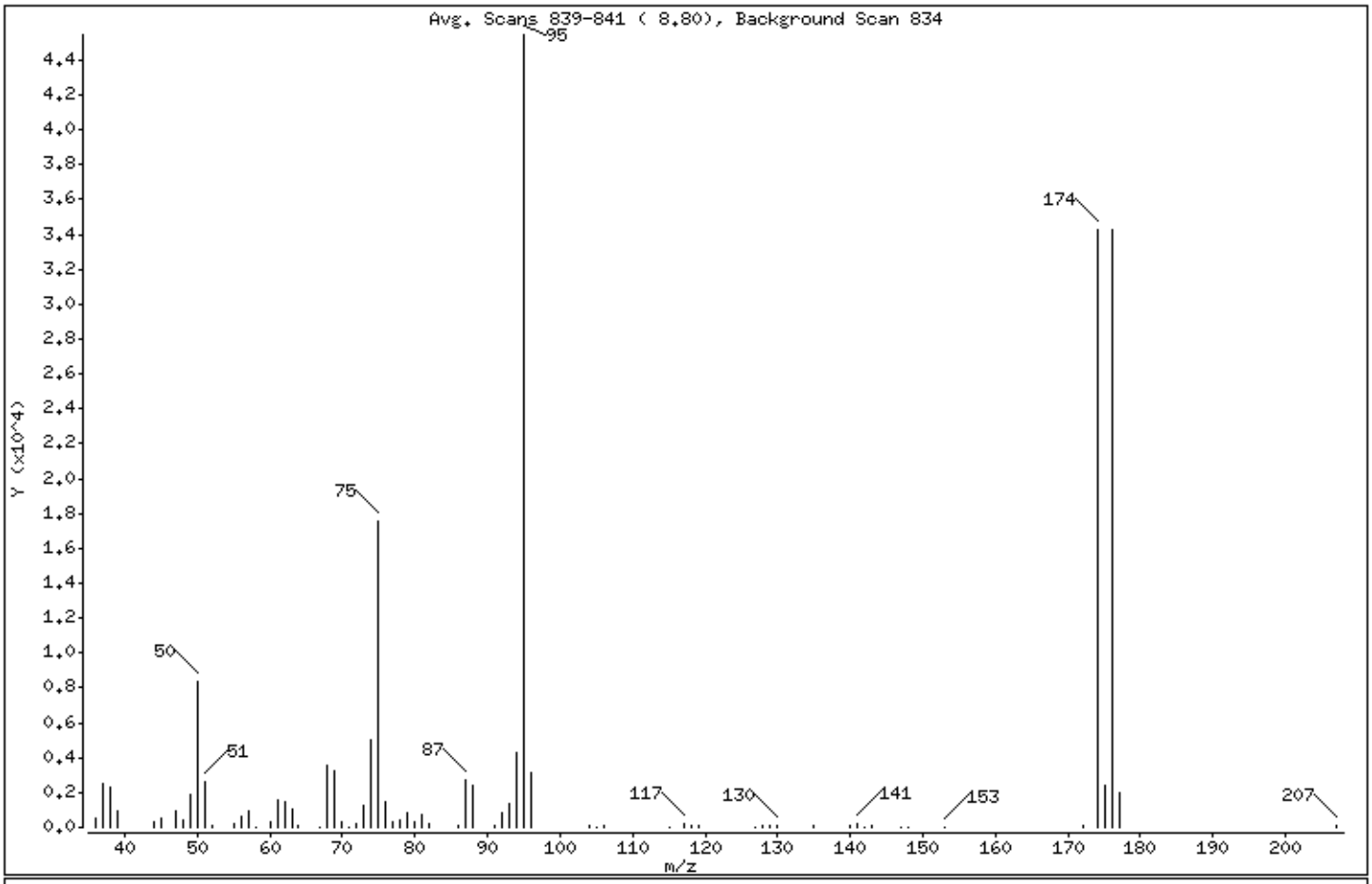
Sample Info: 2UL,BFBC1,BFBC1

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	18.51
75	30.00 - 60.00% of mass 95	38.73
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	75.44
175	5.00 - 9.00% of mass 174	5.28 (7.00)
176	95.00 - 101.00% of mass 174	75.39 (99.93)
177	5.00 - 9.00% of mass 176	4.39 (5.82)

Date : 28-JUN-2013 15:33

Client ID: BFBC1 Instrument: V1.i

Sample Info: 2UL,BFBC1,BFBC1

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M2627.D
Spectrum: Avg. Scans 839-841 (8.80), Background Scan 834
Location of Maximum: 95.00
Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	564	62.00	1488	82.00	173	128.00	77
37.00	2557	63.00	1062	86.00	87	129.00	53
38.00	2341	64.00	110	87.00	2705	130.00	151
39.00	963	67.00	46	88.00	2428	135.00	82
44.00	266	68.00	3515	91.00	132	140.00	140
45.00	499	69.00	3263	92.00	805	141.00	195
47.00	971	70.00	322	93.00	1342	142.00	45
48.00	415	71.00	35	94.00	4243	143.00	142
49.00	1843	72.00	231	95.00	45440	147.00	37
50.00	8409	73.00	1225	96.00	3101	148.00	41
51.00	2656	74.00	5000	104.00	141	153.00	34
52.00	132	75.00	17600	105.00	43	172.00	71
55.00	175	76.00	1501	106.00	128	174.00	34280
56.00	591	77.00	350	115.00	45	175.00	2398
57.00	926	78.00	369	117.00	187	176.00	34256
58.00	39	79.00	820	118.00	99	177.00	1995
60.00	328	80.00	274	119.00	117	207.00	75
61.00	1520	81.00	782	127.00	33		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V6.i\130620.B\V6I1521.D
Lab Smp Id: BFB6B Client Smp ID: BFB6B
Inj Date : 20-JUN-2013 16:04
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,BFB6B,BFB6B
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\130620.B\bfb8260.m
Meth Date : 25-Jun-2013 14:18 amarquis Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: 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		
5.978	6.200	(0.000)	95	45489			0.00- 100.00	100.00
5.978	6.200	(0.000)	50	7529			15.00- 40.00	16.55
5.978	6.200	(0.000)	75	19647			30.00- 60.00	43.19
5.978	6.200	(0.000)	96	3075			5.00- 9.00	6.76
5.978	6.200	(0.000)	173	130			0.00- 2.00	0.34
5.978	6.200	(0.000)	174	38667			50.00- 100.00	85.00
5.978	6.200	(0.000)	175	2930			5.00- 9.00	7.58
5.978	6.200	(0.000)	176	38230			95.00- 101.00	98.87
5.978	6.200	(0.000)	177	2476			5.00- 9.00	6.48

Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1521.D

Date : 20-JUN-2013 16:04

Client ID: BFB6B

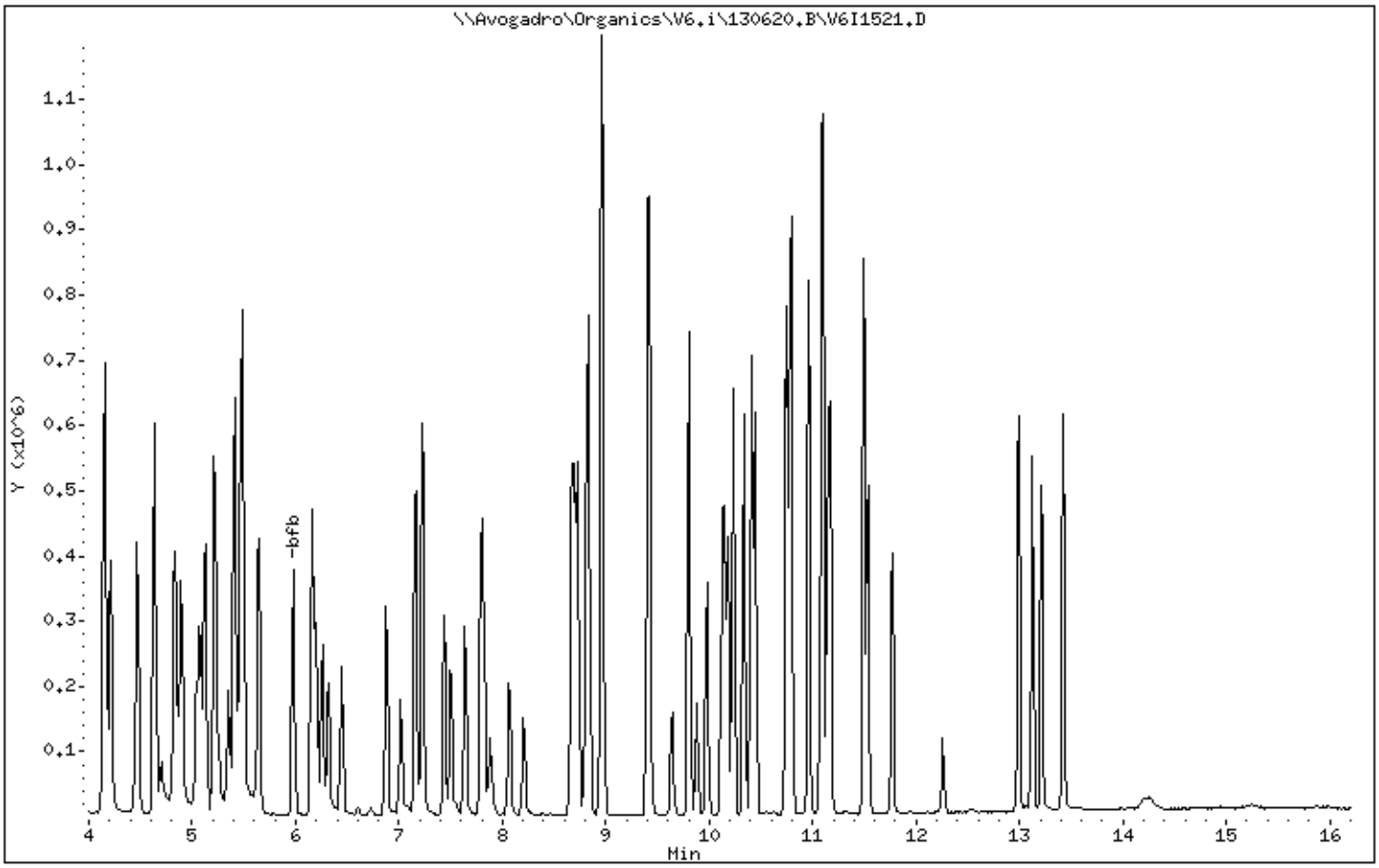
Instrument: V6.i

Sample Info: 5ML,BFB6B,BFB6B

Operator: ALM SRC: ALM

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\130620.B\V6I1521.D

Date : 20-JUN-2013 16:04

Client ID: BFB6B

Instrument: V6.i

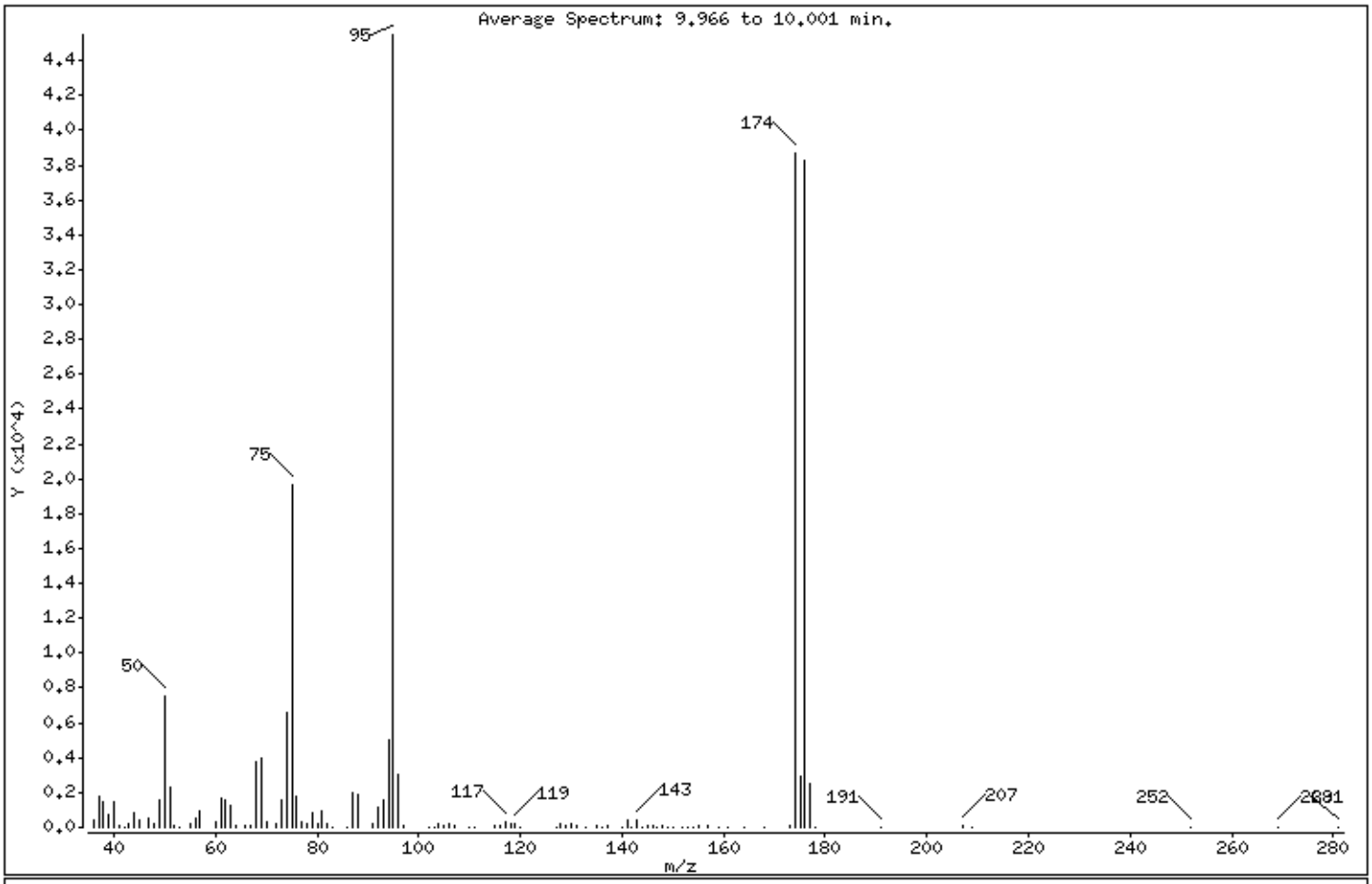
Sample Info: 5ML,BFB6B,BFB6B

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	16.55
75	30.00 - 60.00% of mass 95	43.19
96	5.00 - 9.00% of mass 95	6.76
173	Less than 2.00% of mass 174	0.29 (0.34)
174	50.00 - 100.00% of mass 95	85.00
175	5.00 - 9.00% of mass 174	6.44 (7.58)
176	95.00 - 101.00% of mass 174	84.04 (98.87)
177	5.00 - 9.00% of mass 176	5.44 (6.48)

Date : 20-JUN-2013 16:04

Client ID: BFB6B Instrument: V6.i

Sample Info: 5ML,BFB6B,BFB6B

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V6I1521.D
Spectrum: Average Spectrum: 9.966 to 10.001 min.
Location of Maximum: 95.00
Number of points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	387	68.00	3757	104.00	188	146.00	72
37.00	1745	69.00	3953	105.00	62	147.00	44
38.00	1494	70.00	308	106.00	173	148.00	93
39.00	713	72.00	227	107.00	72	149.00	21
40.00	1503	73.00	1612	110.00	20	150.00	39
41.00	100	74.00	6565	111.00	43	152.00	18
42.00	20	75.00	19640	115.00	81	153.00	20
43.00	162	76.00	1745	116.00	154	154.00	24
44.00	863	77.00	298	117.00	324	155.00	116
45.00	376	78.00	183	118.00	191	157.00	115
47.00	532	79.00	823	119.00	249	159.00	24
48.00	197	80.00	237	120.00	22	161.00	36
49.00	1576	81.00	911	127.00	16	164.00	17
50.00	7529	82.00	227	128.00	167	168.00	17
51.00	2252	83.00	17	129.00	88	173.00	130
52.00	82	86.00	27	130.00	166	174.00	38664
53.00	39	87.00	1948	131.00	104	175.00	2930
55.00	200	88.00	1877	133.00	21	176.00	38224
56.00	556	91.00	174	135.00	91	177.00	2476
57.00	910	92.00	1144	136.00	30	178.00	43
60.00	360	93.00	1554	137.00	98	191.00	15
61.00	1691	94.00	4991	140.00	27	207.00	146
62.00	1588	95.00	45488	141.00	428	209.00	16
63.00	1263	96.00	3075	142.00	46	252.00	18
64.00	83	97.00	117	143.00	458	269.00	24
66.00	55	102.00	18	144.00	24	281.00	49
67.00	106	103.00	33	145.00	60		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\130701.B\V6I1690.D
Lab Smp Id: BFB6I Client Smp ID: BFB6I
Inj Date : 01-JUL-2013 08:02
Operator : ALM SRC: ALM Inst ID: V6.i
Smp Info : 5ML,BFB6I,BFB6I
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\130701.B\bfb8260.m
Meth Date : 02-Jul-2013 11:24 wluo Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: 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		
5.869	6.200	(0.000)	95	526144			0.00- 100.00	100.00
5.869	6.200	(0.000)	50	100184			15.00- 40.00	19.04
5.869	6.200	(0.000)	75	240448			30.00- 60.00	45.70
5.869	6.200	(0.000)	96	40848			5.00- 9.00	7.76
5.869	6.200	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
5.869	6.200	(0.000)	174	446976			50.00- 100.00	84.95
5.869	6.200	(0.000)	175	36712			5.00- 9.00	8.21
5.869	6.200	(0.000)	176	437568			95.00- 101.00	97.90
5.869	6.200	(0.000)	177	31984			5.00- 9.00	7.31

Data File: \\avogadro\organics\V6.i\130701.B\V6I1690.D

Date : 01-JUL-2013 08:02

Client ID: BFB6I

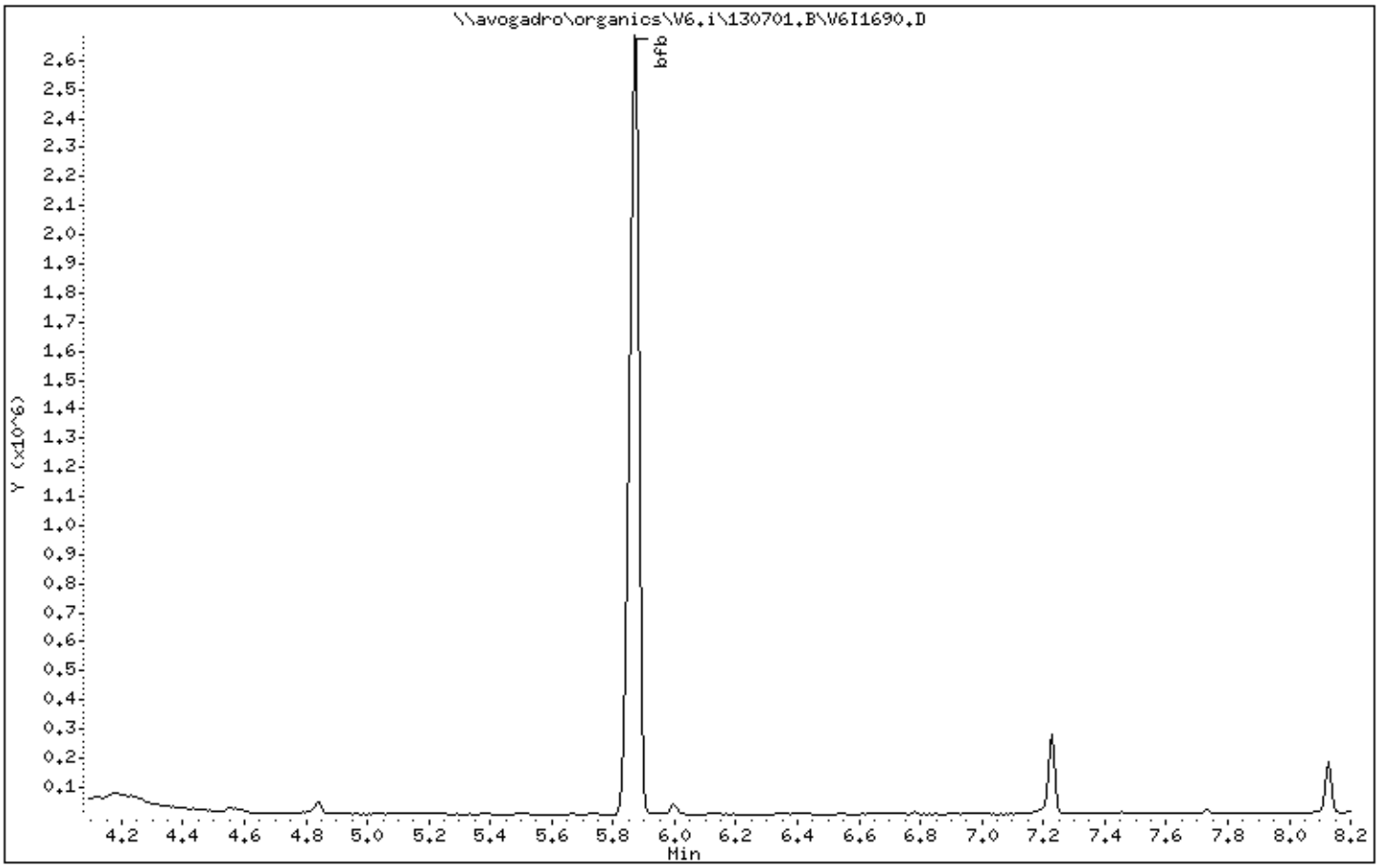
Instrument: V6.i

Sample Info: 5ML,BFB6I,BFB6I

Operator: ALM SRC: ALM

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\130701.B\V6I1690.D

Date : 01-JUL-2013 08:02

Client ID: BFB6I

Instrument: V6.i

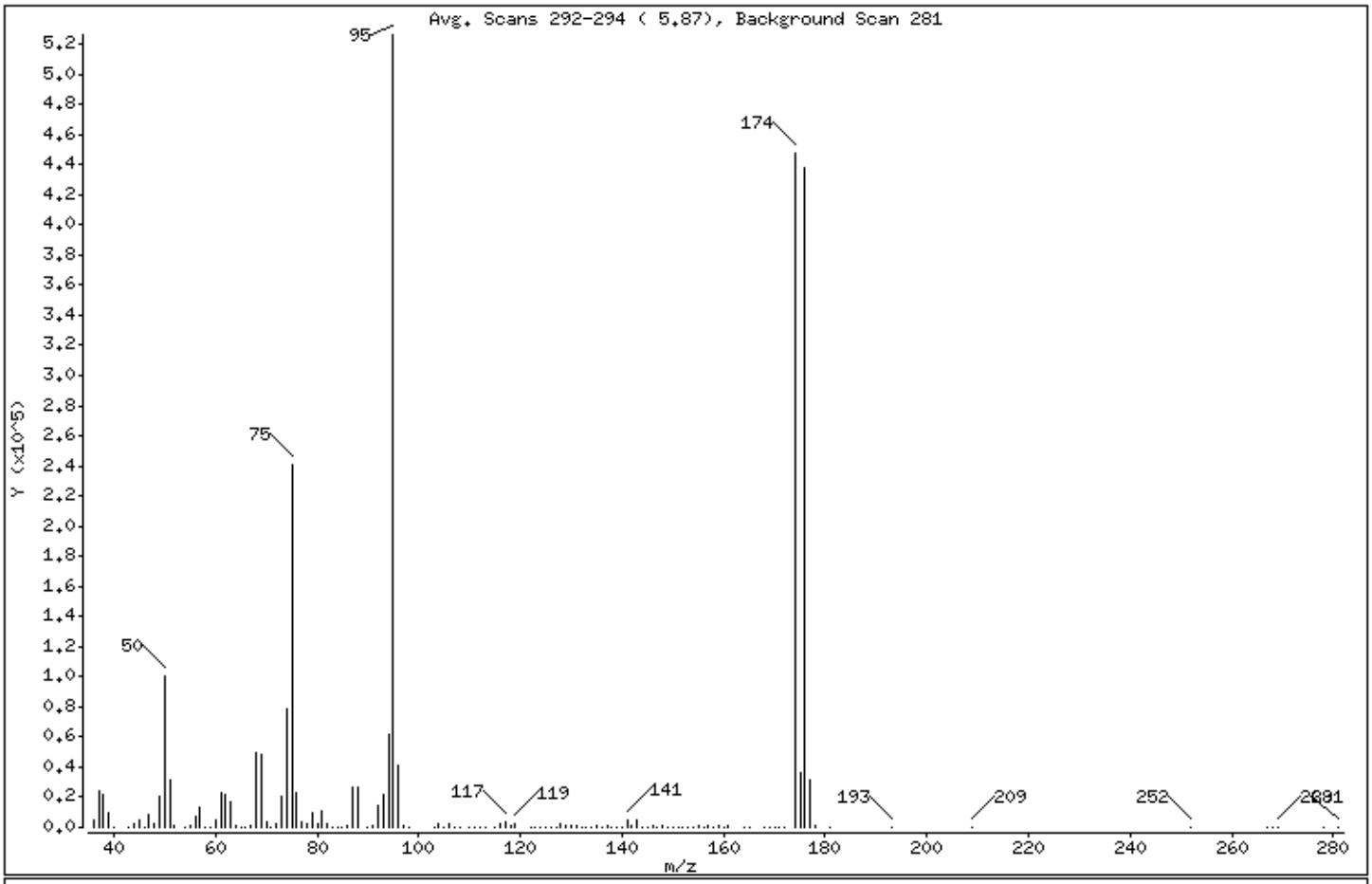
Sample Info: 5ML,BFB6I,BFB6I

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	19.04
75	30.00 - 60.00% of mass 95	45.70
96	5.00 - 9.00% of mass 95	7.76
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	84.95
175	5.00 - 9.00% of mass 174	6.98 (8.21)
176	95.00 - 101.00% of mass 174	83.17 (97.90)
177	5.00 - 9.00% of mass 176	6.08 (7.31)

Date : 01-JUL-2013 08:02

Client ID: BFB6I Instrument: V6.i

Sample Info: 5ML,BFB6I,BFB6I

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V6I1690.D
Spectrum: Avg. Scans 292-294 (5.87), Background Scan 281
Location of Maximum: 95.00
Number of points: 135

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4804	73.00	20616	113.00	219	150.00	538
37.00	24200	74.00	78808	115.00	439	151.00	51
38.00	22208	75.00	240448	116.00	1867	152.00	302
39.00	9083	76.00	22936	117.00	3197	153.00	490
40.00	105	77.00	3399	118.00	1618	154.00	386
43.00	182	78.00	2143	119.00	2548	155.00	1488
44.00	1903	79.00	10197	122.00	96	156.00	218
45.00	4416	80.00	3015	123.00	196	157.00	1210
46.00	285	81.00	11125	124.00	265	158.00	139
47.00	8043	82.00	2425	125.00	219	159.00	686
48.00	2991	83.00	358	126.00	236	160.00	43
49.00	20824	84.00	83	127.00	217	161.00	667
50.00	100184	85.00	122	128.00	2076	164.00	95
51.00	31224	86.00	733	129.00	941	165.00	39
52.00	1210	87.00	26328	130.00	1672	168.00	37
54.00	36	88.00	26576	131.00	809	169.00	87
55.00	1360	90.00	4	132.00	92	170.00	41
56.00	6870	91.00	1456	133.00	223	171.00	403
57.00	13136	92.00	14725	134.00	39	172.00	450
58.00	563	93.00	21928	135.00	943	174.00	446976
59.00	175	94.00	61880	136.00	167	175.00	36712
60.00	4545	95.00	526144	137.00	903	176.00	437568
61.00	22544	96.00	40848	138.00	42	177.00	31984
62.00	21832	97.00	1091	139.00	231	178.00	927
63.00	16400	98.00	43	140.00	310	181.00	36
64.00	1591	103.00	282	141.00	5155	193.00	76
65.00	59	104.00	2218	142.00	616	209.00	50
66.00	85	105.00	427	143.00	4853	252.00	44
67.00	1318	106.00	2140	144.00	301	267.00	39
68.00	49088	107.00	418	145.00	399	268.00	88
69.00	47832	108.00	40	146.00	856	269.00	106
70.00	3899	110.00	314	147.00	525	278.00	42
71.00	303	111.00	284	148.00	1290	281.00	45
72.00	2610	112.00	316	149.00	423		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72527

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M2631.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 06/28/2013

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

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

Purge Volume: 10.0 (mL)

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

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72527

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M2631.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 06/28/2013

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

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

Purge Volume: 10.0 (mL)

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

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2631.D
Report Date: 02-Jul-2013 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

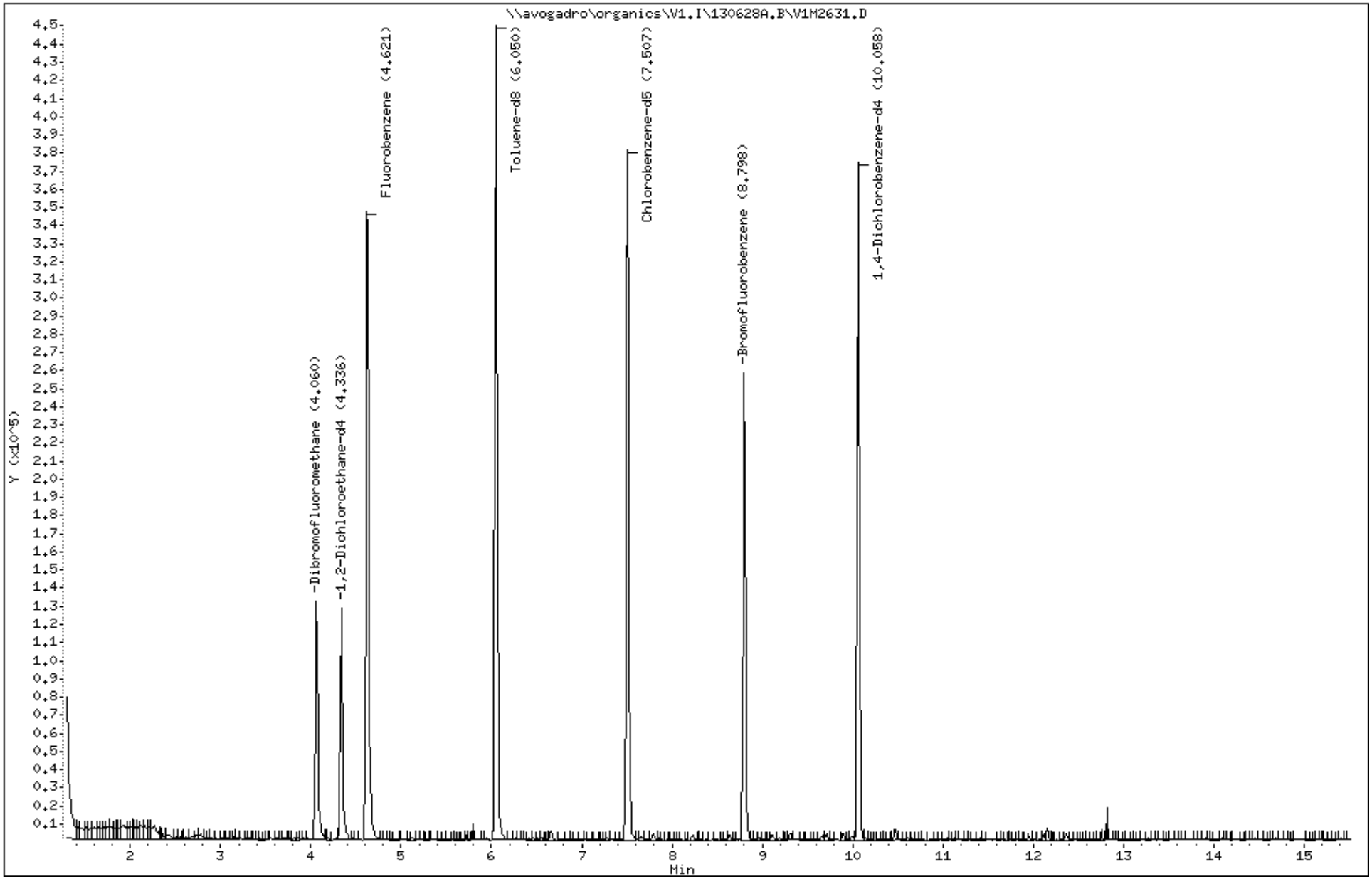
Data file : \\avogadro\organics\V1.I\130628A.B\V1M2631.D
Lab Smp Id: MB-72527 Client Smp ID: VBLKC1
Inj Date : 28-JUN-2013 17:39
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5G,MB-72527,VBLKC1,72527
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628A.B\v18260GH.m
Meth Date : 30-Jun-2013 11:23 V1.i Quant Type: ISTD
Cal Date : 28-JUN-2013 13:25 Cal File: V1M2621.D
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	4.060	4.050	(0.877)	85023	51.4205	51
$ 37 1,2-Dichloroethane-d4	102	4.335	4.326	(0.936)	22809	49.4255	49
* 41 Fluorobenzene	96	4.631	4.611	(1.000)	337855	50.0000	
$ 51 Toluene-d8	98	6.049	6.049	(0.806)	300076	50.5791	50
* 60 Chlorobenzene-d5	117	7.507	7.507	(1.000)	232709	50.0000	
$ 70 Bromofluorobenzene	95	8.797	8.797	(1.172)	105563	49.0244	49
* 84 1,4-Dichlorobenzene-d4	152	10.058	10.058	(1.000)	100464	50.0000	

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2631.D
Date : 28-JUN-2013 17:39
Client ID: VBLKC1
Instrument: V1.i
Sample Info: 5G,MB-72527,VBLKC1,72527
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72542

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V6I1695.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 07/01/2013

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	250	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U
74-88-4	Iodomethane	250	U
75-15-0	Carbon disulfide	250	U
75-09-2	Methylene chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
78-93-3	2-Butanone	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
594-20-7	2,2-Dichloropropane	250	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
563-58-6	1,1-Dichloropropene	250	U
56-23-5	Carbon tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
74-95-3	Dibromomethane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
142-28-9	1,3-Dichloropropane	250	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72542

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V6I1695.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 07/01/2013

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
179601-23-1	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
103-65-1	n-Propylbenzene	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U

Data File: \\avogadro\organics\V6.i\130701.B\V6I1695.D
Report Date: 02-Jul-2013 11:26

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\130701.B\V6I1695.D
Lab Smp Id: MB-72542 Client Smp ID: MB-72542
Inj Date : 01-JUL-2013 10:28
Operator : ALM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,MB-72542,MB-72542,72542
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V6.i\130701.B\v68260Gadd-6lvl.m
Meth Date : 02-Jul-2013 11:24 wluo Quant Type: ISTD
Cal Date : 20-JUN-2013 18:05 Cal File: V6I1526.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

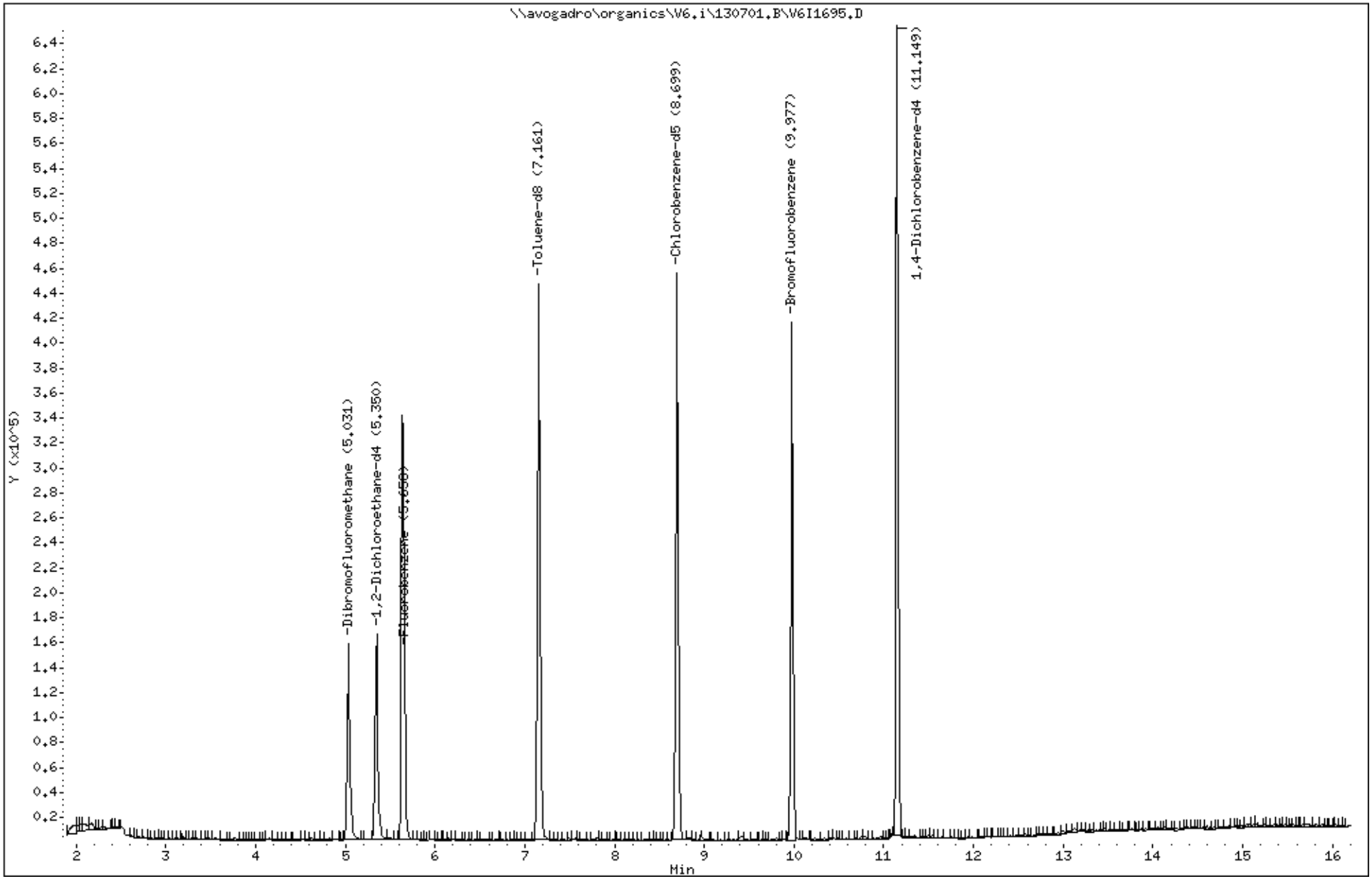
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 36 Dibromofluoromethane	113	5.030	5.034	(0.891)	115459	56.3619	2800
$ 42 1,2-Dichloroethane-d4	102	5.350	5.353	(0.948)	29435	56.3787	2800(R)
* 46 Fluorobenzene	96	5.646	5.649	(1.000)	380883	50.0000	
$ 58 Toluene-d8	98	7.160	7.152	(0.823)	376972	47.9635	2400
* 68 Chlorobenzene-d5	117	8.699	8.702	(1.000)	324304	50.0000	
$ 79 Bromofluorobenzene	95	9.977	9.980	(1.147)	160240	51.4483	2600
* 92 1,4-Dichlorobenzene-d4	152	11.148	11.151	(1.000)	180446	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\V6.i\130701.B\V6I1695.D
Date : 01-JUL-2013 10:28
Client ID: MB-72542
Instrument: V6.i
Sample Info: 5ML,MB-72542,MB-72542,72542
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72527

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M2629.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 06/28/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	38	
74-87-3	Chloromethane	44	
75-01-4	Vinyl chloride	43	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	42	
75-69-4	Trichlorofluoromethane	44	
75-35-4	1,1-Dichloroethene	44	
67-64-1	Acetone	50	
74-88-4	Iodomethane	40	
75-15-0	Carbon disulfide	44	
75-09-2	Methylene chloride	43	
156-60-5	trans-1,2-Dichloroethene	44	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	44	
108-05-4	Vinyl acetate	41	
78-93-3	2-Butanone	52	
156-59-2	cis-1,2-Dichloroethene	45	
594-20-7	2,2-Dichloropropane	45	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	45	
71-55-6	1,1,1-Trichloroethane	44	
563-58-6	1,1-Dichloropropene	44	
56-23-5	Carbon tetrachloride	44	
107-06-2	1,2-Dichloroethane	47	
71-43-2	Benzene	45	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	44	
74-95-3	Dibromomethane	45	
75-27-4	Bromodichloromethane	45	
10061-01-5	cis-1,3-Dichloropropene	46	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	44	
10061-02-6	trans-1,3-Dichloropropene	47	
79-00-5	1,1,2-Trichloroethane	45	
142-28-9	1,3-Dichloropropane	46	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72527

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M2629.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 06/28/2013

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

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

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	59	
591-78-6	2-Hexanone	50	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	46	
108-90-7	Chlorobenzene	45	
630-20-6	1,1,1,2-Tetrachloroethane	45	
100-41-4	Ethylbenzene	44	
179601-23-1	m,p-Xylene	87	
95-47-6	o-Xylene	43	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	44	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	43	
79-34-5	1,1,2,2-Tetrachloroethane	45	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	48	
103-65-1	n-Propylbenzene	45	
95-49-8	2-Chlorotoluene	45	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	45	
98-06-6	tert-Butylbenzene	42	
95-63-6	1,2,4-Trimethylbenzene	45	
135-98-8	sec-Butylbenzene	44	
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	45	
95-50-1	1,2-Dichlorobenzene	45	
96-12-8	1,2-Dibromo-3-chloropropane	51	
120-82-1	1,2,4-Trichlorobenzene	46	
87-68-3	Hexachlorobutadiene	46	
87-61-6	1,2,3-Trichlorobenzene	48	
91-20-3	Naphthalene	48	

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2629.D
Report Date: 02-Jul-2013 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V1.I\130628A.B\V1M2629.D
Lab Smp Id: LCS-72527 Client Smp ID: VLCSC1
Inj Date : 28-JUN-2013 16:49
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,LCS-72527,VLCSC1,72527
Misc Info :
Comment   :
Method   : \\avogadro\organics\V1.I\130628A.B\v18260GH.m
Meth Date : 30-Jun-2013 11:23 V1.i Quant Type: ISTD
Cal Date : 28-JUN-2013 13:25 Cal File: V1M2621.D
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.335	1.331	(0.289)	31265	50.0000	38
2	Chloromethane	50	1.454	1.460	(0.315)	181599	50.0000	44
3	Vinyl Chloride	62	1.552	1.558	(0.336)	134405	50.0000	43
4	Bromomethane	94	1.789	1.785	(0.388)	78090	50.0000	44
5	Chloroethane	64	1.867	1.863	(0.405)	89275	50.0000	42
6	Trichlorofluoromethane	101	2.054	2.041	(0.445)	79056	50.0000	44
127	Ethanol	46	2.143	2.139	(0.464)	76039	5000.00	6800(Q)
7	Ether	59	2.222	2.228	(0.481)	104987	50.0000	46
8	Acrolein	56	2.311	2.307	(0.501)	104538	250.000	230
9	1,1-Dichloroethene	96	2.419	2.415	(0.524)	94721	50.0000	44
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.439	2.425	(0.528)	82686	50.0000	39
11	Acetone	58	2.419	2.415	(0.524)	16507	50.0000	50
12	Iodomethane	142	2.547	2.533	(0.552)	117734	50.0000	40
13	Carbon Disulfide	76	2.577	2.573	(0.558)	246935	50.0000	44
14	Acetonitrile	40	2.606	2.602	(0.565)	120017	500.000	450(Q)
15	Methyl Acetate	43	2.655	2.651	(0.575)	135225	50.0000	49
16	Methylene Chloride	84	2.734	2.730	(0.592)	56997	50.0000	43(Q)
17	tert-Butanol	59	2.803	2.799	(0.607)	19815	100.000	100
18	Acrylonitrile	53	2.902	2.898	(0.629)	46313	50.0000	46
20	Methyl tert-butyl ether	73	2.941	2.937	(0.637)	237629	50.0000	47
19	trans-1,2-Dichloroethene	96	2.941	2.937	(0.637)	98622	50.0000	44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.246	3.242	(0.703)	195827	50.0000	44
	22 Vinyl acetate	43	3.296	3.292	(0.714)	356644	50.0000	41
	23 Diisopropyl Ether	45	3.305	3.292	(0.716)	528600	50.0000	47
	24 Ethyl tert-butyl ether	59	3.581	3.567	(0.776)	337803	50.0000	46
M	27 1,2-dichloroethene, (Total)	100				208558	100.000	89
	25 cis-1,2-Dichloroethene	96	3.690	3.676	(0.799)	109936	50.0000	45
	26 2,2-Dichloropropane	77	3.690	3.686	(0.799)	58144	50.0000	44
	28 2-Butanone	72	3.690	3.686	(0.799)	12507	50.0000	52(Q)
	29 Bromochloromethane	128	3.867	3.863	(0.838)	56838	50.0000	48
	30 Tetrahydrofuran	72	3.916	3.912	(0.848)	23372	100.000	94
	31 Chloroform	83	3.926	3.932	(0.851)	146720	50.0000	45
$	32 Dibromofluoromethane	113	4.054	4.050	(0.878)	83247	50.0000	50
	33 1,1,1-Trichloroethane	97	4.093	4.089	(0.887)	89705	50.0000	44
	34 Cyclohexane	56	4.143	4.148	(0.898)	197359	50.0000	41
	36 Carbon Tetrachloride	117	4.231	4.227	(0.917)	83558	50.0000	44
	35 1,1-Dichloropropene	110	4.221	4.217	(0.915)	42879	50.0000	44
$	37 1,2-Dichloroethane-d4	102	4.330	4.326	(0.938)	23443	50.0000	50
	38 Benzene	78	4.389	4.385	(0.951)	389437	50.0000	45
	39 1,2-Dichloroethane	62	4.389	4.385	(0.951)	104546	50.0000	47
	40 tert-Amyl methyl ether	73	4.487	4.483	(0.972)	252374	50.0000	46
*	41 Fluorobenzene	96	4.615	4.611	(1.000)	341572	50.0000	
	42 Trichloroethene	130	4.931	4.927	(1.068)	102966	50.0000	46
	43 Methylcyclohexane	83	5.108	5.114	(1.107)	143610	50.0000	41
	44 1,2-Dichloropropane	63	5.118	5.124	(1.109)	116138	50.0000	44
	46 Dibromomethane	93	5.216	5.222	(1.130)	55790	50.0000	45
	47 1,4-Dioxane	88	5.236	5.242	(1.134)	15510	1000.00	1300
	48 Bromodichloromethane	83	5.364	5.360	(1.162)	110705	50.0000	45
	45 2-Chloroethyl vinyl ether	63	6.103	6.109	(1.322)	26567	50.0000	43(T)
	49 cis-1,3-Dichloropropene	75	5.778	5.784	(1.252)	163517	50.0000	46
	50 4-Methyl-2-pentanone	43	5.925	5.921	(1.284)	137706	50.0000	50
$	51 Toluene-d8	98	6.044	6.049	(0.806)	297347	50.0000	49
	52 Toluene	91	6.103	6.109	(1.322)	350355	50.0000	44
	53 trans-1,3-Dichloropropene	75	6.310	6.315	(1.367)	128484	50.0000	47
	54 1,1,2-Trichloroethane	97	6.487	6.493	(1.405)	77181	50.0000	45
	55 Tetrachloroethene	164	6.654	6.660	(0.887)	107991	50.0000	59
	56 1,3-Dichloropropane	76	6.654	6.660	(0.887)	146456	50.0000	46
	57 2-Hexanone	43	6.743	6.749	(0.899)	99638	50.0000	50
	58 Dibromochloromethane	129	6.891	6.887	(0.919)	91795	50.0000	46
	59 1,2-Dibromoethane	107	7.009	7.005	(0.934)	85193	50.0000	46
*	60 Chlorobenzene-d5	117	7.501	7.507	(1.000)	237128	50.0000	
	63 1-Chlorohexane	91	7.521	7.527	(1.003)	123533	50.0000	42
	61 Chlorobenzene	112	7.531	7.537	(1.004)	246114	50.0000	45
	62 1,1,1,2-Tetrachloroethane	131	7.620	7.625	(1.016)	85329	50.0000	44
	64 Ethylbenzene	106	7.659	7.655	(1.021)	122166	50.0000	44
	65 m,p-Xylene	106	7.787	7.793	(1.038)	311284	100.000	87
	66 o-Xylene	106	8.220	8.216	(1.096)	151991	50.0000	43
	67 Styrene	104	8.230	8.236	(1.097)	264525	50.0000	44
	68 Bromoform	173	8.417	8.413	(1.122)	52984	50.0000	46
	69 Isopropylbenzene	105	8.644	8.640	(1.152)	374798	50.0000	43
	126 trans-1,4-Dichloro-2-butene	75	8.703	8.699	(1.160)	29698	50.0000	45
$	70 Bromofluorobenzene	95	8.801	8.797	(1.173)	104251	50.0000	48
	72 Bromobenzene	156	8.959	8.955	(0.890)	94438	50.0000	45
	71 1,1,2,2-Tetrachloroethane	83	8.959	8.955	(0.890)	106087	50.0000	45
	73 1,2,3-Trichloropropane	75	9.008	9.004	(0.895)	110322	50.0000	48

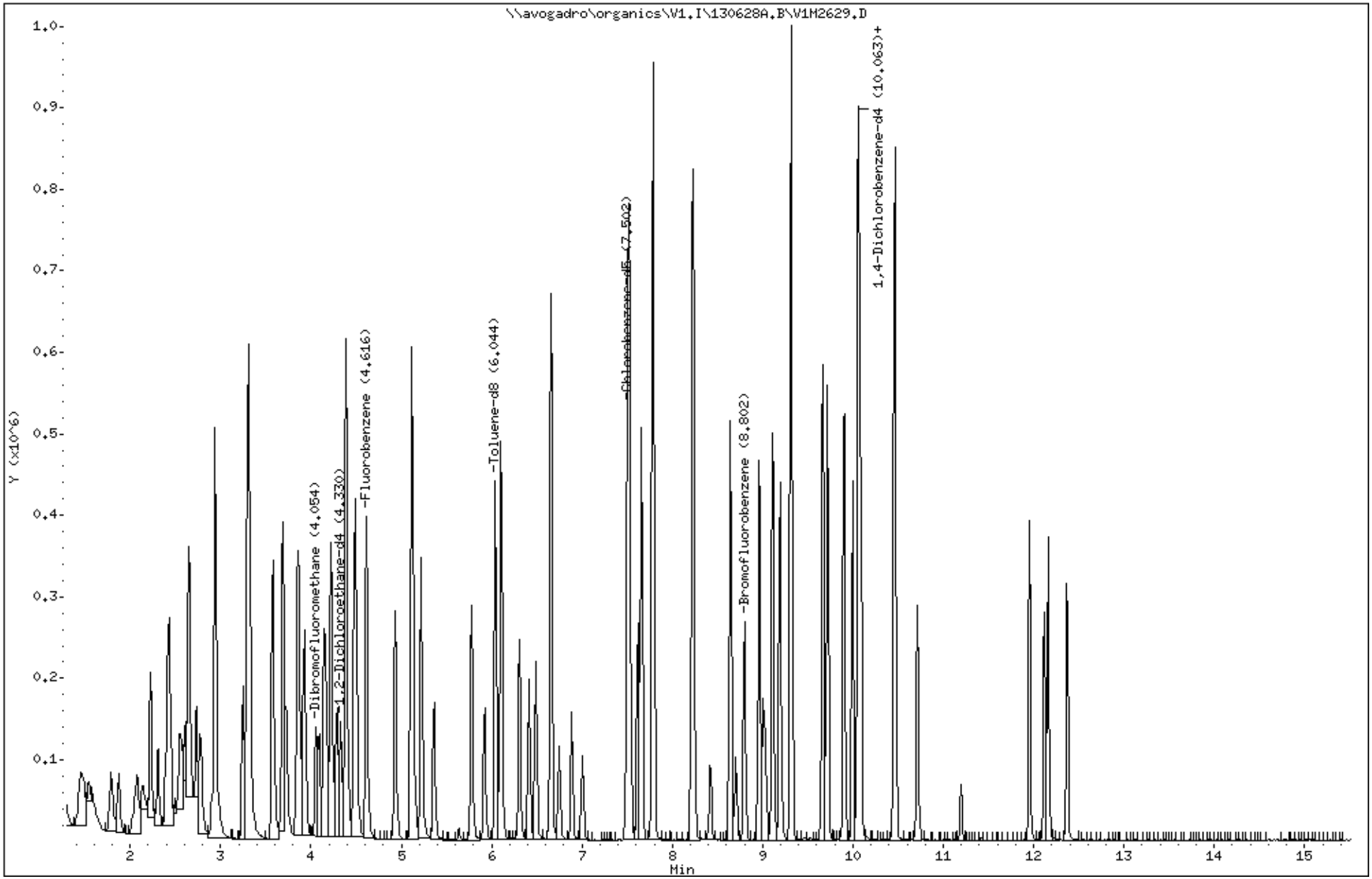
Data File: \\avogadro\organics\V1.I\130628A.B\V1M2629.D
Report Date: 02-Jul-2013 10:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 n-Propylbenzene	120	9.107	9.103	(0.905)	100453	50.0000	44
	75 2-Chlorotoluene	126	9.195	9.191	(0.914)	94291	50.0000	45
	76 1,3,5-Trimethylbenzene	105	9.314	9.310	(0.926)	307165	50.0000	46
	77 4-Chlorotoluene	126	9.314	9.310	(0.926)	96400	50.0000	45
	78 tert-Butylbenzene	119	9.668	9.664	(0.961)	280629	50.0000	42
	79 1,2,4-Trimethylbenzene	105	9.717	9.714	(0.966)	310389	50.0000	45
M	81 Xylene (Total)	106				463275	150.000	130
	80 sec-Butylbenzene	105	9.905	9.901	(0.984)	412010	50.0000	44
	82 1,3-Dichlorobenzene	146	9.993	9.989	(0.993)	184048	50.0000	45
	83 4-Isopropyltoluene	119	10.052	10.058	(0.999)	328815	50.0000	45
*	84 1,4-Dichlorobenzene-d4	152	10.062	10.058	(1.000)	102689	50.0000	
	85 1,4-Dichlorobenzene	146	10.092	10.088	(1.003)	187655	50.0000	45
	86 n-Butylbenzene	91	10.466	10.462	(1.040)	297817	50.0000	44
	87 1,2-Dichlorobenzene	146	10.456	10.452	(1.039)	175637	50.0000	45
	88 1,2-Dibromo-3-chloropropane	75	11.195	11.191	(1.113)	13228	50.0000	51
	89 1,2,4-Trichlorobenzene	180	11.953	11.959	(1.188)	107518	50.0000	46
	90 Hexachlorobutadiene	225	12.121	12.117	(1.205)	49724	50.0000	46
	91 Naphthalene	128	12.160	12.156	(1.208)	263589	50.0000	48
	92 1,2,3-Trichlorobenzene	180	12.367	12.373	(1.229)	95141	50.0000	48

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\130628A.B\V1M2629.D
Date : 28-JUN-2013 16:49
Client ID: VLCSC1
Instrument: V1.i
Sample Info: 5G,LCS-72527,VLCSC1,72527
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-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72542

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V6I1693.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 07/01/2013

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3100	
74-87-3	Chloromethane	2700	
75-01-4	Vinyl chloride	3100	
74-83-9	Bromomethane	1900	
75-00-3	Chloroethane	3000	
75-69-4	Trichlorofluoromethane	3000	
75-35-4	1,1-Dichloroethene	3000	
67-64-1	Acetone	3400	
74-88-4	Iodomethane	1800	
75-15-0	Carbon disulfide	2400	
75-09-2	Methylene chloride	2900	
156-60-5	trans-1,2-Dichloroethene	2900	
1634-04-4	Methyl tert-butyl ether	2400	
75-34-3	1,1-Dichloroethane	2600	
108-05-4	Vinyl acetate	2400	
78-93-3	2-Butanone	2400	
156-59-2	cis-1,2-Dichloroethene	2900	
594-20-7	2,2-Dichloropropane	2900	
74-97-5	Bromochloromethane	3200	
67-66-3	Chloroform	2900	
71-55-6	1,1,1-Trichloroethane	2900	
563-58-6	1,1-Dichloropropene	2900	
56-23-5	Carbon tetrachloride	2900	
107-06-2	1,2-Dichloroethane	2800	
71-43-2	Benzene	2900	
79-01-6	Trichloroethene	2900	
78-87-5	1,2-Dichloropropane	2800	
74-95-3	Dibromomethane	2800	
75-27-4	Bromodichloromethane	2800	
10061-01-5	cis-1,3-Dichloropropene	2900	
108-10-1	4-Methyl-2-pentanone	2200	
108-88-3	Toluene	2900	
10061-02-6	trans-1,3-Dichloropropene	2900	
79-00-5	1,1,2-Trichloroethane	2700	
142-28-9	1,3-Dichloropropane	2500	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-72542

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72542

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V6I1693.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 07/01/2013

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	2700	
591-78-6	2-Hexanone	2100	
124-48-1	Dibromochloromethane	2700	
106-93-4	1,2-Dibromoethane	2500	
108-90-7	Chlorobenzene	2800	
630-20-6	1,1,1,2-Tetrachloroethane	2700	
100-41-4	Ethylbenzene	2800	
179601-23-1	m,p-Xylene	5400	
95-47-6	o-Xylene	2800	
1330-20-7	Xylene (Total)	8200	
100-42-5	Styrene	2800	
75-25-2	Bromoform	2700	
98-82-8	Isopropylbenzene	2700	
79-34-5	1,1,2,2-Tetrachloroethane	2400	
108-86-1	Bromobenzene	2700	
96-18-4	1,2,3-Trichloropropane	2400	
103-65-1	n-Propylbenzene	2700	
95-49-8	2-Chlorotoluene	2700	
108-67-8	1,3,5-Trimethylbenzene	2600	
106-43-4	4-Chlorotoluene	2700	
98-06-6	tert-Butylbenzene	2700	
95-63-6	1,2,4-Trimethylbenzene	2600	
135-98-8	sec-Butylbenzene	2700	
99-87-6	4-Isopropyltoluene	2700	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2700	
104-51-8	n-Butylbenzene	2700	
95-50-1	1,2-Dichlorobenzene	2700	
96-12-8	1,2-Dibromo-3-chloropropane	2000	
120-82-1	1,2,4-Trichlorobenzene	2700	
87-68-3	Hexachlorobutadiene	2500	
87-61-6	1,2,3-Trichlorobenzene	2600	
91-20-3	Naphthalene	2500	

Data File: \\avogadro\organics\V6.i\130701.B\V6I1693.D
Report Date: 02-Jul-2013 11:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V6.i\130701.B\V6I1693.D
Lab Smp Id: LCS-72542 Client Smp ID: LCS-72542
Inj Date : 01-JUL-2013 09:41
Operator : ALM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,LCS-72542,LCS-72542,72542
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\130701.B\v68260Gadd-6lvl.m
Meth Date : 02-Jul-2013 11:24 wluo Quant Type: ISTD
Cal Date : 20-JUN-2013 18:05 Cal File: V6I1526.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*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.741	1.741	(0.308)	117273	50.0000	62
2	Freon114	85	1.871	1.871	(0.331)	132012	50.0000	62
3	Chloromethane	50	1.930	1.930	(0.342)	164856	50.0000	54
4	Vinyl Chloride	62	2.037	2.037	(0.361)	171064	50.0000	62
5	Bromomethane	94	2.368	2.368	(0.419)	52106	50.0000	38
6	Chloroethane	64	2.463	2.463	(0.436)	96741	50.0000	60
7	Trichlorofluoromethane	101	2.687	2.687	(0.476)	206419	50.0000	60
126	Ethanol	46	2.841	2.841	(0.503)	20319	5000.00	5300(AQ)
8	Ether	59	2.936	2.936	(0.520)	115950	50.0000	51
9	Acrolein	56	2.841	2.841	(0.503)	202	250.000	2(a)
10	1,1-Dichloroethene	96	3.149	3.149	(0.558)	140644	50.0000	60
11	1,1,2-Trichloro-1,2,2-Trifluo	101	3.137	3.137	(0.556)	142708	50.0000	58
12	Acetone	58	3.196	3.196	(0.566)	16872	50.0000	67
13	Iodomethane	142	3.291	3.291	(0.583)	101300	50.0000	36
14	Carbon Disulfide	76	3.350	3.350	(0.593)	362264	50.0000	48
15	Acetonitrile	41	3.445	3.445	(0.610)	346373	500.000	490(AQ)
16	Allyl Chloride	39	3.445	3.445	(0.610)	123980	50.0000	44(Q)
17	Methyl Acetate	43	3.456	3.456	(0.612)	132060	50.0000	47
18	Methylene Chloride	84	3.551	3.551	(0.629)	147601	50.0000	58

Data File: \\avogadro\organics\V6.i\130701.B\V6I1693.D
Report Date: 02-Jul-2013 11:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	19 tert-Butanol	59	3.776	3.776	(0.669)	9523	100.000	69
	20 Acrylonitrile	53	3.764	3.764	(0.667)	69275	50.0000	55
	21 trans-1,2-Dichloroethene	96	3.776	3.776	(0.669)	152098	50.0000	57
	22 Methyl tert-butyl ether	73	3.764	3.764	(0.667)	362657	50.0000	49
	23 1,1-Dichloroethane	63	4.143	4.143	(0.734)	232921	50.0000	52
	24 Vinyl acetate	43	4.155	4.155	(0.736)	400581	50.0000	47
	25 Diisopropyl Ether	45	4.155	4.155	(0.736)	430441	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	4.214	4.214	(0.746)	200377	50.0000	53
	27 Ethyl tert-butyl ether	59	4.462	4.462	(0.790)	391523	50.0000	49
	29 2,2-Dichloropropane	77	4.628	4.628	(0.820)	211358	50.0000	59
	28 cis-1,2-Dichloroethene	96	4.628	4.628	(0.820)	163397	50.0000	58(Q)
	30 2-Butanone	72	4.628	4.628	(0.820)	15694	50.0000	48
	32 Propionitrile	54	4.699	4.699	(0.832)	240732	500.000	530(A)
	33 Methacrylonitrile	41	4.817	4.817	(0.853)	176395	100.000	100
	34 Bromochloromethane	128	4.841	4.841	(0.857)	81327	50.0000	64
	31 Tetrahydrofuran	72	4.876	4.876	(0.864)	37887	100.000	92
	35 Chloroform	83	4.888	4.888	(0.866)	236344	50.0000	57
$	36 Dibromofluoromethane	113	5.042	5.042	(0.893)	124137	50.0000	53
	37 1,1,1-Trichloroethane	97	5.066	5.066	(0.897)	216887	50.0000	58
	38 Cyclohexane	56	5.125	5.125	(0.908)	256488	50.0000	58
	39 1,1-Dichloropropene	110	5.208	5.208	(0.922)	76975	50.0000	58
	40 Carbon Tetrachloride	117	5.220	5.220	(0.925)	206464	50.0000	59
	41 Isobutyl Alcohol	43	5.255	5.255	(0.931)	103123	1000.00	800(A)
$	42 1,2-Dichloroethane-d4	102	5.350	5.350	(0.948)	32016	50.0000	54
	43 Benzene	78	5.409	5.409	(0.958)	534412	50.0000	58
	44 1,2-Dichloroethane	62	5.421	5.421	(0.960)	183496	50.0000	55
	45 tert-Amyl methyl ether	73	5.468	5.468	(0.969)	343470	50.0000	49
M	50 1,2-Dichloroethene (Total)	96				315495	100.000	120
*	46 Fluorobenzene	96	5.646	5.646	(1.000)	435895	50.0000	
	47 Trichloroethene	130	5.977	5.977	(1.059)	162728	50.0000	58
	48 Methylcyclohexane	83	6.166	6.166	(1.092)	237046	50.0000	55
	49 1,2-Dichloropropane	63	6.202	6.202	(1.098)	147785	50.0000	57
	51 Methyl Methacrylate	69	6.261	6.261	(1.109)	100769	50.0000	45
	52 Dibromomethane	93	6.320	6.320	(1.119)	92320	50.0000	56
	53 1,4-Dioxane	88	6.320	6.320	(1.119)	18663	1000.00	980(AQ)
	54 Bromodichloromethane	83	6.450	6.450	(1.143)	181718	50.0000	56
	55 2-Chloroethyl vinyl ether	63	6.710	6.710	(1.189)	717	50.0000	28(Q)
	56 cis-1,3-Dichloropropene	75	6.876	6.876	(1.218)	231546	50.0000	57
	57 4-Methyl-2-pentanone	43	7.018	7.018	(1.243)	144503	50.0000	43
$	58 Toluene-d8	98	7.160	7.160	(0.823)	429315	50.0000	49
	59 Toluene	91	7.219	7.219	(1.279)	567928	50.0000	58
	60 trans-1,3-Dichloropropene	75	7.432	7.432	(1.316)	213580	50.0000	57
	61 Ethyl Methacrylate	69	7.503	7.503	(1.329)	138651	50.0000	49
	62 1,1,2-Trichloroethane	97	7.633	7.633	(1.352)	125797	50.0000	54
	63 Tetrachloroethene	164	7.799	7.799	(0.897)	126512	50.0000	54
	64 1,3-Dichloropropane	76	7.823	7.823	(0.899)	207869	50.0000	51
	65 2-Hexanone	43	7.882	7.882	(0.906)	106016	50.0000	42
	66 Dibromochloromethane	129	8.071	8.071	(0.928)	164152	50.0000	54
	67 1,2-Dibromoethane	107	8.201	8.201	(0.943)	144007	50.0000	51
	69 1-Chlorohexane	91	8.675	8.675	(0.997)	198933	50.0000	50
*	68 Chlorobenzene-d5	117	8.698	8.698	(1.000)	360072	50.0000	
	70 Chlorobenzene	112	8.734	8.734	(1.004)	406271	50.0000	56
	71 1,1,1,2-Tetrachloroethane	131	8.817	8.817	(1.014)	149972	50.0000	53(Q)
	72 Ethylbenzene	106	8.840	8.840	(1.016)	224322	50.0000	55

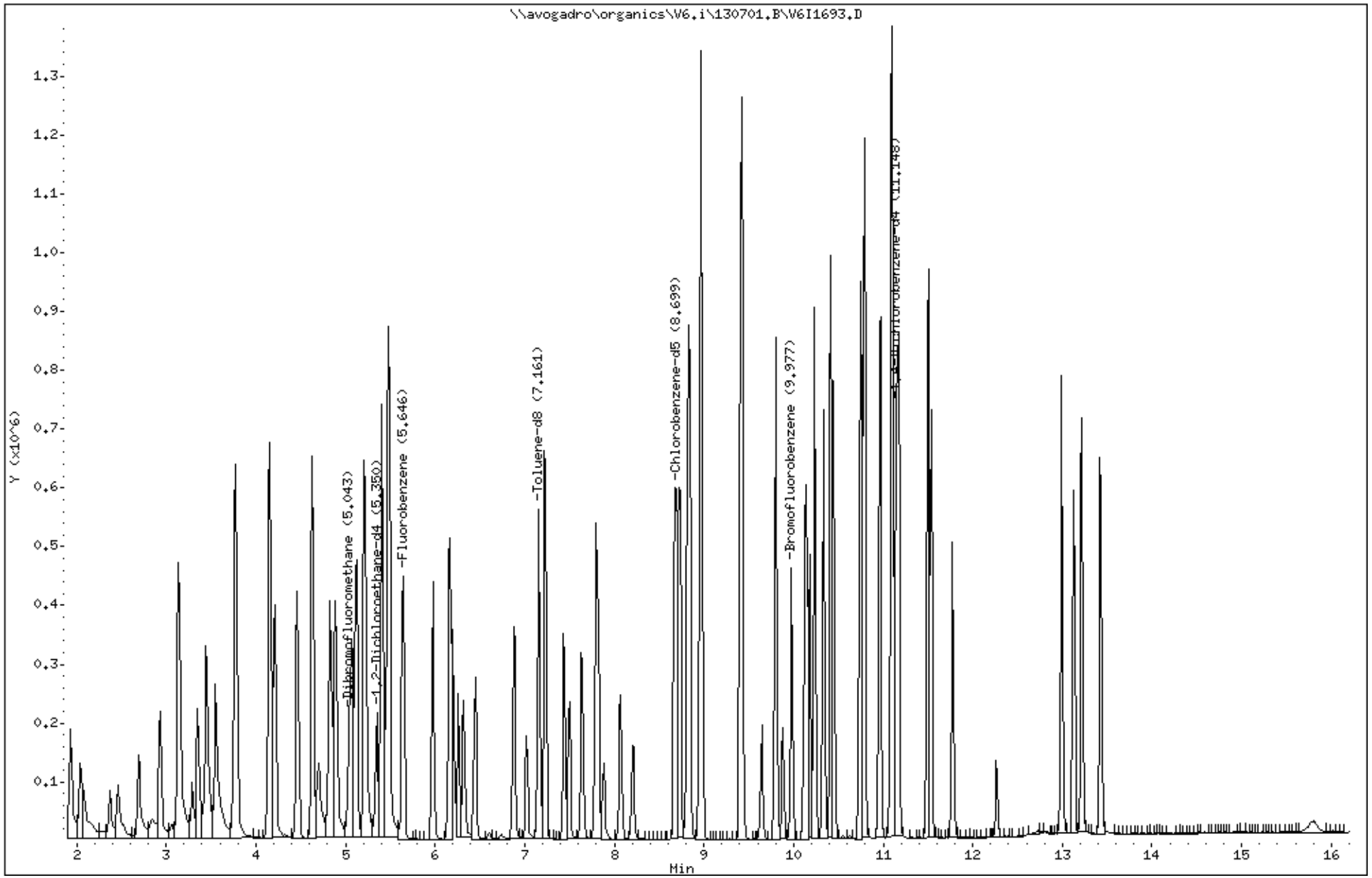
Data File: \\avogadro\organics\V6.i\130701.B\V6I1693.D
Report Date: 02-Jul-2013 11:29

								AMOUNTS	
			QUANT SIG					CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	73	m,p-Xylene	106	8.971	8.971	(1.031)	542293	100.0000	110
	74	o-Xylene	106	9.408	9.408	(1.082)	271428	50.0000	55
	75	Styrene	104	9.432	9.432	(1.084)	453360	50.0000	56
	76	Bromoform	173	9.645	9.645	(1.109)	105201	50.0000	54
	77	Isopropylbenzene	105	9.799	9.799	(1.127)	665718	50.0000	54
	78	trans-1,4-Dichloro-2-butene	75	9.882	9.882	(1.136)	50988	50.0000	50(Q)
$	79	Bromofluorobenzene	95	9.976	9.976	(1.147)	175467	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	10.118	10.118	(0.908)	170220	50.0000	48
	81	Bromobenzene	156	10.142	10.142	(0.910)	181166	50.0000	53
	82	1,2,3-Trichloropropane	75	10.177	10.177	(0.913)	209888	50.0000	49
	83	n-Propylbenzene	120	10.237	10.237	(0.918)	202903	50.0000	53
	84	2-Chlorotoluene	126	10.331	10.331	(0.927)	178709	50.0000	54
	85	1,3,5-Trimethylbenzene	105	10.414	10.414	(0.934)	561067	50.0000	53
	86	4-Chlorotoluene	126	10.450	10.450	(0.937)	185464	50.0000	53
M	94	Xylene (Total)	106				813721	150.000	160
	87	tert-Butylbenzene	119	10.745	10.745	(0.964)	672299	50.0000	53
	88	1,2,4-Trimethylbenzene	105	10.793	10.793	(0.968)	565109	50.0000	53
	89	sec-Butylbenzene	105	10.970	10.970	(0.984)	739845	50.0000	54
	90	1,3-Dichlorobenzene	146	11.089	11.089	(0.995)	341512	50.0000	54
	91	4-Isopropyltoluene	119	11.100	11.100	(0.996)	639788	50.0000	54
*	92	1,4-Dichlorobenzene-d4	152	11.148	11.148	(1.000)	193489	50.0000	
	93	1,4-Dichlorobenzene	146	11.171	11.171	(1.002)	345781	50.0000	54
	95	n-Butylbenzene	91	11.503	11.503	(1.032)	580718	50.0000	54
	96	1,2-Dichlorobenzene	146	11.538	11.538	(1.035)	323062	50.0000	54
	97	Hexachloroethane	117	11.775	11.775	(1.056)	118898	50.0000	52
	98	1,2-Dibromo-3-chloropropane	75	12.260	12.260	(1.100)	31867	50.0000	40(Q)
	141	1,3,5-Trichlorobenzene	182	12.994	12.994	(2.301)	237409	50.0000	60(A)
	99	1,2,4-Trichlorobenzene	180	12.994	12.994	(1.166)	246306	50.0000	54
	100	Hexachlorobutadiene	225	13.124	13.124	(1.177)	106246	50.0000	49
	101	Naphthalene	128	13.219	13.219	(1.186)	604163	50.0000	50
	102	1,2,3-Trichlorobenzene	180	13.432	13.432	(1.205)	235866	50.0000	53

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\130701.B\V6I1693.D
Date : 01-JUL-2013 09:41
Client ID: LCS-72542
Instrument: V6.i
Sample Info: 5ML,LCS-72542,LCS-72542,72542
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
6/28/13	M1048	01D	8260	31.94	42.59	10.7	5.0	B			
	M1048	02D		32.65	42.04	9.4		B			
	M1032	01D		NA	NA	5.2		E			
	M1032	02D		NA	NA	5.7		E			
	M1054	01D		32.41	38.53	6.1		B			
		01DMS		31.73	38.61	6.9					
		01DMSD		31.81	38.25	6.4					
6/28/13	M1054	02D	8260	32.83	39.32	6.5		B			
6/28/13	M1000	01B	5035	30.5	40.5	10.0		A			
		03B		30.5	40.4	9.9					
		05B		30.5	37.1	6.6					
		08B		30.5	35.5	5.0					
		11B		30.5	34.8	4.3					
		12B		30.5	36.6	6.1					
6/28/13	M1000	13B	5035	30.5	34.8	4.3	5.0	A			

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Logbook ID: 90.0189-06/13

Reviewed By: 6/30/13

M1032

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID		Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
6/28/13	M1070	03D[1]	SOM	26.54	31.12	~~6~~ 4.6 (m 7/1/13)	5.0	D		11:13	AED
		03D[2]		26.87	31.70	4.8				11:14	
		04C[1]		26.54	31.79	5.3				11:15	
		04C[2]		26.29	31.79	5.5				11:16	
		04D[1]		26.32	31.82	5.5				11:17	
6/28/13	M1070	04D[2]	SOM	26.78	32.04	5.3		D		11:18	AED
6/28/13	MB-72538		SOM ~~NA~~ (m 7/1/13)	NA	NA	5.0		E	MeOH	Ottawa sand #085645	m
	M1061-01D		8260	29.18	35.02	5.8		A			
6/28/13	M1061-02C		8260	29.01	34.81	5.8		A	MeOH		
7/1/13	MB-72544		SOM	NA	NA	5.0		E	DI H_2O	Ottawa sand #085645	
	(m 7/2/13) MD-~~72378~~ 72542		8260M			5.0			MeOH		
	LCD-72542					5.0					
7/1/13	~~M1072 M0720~~ M1072	01B	8260M	MS	MS	5.0	5.0	E	MeOH		m
							m	7/2/13			

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Logbook ID: 90.0189-06/13

Reviewed By: m 7/2/13

Percent Moisture and Percent Solids Report

Lab Sample ID	Client Sample ID	Analyzed	Percent Moisture	Percent Solids	Validated
M1032-01A	PC-01	07/01/2013	4.496	95.504	Yes
M1032-02A	PC-02	07/01/2013	5.263	94.737	Yes

INJECTION LOG

VOLATILES LABORATORY

METHOD:	CAL ID:	ANALYST:
INITIAL CAL:	IS/SS ID:	ARCHIVE:
COMMENTS:	ICV ID:	

SAMPLE

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260_L.S ANALYST: WL
ICAL DATE: 6/28/13

BATCH: 130628.B

Start: 28-JUN-13 12:35
End: 28-JUN-13 16:23

Comments:

Standards: ES/SS-VW130617A ___ uL
STD-VW130617B ___ uL
BHS-VW130703A ___ uL
_____ ___ uL

Reviewed By: 7-2-13 Manual Integration: NA MI Review: WL

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
V1M2620	12:35	BFBB1	BFBB1		SL												
V1M2621	13:25	VSTD005B1	VSTD005B1		SL		102	102	106					1		OK	
V1M2622	13:51	VSTD020B1	VSTD020B1		SL		104	103	105					1		OK	
V1M2623	14:16	VSTD050B1	VSTD050B1		SL		100	100	100					1		OK	
V1M2624	14:42	VSTD100B1	VSTD100B1		SL		102	101	107					1		OK	
V1M2625	15:07	VSTD200B1	VSTD200B1		SL		95	95	100					1		OK	
V1M2626	16:23	VICV050B1	VICV050B1		SL		99	99	100	100	106	100	99	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 7/2/13

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260_LS
ICAL DATE: 6/28/13

ANALYST: WL

BATCH: 130628A.B

Start: 28-JUN-13 15:33
End: 29-JUN-13 01:43

Comments:

Standards: IS/SS-VW130617A ___ uL
STD-VW130617B ___ uL
BFB-VW130617A ___ uL
_____ ___ uL

Reviewed By: 7-2-13 Manual Integration: NA MI Review: WL

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
V1M2627	15:33	BFBC1	BFBC1		SL									1		OK	
V1M2628	15:58	VSTD050C1	VSTD050C1		SL		100	100	100					1		OK	
V1M2629	16:49	LCS-72527	VLCSC1	72527	SL		105	104	102	100	100	98	95	1		OK	
V1M2630	17:14	MB-72527	VBLKC1	72527	SL		109	105	96	102	102	101	97	1		not used	
V1M2631	17:39	MB-72527	VBLKC1	72527	SL		104	102	100	103	99	101	98	1		OK	
V1M2632	18:05	M1051-01A	CONF-1	72527	SL	1	99	100	101	106	106	98	97	1		OK	
V1M2633	18:30	M1051-02A	CONF-2	72527	SL	1	91	92	91	102	103	99	98	1		OK	
V1M2634	18:56	M1051-03A	CONF-3	72527	SL	1	103	102	102	106	104	99	100	1		OK	
V1M2635	19:20	M1051-04A	CONF-4	72527	SL	1	100	100	99	104	104	100	98	1		OK	
V1M2636	19:46	M1051-05A	CONF-5	72527	SL	1	101	101	98	103	108	98	98	1		OK	
V1M2637	20:12	M1051-06A	CONF-6	72527	SL	1	104	103	101	104	108	98	97	1		OK	
V1M2638	20:38	M1051-07A	CONF-7	72527	SL	1	101	101	102	107	108	98	99	1		OK	
V1M2639	21:03	M1051-08A	CONF-8	72527	SL	1	100	101	99	104	106	96	96	1		OK	
V1M2640	21:29	M1054-01D	MOUND-1	72527	SL	1	98	99	97	106	114*	97	99	1		OK	
V1M2641	21:54	M1054-02D	DUP	72527	SL	1	100	100	105	105	119*	98	99	1		OK	
V1M2642	22:20	M1032-02B	PC-02	72527	SL	1	94	94	96	106	107	98	97	1		OK	
V1M2643	22:45	M1048-02D	EP-203	72527	SL	1	99	101	102	109	109	96	96	1		OK	
V1M2644	23:11	M0871-08A	F9 week 4	72527	SL	1	99	98	95	101	97	98	92	1		OK	
V1M2645	23:36	M0871-08B	F10 week 4	72527	SL	1	92	96	98	109	105	99	97	1		OK	
V1M2646	00:01	M1054-01DMS	MOUND-1MS	72527	SL	2	101	101	107	101	115*	99	100	1	R	OK	
V1M2647	00:27	M1054-01DMSD	MOUND-1MSD	72527	SL	3	99	101	100	102	108	96	94	1		OK	
V1M2648	00:52	BLK		72527	SL		103	100	98	101	104	99	95	1		not used	
V1M2649	01:17	M1048-01D	EP-201	72527	SL	1	101	102	106	107	113*	97	98	1		OK	
V1M2650	01:43	M1032-01B	PC-01	72527	SL	1	106	102	106	102	100	104	120*	1	E	1,2,4-TMB = 385 RR x Mod. Ro	

* - 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 7/2/13

M10322

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 6-2013

ANALYST: [illegible]

BATCH: 130620.B

Start: 20-JUN-13 16:04
End: 20-JUN-13 19:17

Comments:

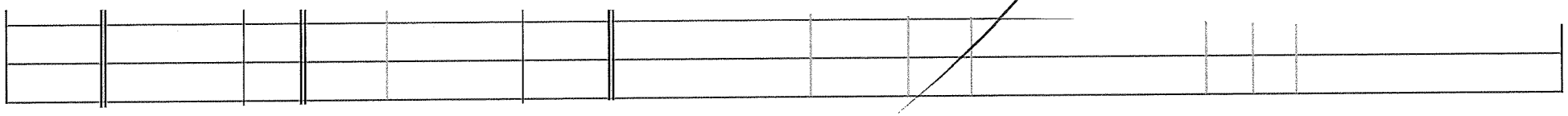
Standards: [illegible] 2 uL
[illegible] 8 uL
[illegible] ____ uL
_____ ____ uL

Reviewed By: [illegible] 6/25/13 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V6I1521	16:04	BFB6B	BFB6B		AQ									1			
V6I1522	16:28	VSTD0506B	VSTD0506B		AQ		100	100	100					1			
V6I1523	16:52	VSTD0206B	VSTD0206B		AQ		93	95	96					1			
V6I1524	17:16	VSTD0056B	VSTD0056B		AQ		98	105	115					1			
V6I1526	18:05	VSTD0016B	VSTD0016B		AQ		92	99	108					1		MI_5_98	
V6I1527	18:29	VSTD2006B	VSTD2006B		AQ		106	109	118					1			
V6I1528	18:53	VSTD1006B	VSTD1006B		AQ		110	112	122					1			
V6I1529	19:17	VICV0506B	VICV0506B		AQ		109	112	127	101	98	99	103	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

[illegible] 6-2013



Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory

METHOD: 8260W/MS ANALYST: JM
ICAL DATE: 6-26-13

BATCH: 130701.B

Start: 01-JUL-13 08:02
End: 01-JUL-13 19:12

Comments:

Standards: RPB MW130703A 2 uL
IS/SS MW130608A 8 uL
SIB MW130608A 2 uL
_____ ___ uL

Reviewed By: M 7/2/13 Manual Integration: MB MI Review: M

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
V6I1690	08:02	BFB6I	BFB6I		AQ									1			
V6I1691	08:18	VSTD0506I	VSTD0506I		AQ		100	100	100					1			
V6I1692	08:42	LCS-72541	LCS-72541	72541	AQ		102	98	99	100	100	97	101	1	ER		
V6I1693	09:41	LCS-72542	LCS-72542	72542	SL		119	122	120	106	107	98	101	1	ER		
V6I1694	10:05	MB-72541	MB-72541	72541	AQ		80	89	87	116*	120	94	105	1			
V6I1695	10:28	MB-72542	MB-72542	72542	SL		104	110	112	113	113*	96	103	1			
V6I1696	10:52	MB-72541	MB-72541	72541	AQ		99	105	107	114	108	98	104	1		BLK USED	
V6I1697	11:16	M1003-01E	EP-203	72541	AQ	1	99	104	101	108	102	96	101	1			7
V6I1698	11:40	M1003-02E	MR-114	72541	AQ	1	99	110	114	118*	119	95	105	1			7
V6I1699	12:04	M1003-03E	DUP-01	72541	AQ	1	101	109	111	116*	118	96	104	1			7
V6I1700	12:27	M1061-02C	JT-SB-01-5.0-5.	72542	SL	1	101	101	107	108	112*	98	108	1		NAPPA-P3	
V6I1701	12:51	M1061-01D	JT-SB-01-11.0-1	72542	SL	1	104	115	121	117	122*	95	105	10		NAPPA-iL4	
V6I1702	13:15	M1032-01B	PC-01	72542	SL	1	125	122	127	94	104	97	102	1		TOAH TCB	
V6I1703	13:39	M1060-02A	MW-4S-062513	72541	AQ	1	104	109	112	112	107	96	105	1			7
V6I1704	14:02	M1060-08A	EW-2.50-062613	72541	AQ	1	109	115	114	112	112	93	104	1			
V6I1705	14:26	M1060-09A	EW-4.5-062613	72541	AQ	1	109	118	124	116*	110	93	105	1			
V6I1706	14:50	M1060-10A	IRM-2I-062613	72541	AQ	1	115	121	122	108	106	96	103	1			
V6I1707	15:14	M1060-11A	TOWN WELL-06261	72541	AQ	1	108	115	116	105	113	80*	105	1			
V6I1708	15:38	M1060-12A	IRM-1-062613	72541	AQ	1	89	98	99	113	128*	88	107	1			
V6I1709	16:02	M1060-13A	GW-DUP-062613	72541	AQ	1	117	121	126	105	106	94	103	1			
V6I1710	16:25	M1066-01A	EFFLUENT 17	72548	AQ	1	91	97	102	110	114	95	106	1			
V6I1711	16:49	M1053-01A	AMSF-MW-3S-W-06	72541	AQ	1	98	104	111	112	119	93	107	1			
V6I1712	17:13	M1053-02A	AMSF-TB-0620201	72541	AQ	1	109	114	122	114	112	95	108	1			
V6I1713	17:36	M1053-03A	AMSF-MW-10-W-06	72541	AQ	1	112	118	127	112	108	95	104	1			
V6I1714	18:00	M1053-04A	AMSF-MW-26-W-06	72541	AQ	1	102	105	109	111	113	97	104	1			
V6I1715	18:24	M1060-02AMS	MW-4S-062513MS	72541	AQ	2	84	89	96	111	127*	90	106	1	ER		
V6I1716	18:48	M1060-02AMSD	MW-4S-062513MSD	72541	AQ	3	107	103	105	101	106	98	104	1	ER		7
V6I1717	19:12	VBLK	VBLK		AQ		64	71	68	122*	145*	90	103	1	E	MS USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
F - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

7-2-13

M1032

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R23
6/25/13	M1028	SAIC	01	AED		H	R10	
	M1020	EPA	13, 15, 17, 18			M	R13	
	M1029	EPA	01, 03, 05, 07, 08, 10, 13, 15, 16, 18			M	R13	
	M1031	ENE	01, 02			H	R10	
	M1030	TRC	01, 02			H	R10	
	M1009	EPA	11 - 20			H	R13	
	M1035	EPA	01 - 08			H	R13	
	M1023	EPA	02 - 15			T	R4	
	M1020	EPA	12, 14, 16, 19, 20			E	F13	
6/25/13	M1029	EPA	02, 04, 06, 09, 11, 12, 14, 17	AED		E	F13	
6/25/13	M1037	Land	01	VEB		US	R3	
	M1032	EA	01, 02			US	R3	
	5010292	RIRC	01			H	R10	
6/25/13	M1035	EPA	09 - 20	VEB		H	R13	

Logbook ID 90.0191-01/13

Reviewed By: 6-28-13

"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

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : ARCADIS U.S., Inc.

Project: NYSDEC Former Plaza Cleaners

Laboratory Workorder / SDG #: M1032

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8270D

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 5973

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits 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-72594 in batch 72594, recovery is below criteria for 2,4-Dimethylphenol at 20% with criteria of (30-105).

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

(LCSD-72594), Relative Percent Difference is greater than RPD limit for 2,4-Dimethylphenol, 3,3´-Dichlorobenzidine, 4-Chloroaniline.

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

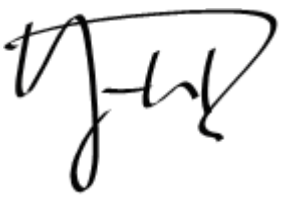
Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram 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 integrations were performed on the following:

SSTD0804A 2,4,5-Trichlorophenol due to M6

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



Signed:_____ _____

Date:_____7/11/2013_____

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

2K - FORM II SV-4

SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	PC-01	76	82	100	76	79	95			0
02	PC-02	75	78	100	74	77	83			0
03	MB-72594	86	91	112	80	72	50			0
04	LCS-72594	83	86	102	83	84	87			0
05	LCSD-72594	83	86	104	83	87	96			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(35-100)
SDMC2	(FBP) = 2-Fluorobiphenyl	(45-105)
SDMC3	(TPH) = Terphenyl-d14	(30-125)
SDMC4	(PHL) = Phenol-d5	(40-100)
SDMC5	(2FP) = 2-Fluorophenol	(35-105)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(35-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som13.06.03.A

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCS-72594 LCS Lot No.: A092773

Date Extracted: 07/05/2013 Date Analyzed (1): 07/11/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	3333.0000	0.0000	2551.2111	77		40 - 100
Bis(2-chloroethyl)ether	3333.0000	0.0000	2771.3997	83		40 - 105
2-Chlorophenol	3333.0000	0.0000	2738.4823	82		45 - 105
1,3-Dichlorobenzene	3333.0000	0.0000	2672.3755	80		40 - 100
1,4-Dichlorobenzene	3333.0000	0.0000	2713.2813	81		35 - 105
1,2-Dichlorobenzene	3333.0000	0.0000	2727.1449	82		45 - 95
2-Methylphenol	3333.0000	0.0000	2223.1104	67		40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	0.0000	2783.5043	84		20 - 115
4-Methylphenol	3333.0000	0.0000	2056.4113	62		40 - 105
N-Nitroso-di-n-propylamine	3333.0000	0.0000	2456.0830	74		40 - 115
Hexachloroethane	3333.0000	0.0000	2680.7214	80		35 - 110
Nitrobenzene	3333.0000	0.0000	2796.6520	84		40 - 115
Isophorone	3333.0000	0.0000	2609.2565	78		45 - 110
2-Nitrophenol	3333.0000	0.0000	2797.0917	84		40 - 110
2,4-Dimethylphenol	3333.0000	0.0000	663.0835	20	*	30 - 105
2,4-Dichlorophenol	3333.0000	0.0000	2699.6743	81		45 - 110
1,2,4-Trichlorobenzene	3333.0000	0.0000	2720.4083	82		45 - 110
Naphthalene	3333.0000	0.0000	2725.3338	82		40 - 105
4-Chloroaniline	3333.0000	0.0000	872.6189	26		10 - 100
Bis(2-chloroethoxy)methane	3333.0000	0.0000	2726.7825	82		45 - 110
Hexachlorobutadiene	3333.0000	0.0000	2799.9746	84		40 - 115
4-Chloro-3-methylphenol	3333.0000	0.0000	2542.1482	76		45 - 115
2-Methylnaphthalene	3333.0000	0.0000	2574.3674	77		45 - 105
Hexachlorocyclopentadiene	3333.0000	0.0000	2900.3897	87		8 - 148
2,4,6-Trichlorophenol	3333.0000	0.0000	2789.0686	84		45 - 110
2,4,5-Trichlorophenol	3333.0000	0.0000	2867.0385	86		50 - 110
2-Chloronaphthalene	3333.0000	0.0000	2847.1631	85		45 - 105
2-Nitroaniline	3333.0000	0.0000	2777.0496	83		45 - 120
Dimethylphthalate	3333.0000	0.0000	2724.4629	82		50 - 110
Acenaphthylene	3333.0000	0.0000	2680.6451	80		45 - 105
2,6-Dinitrotoluene	3333.0000	0.0000	2777.0878	83		50 - 110
3-Nitroaniline	3333.0000	0.0000	1808.8255	54		25 - 110
Acenaphthene	3333.0000	0.0000	2749.6452	82		45 - 110
2,4-Dinitrophenol	3333.0000	0.0000	3258.6647	98		15 - 130
4-Nitrophenol	3333.0000	0.0000	2703.6321	81		15 - 140
Dibenzofuran	3333.0000	0.0000	2789.4529	84		50 - 105
2,4-Dinitrotoluene	3333.0000	0.0000	2802.3963	84		50 - 115
Diethylphthalate	3333.0000	0.0000	2734.8477	82		50 - 115
4-Chlorophenyl-phenylether	3333.0000	0.0000	2748.7317	82		45 - 110
Fluorene	3333.0000	0.0000	2724.6385	82		50 - 110
4-Nitroaniline	3333.0000	0.0000	1833.3472	55		35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	0.0000	3138.0318	94		30 - 135
N-Nitrosodiphenylamine	3333.0000	0.0000	2550.1773	77		50 - 115
4-Bromophenyl-phenylether	3333.0000	0.0000	2871.8651	86		45 - 115

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCS-72594 LCS Lot No.: A092773

Date Extracted: 07/05/2013 Date Analyzed (1): 07/11/2013

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	3333.0000	0.0000	2872.7222	86		45 - 120
Pentachlorophenol	3333.0000	0.0000	2937.4665	88		25 - 120
Phenanthrene	3333.0000	0.0000	2792.3731	84		50 - 110
Anthracene	3333.0000	0.0000	2631.0612	79		55 - 105
Carbazole	3333.0000	0.0000	2685.7831	81		45 - 115
Di-n-butylphthalate	3333.0000	0.0000	2780.4396	83		55 - 110
Fluoranthene	3333.0000	0.0000	2719.6368	82		55 - 115
Pyrene	3333.0000	0.0000	3035.6565	91		45 - 125
Butylbenzylphthalate	3333.0000	0.0000	3025.2110	91		50 - 125
3,3´-Dichlorobenzidine	3333.0000	0.0000	907.9063	27		10 - 130
Benzo(a)anthracene	3333.0000	0.0000	2856.5134	86		50 - 110
Chrysene	3333.0000	0.0000	2985.5409	90		55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	0.0000	2955.9644	89		45 - 125
Di-n-octylphthalate	3333.0000	0.0000	3161.9820	95		40 - 130
Benzo(b)fluoranthene	3333.0000	0.0000	3029.4887	91		45 - 115
Benzo(k)fluoranthene	3333.0000	0.0000	3022.6077	91		45 - 125
Benzo(a)pyrene	3333.0000	0.0000	2698.2735	81		50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	0.0000	2764.6475	83		40 - 120
Dibenzo(a,h)anthracene	3333.0000	0.0000	2816.9835	85		40 - 125
Benzo(g,h,i)perylene	3333.0000	0.0000	2745.3731	82		40 - 125

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

* Values outside of QC limits

Spike Recovery: 1 out of 64 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCSD-72594 LCS Lot No.: A092773

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	3333.0000	2714.9617	81		5		40	40 - 100
Bis(2-chloroethyl)ether	3333.0000	2785.3039	84		1		40	40 - 105
2-Chlorophenol	3333.0000	2837.1734	85		4		40	45 - 105
1,3-Dichlorobenzene	3333.0000	2658.7680	80		0		40	40 - 100
1,4-Dichlorobenzene	3333.0000	2689.8412	81		0		40	35 - 105
1,2-Dichlorobenzene	3333.0000	2737.8110	82		0		40	45 - 95
2-Methylphenol	3333.0000	2688.2962	81		19		40	40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	2687.0653	81		4		40	20 - 115
4-Methylphenol	3333.0000	2486.7153	75		19		40	40 - 105
N-Nitroso-di-n-propylamine	3333.0000	2717.8370	82		10		40	40 - 115
Hexachloroethane	3333.0000	2661.6894	80		0		40	35 - 110
Nitrobenzene	3333.0000	2791.6198	84		0		40	40 - 115
Isophorone	3333.0000	2635.8656	79		1		40	45 - 110
2-Nitrophenol	3333.0000	2801.7166	84		0		40	40 - 110
2,4-Dimethylphenol	3333.0000	2259.2660	68		109	*	40	30 - 105
2,4-Dichlorophenol	3333.0000	2814.1806	84		4		40	45 - 110
1,2,4-Trichlorobenzene	3333.0000	2725.2965	82		0		40	45 - 110
Naphthalene	3333.0000	2750.8008	83		1		40	40 - 105
4-Chloroaniline	3333.0000	1453.7869	44		51	*	40	10 - 100
Bis(2-chloroethoxy)methane	3333.0000	2759.4419	83		1		40	45 - 110
Hexachlorobutadiene	3333.0000	2825.1432	85		1		40	40 - 115
4-Chloro-3-methylphenol	3333.0000	2663.4109	80		5		40	45 - 115
2-Methylnaphthalene	3333.0000	2600.5812	78		1		40	45 - 105
Hexachlorocyclopentadiene	3333.0000	3505.1388	105		19		40	8 - 148
2,4,6-Trichlorophenol	3333.0000	3042.9481	91		8		40	45 - 110
2,4,5-Trichlorophenol	3333.0000	2970.4322	89		3		40	50 - 110
2-Chloronaphthalene	3333.0000	2930.2173	88		3		40	45 - 105
2-Nitroaniline	3333.0000	2859.0408	86		4		40	45 - 120
Dimethylphthalate	3333.0000	2832.1351	85		4		40	50 - 110
Acenaphthylene	3333.0000	2817.0093	85		6		40	45 - 105
2,6-Dinitrotoluene	3333.0000	2857.1198	86		4		40	50 - 110
3-Nitroaniline	3333.0000	2027.1033	61		12		40	25 - 110
Acenaphthene	3333.0000	2854.6924	86		5		40	45 - 110
2,4-Dinitrophenol	3333.0000	3404.5238	102		4		40	15 - 130
4-Nitrophenol	3333.0000	2714.5698	81		0		40	15 - 140
Dibenzofuran	3333.0000	2859.2596	86		2		40	50 - 105
2,4-Dinitrotoluene	3333.0000	2869.9075	86		2		40	50 - 115
Diethylphthalate	3333.0000	2784.5711	84		2		40	50 - 115
4-Chlorophenyl-phenylether	3333.0000	2857.5288	86		5		40	45 - 110
Fluorene	3333.0000	2809.2114	84		2		40	50 - 110
4-Nitroaniline	3333.0000	2227.1429	67		20		40	35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	3269.1707	98		4		40	30 - 135
N-Nitrosodiphenylamine	3333.0000	2898.4385	87		12		40	50 - 115
4-Bromophenyl-phenylether	3333.0000	2970.4526	89		3		40	45 - 115
Hexachlorobenzene	3333.0000	2980.5477	89		3		40	45 - 120
Pentachlorophenol	3333.0000	3019.8420	91		3		40	25 - 120

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab Sample ID: LCSD-72594 LCS Lot No.: A092773

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenanthrene	3333.0000	2852.2955	86		2		40	50 - 110
Anthracene	3333.0000	2827.0665	85		7		40	55 - 105
Carbazole	3333.0000	2804.8087	84		4		40	45 - 115
Di-n-butylphthalate	3333.0000	2836.5138	85		2		40	55 - 110
Fluoranthene	3333.0000	2767.0553	83		1		40	55 - 115
Pyrene	3333.0000	3135.6926	94		3		40	45 - 125
Butylbenzylphthalate	3333.0000	3056.6979	92		1		40	50 - 125
3,3´-Dichlorobenzidine	3333.0000	2050.8153	62		79	*	40	10 - 130
Benzo(a)anthracene	3333.0000	2963.1804	89		3		40	50 - 110
Chrysene	3333.0000	3066.8759	92		2		40	55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	3024.7938	91		2		40	45 - 125
Di-n-octylphthalate	3333.0000	3082.8574	92		3		40	40 - 130
Benzo(b)fluoranthene	3333.0000	3014.7233	90		1		40	45 - 115
Benzo(k)fluoranthene	3333.0000	3009.9074	90		1		40	45 - 125
Benzo(a)pyrene	3333.0000	2855.3220	86		6		40	50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	2768.0363	83		0		40	40 - 120
Dibenzo(a,h)anthracene	3333.0000	2835.3125	85		0		40	40 - 125
Benzo(g,h,i)perylene	3333.0000	2753.8908	83		1		40	40 - 125

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

* Values outside of QC limits

RPD: 3 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: S3I5682A.D Lab Sample ID: MB-72594

Instrument ID: S3 Date Extracted: 07/05/2013

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 07/11/2013

Level: (LOW/MED) LOW Time Analyzed: 13:16

Extraction: (Type) SONC GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	PC-01	M1032-01A	S3I5664.D	07/10/2013
02	PC-02	M1032-02A	S3I5665.D	07/10/2013
03	LCS-72594	LCS-72594	S3I5683B.D	07/11/2013
04	LCSD-72594	LCSD-72594	S3I5684.D	07/11/2013

COMMENTS:

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP3Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: S3I5620.D DFTPP Injection Date: 07/09/2013

Instrument ID: S3 DFTPP Injection Time: 13:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	29.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	33.0
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	10.0 - 80.0% of mass 198	41.8
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 60.0% of mass 198	29.6
365	Greater than 1.0% of mass 198	4.0
441	Present, but less than mass 443	13.1
442	50.0 - 100% of mass 198	91.2
443	15.0 - 24.0% of mass 442	17.7 (19.5)2

1 - Value is % mass 69 2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253Z	SSTD0253Z	S3I5621B.D	07/09/2013	14:36
02	SSTD0803Z	SSTD0803Z	S3I5622.D	07/09/2013	15:05
03	SSTD0053Z	SSTD0053Z	S3I5623.D	07/09/2013	15:34
04	SSTD0603Z	SSTD0603Z	S3I5624.D	07/09/2013	16:03
05	SSTD0103Z	SSTD0103Z	S3I5625.D	07/09/2013	16:31
06	SSTD0403Z	SSTD0403Z	S3I5626.D	07/09/2013	17:00

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP3C

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: S3I5650D.D DFTPP Injection Date: 07/10/2013

Instrument ID: S3 DFTPP Injection Time: 16:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	31.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	34.2
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	10.0 - 80.0% of mass 198	43.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 60.0% of mass 198	28.7
365	Greater than 1.0% of mass 198	3.8
441	Present, but less than mass 443	11.5
442	50.0 - 100% of mass 198	79.4
443	15.0 - 24.0% of mass 442	15.2 (19.2)2

1 - Value is % mass 69 2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253C	SSTD0253C	S3I5651.D	07/10/2013	17:09
02	PC-01	M1032-01A	S3I5664.D	07/10/2013	23:01
03	PC-02	M1032-02A	S3I5665.D	07/10/2013	23:28

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPINE (DFTPP)

CLIENT SAMPLE NO.
DFTPP3D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Lab File ID: S3I5680.D DFTPP Injection Date: 07/11/2013

Instrument ID: S3 DFTPP Injection Time: 10:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	37.7
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	10.0 - 80.0% of mass 198	44.1
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	28.2
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than mass 443	11.6
442	50.0 - 100% of mass 198	80.1
443	15.0 - 24.0% of mass 442	16.2 (20.2)2

1 - Value is % mass 69 2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253D	SSTD0253D	S3I5681B.D	07/11/2013	12:50
02	MB-72594	MB-72594	S3I5682A.D	07/11/2013	13:16
03	LCS-72594	LCS-72594	S3I5683B.D	07/11/2013	13:42
04	LCSD-72594	LCSD-72594	S3I5684.D	07/11/2013	14:09

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253C Date Analyzed: 07/10/2013

Lab File ID (Standard): S3I5651.D Time Analyzed: 17:09

Instrument ID: S3

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	40584		4.332		151888		6.03		105111		7.793	
	UPPER LIMIT	81168		4.832		303776		6.53		210222		8.293	
	LOWER LIMIT	20292		3.832		75944		5.53		52556		7.293	
	SAMPLE NO.												
01	PC-01	80117		4.330		287846		6.029		188131		7.792	
02	PC-02	78199		4.327		280507		6.026		182967		7.789	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

EPA Sample No.(SSTD020##) SSTD0253C Date Analyzed: 07/10/2013

Lab File ID (Standard): S3I5651.D Time Analyzed: 17:09

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	218948		9.081		285896		11.495		283512		13.525	
	UPPER LIMIT	437896		9.581		571792		11.995		567024		14.025	
	LOWER LIMIT	109474		8.581		142948		10.995		141756		13.025	
	SAMPLE NO.												
01	PC-01	380195		9.080		458281		11.478		418921		13.498	
02	PC-02	362891		9.077		428271		11.448		387048		13.462	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253D Date Analyzed: 07/11/2013

Lab File ID (Standard): S3I5681B.D Time Analyzed: 12:50

Instrument ID: S3

		IS1 (DCB) AREA	#	IS1 (DCB) RT	#	IS2 (NPT) AREA	#	IS2 (NPT) RT	#	IS3 (ANT) AREA	#	IS3 (ANT) RT	#
	12 HOUR STD	58690		4.295		221768		6.004		151883		7.767	
	UPPER LIMIT	117380		4.795		443536		6.504		303766		8.267	
	LOWER LIMIT	29345		3.795		110884		5.504		75942		7.267	
	SAMPLE NO.												
01	MB-72594	92650		4.292		329831		6.002		209826		7.765	
02	LCS-72594	85748		4.297		309726		6.007		197622		7.770	
03	LCSD-72594	94639		4.298		342427		6.008		215621		7.771	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

EPA Sample No.(SSTD020##) SSTD0253D Date Analyzed: 07/11/2013

Lab File ID (Standard): S3I5681B.D Time Analyzed: 12:50

Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	309350		9.076		391224		11.624		384223		13.654	
	UPPER LIMIT	618700		9.576		782448		12.124		768446		14.154	
	LOWER LIMIT	154675		8.576		195612		11.124		192112		13.154	
	SAMPLE NO.												
01	MB-72594	410203		9.063		474921		11.568		432461		13.588	
02	LCS-72594	385359		9.062		457711		11.525		413774		13.539	
03	LCSD-72594	416579		9.069		490611		11.590		465230		13.610	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PC-01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-01A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S3I5664.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 4.5 Decanted: (Y/N) N Date Received: 06/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/10/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	Bis(2-chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2´-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	150	J
106-47-8	4-Chloroaniline	340	U
111-91-1	Bis(2-chloroethoxy)methane	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	2100	
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	680	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	680	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	680	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	680	U
100-02-7	4-Nitrophenol	680	U
132-64-9	Dibenzofuran	340	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PC-01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-01A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S3I5664.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 4.5 Decanted: (Y/N) N Date Received: 06/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/10/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	N-Nitrosodiphenylamine	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	560	
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3´-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	Bis(2-ethylhexyl)phthalate	79	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D
Report Date: 11-Jul-2013 10:00

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130710B.B\S3I5664.D
Lab Smp Id: M1032-01A Client Smp ID: PC-01
Inj Date : 10-JUL-2013 23:01
Operator : PK   SRC: LIMS Inst ID: S3.i
Smp Info : M1032-01A,,72594
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130710B.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 10:00 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.400	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

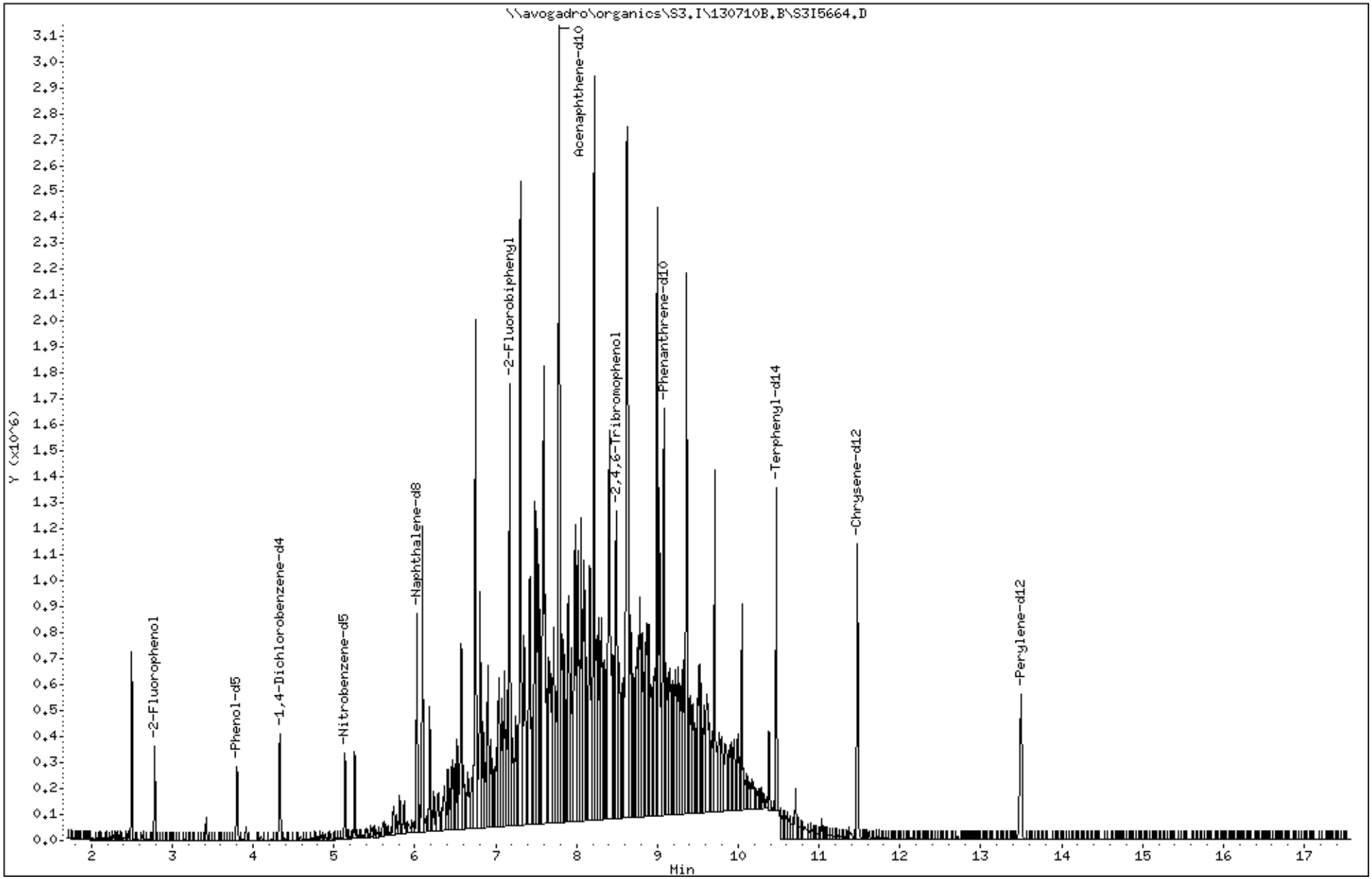
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	3 2-Fluorophenol	112	2.786	2.782	(0.643)	95495	39.4554	2600
$	5 Phenol-d5	99	3.801	3.808	(0.878)	120668	37.8349	2400
*	12 1,4-Dichlorobenzene-d4	152	4.330	4.331	(1.000)	80117	40.0000	
$	22 Nitrobenzene-d5	82	5.137	5.138	(0.852)	104881	37.8306	2400
*	31 Naphthalene-d8	136	6.029	6.030	(1.000)	287846	40.0000	
	32 Naphthalene	128	6.050	6.051	(1.004)	16860	2.27711	150(a)
	36 2-Methylnaphthalene	142	6.803	6.805	(1.128)	162090	30.5771	2000(H)
$	41 2-Fluorobiphenyl	172	7.177	7.179	(0.921)	248142	41.0768	2700
*	48 Acenaphthene-d10	164	7.792	7.793	(1.000)	188131	40.0000	
$	60 2,4,6-Tribromophenol	330	8.491	8.493	(0.935)	47077	47.7380	3100
*	64 Phenanthrene-d10	188	9.079	9.080	(1.000)	380195	40.0000	
	65 Phenanthrene	178	9.100	9.102	(1.002)	75624	8.30483	540(a)
$	72 Terphenyl-d14	244	10.473	10.485	(0.913)	373653	50.0096	3200
*	76 Chrysene-d12	240	11.478	11.495	(1.000)	458281	40.0000	
	78 bis(2-Ethylhexyl)phthalate	149	11.499	11.522	(1.002)	7068	1.16916	76(a)
*	83 Perylene-d12	264	13.497	13.525	(1.000)	418921	40.0000	

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D
Report Date: 11-Jul-2013 10:00

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D
Date : 10-JUL-2013 23:01
Client ID: PC-01
Instrument: S3.i
Sample Info: M1032-01A,,72594
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D

Date : 10-JUL-2013 23:01

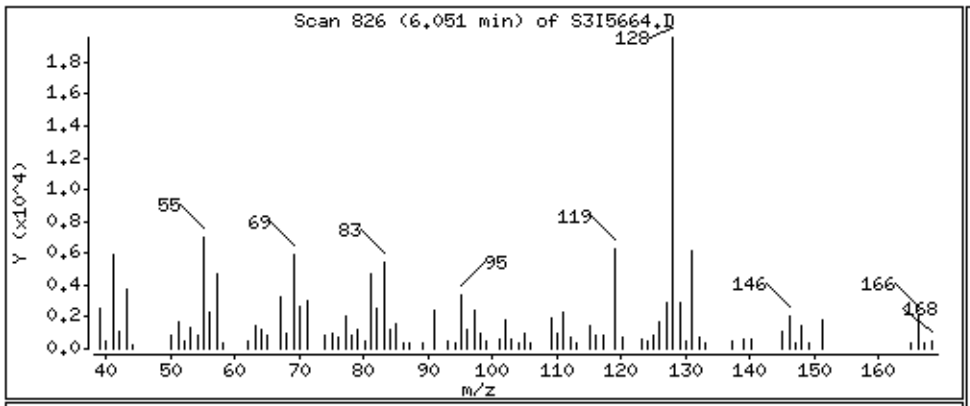
Client ID: PC-01 Instrument: S3.i

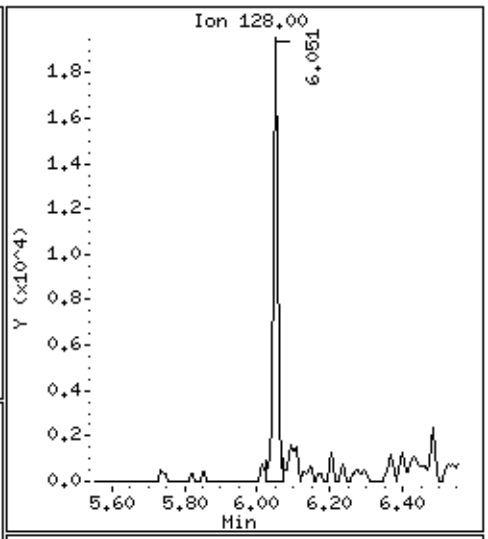
Sample Info: M1032-01A,,72594

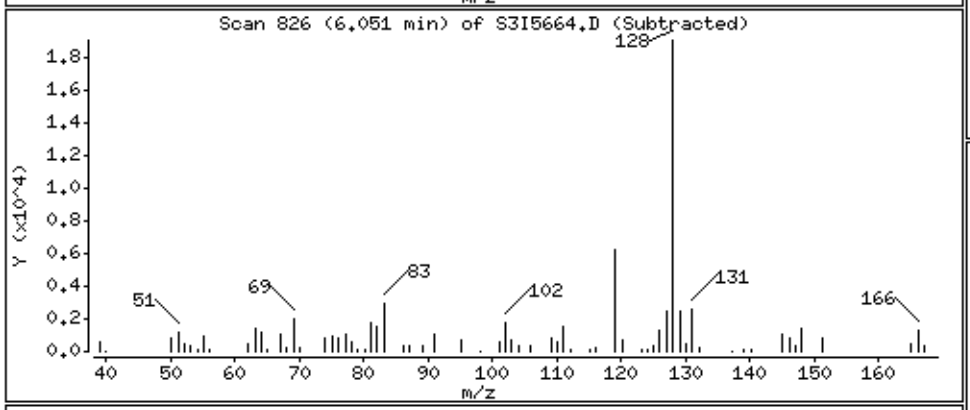
Volume Injected (uL): 1.0 Operator: PK SRC: LIMS

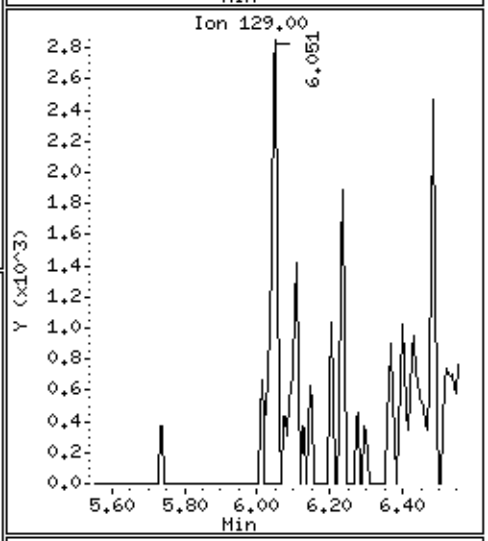
Column phase: Rxi-5Sil MS Column diameter: 0.25

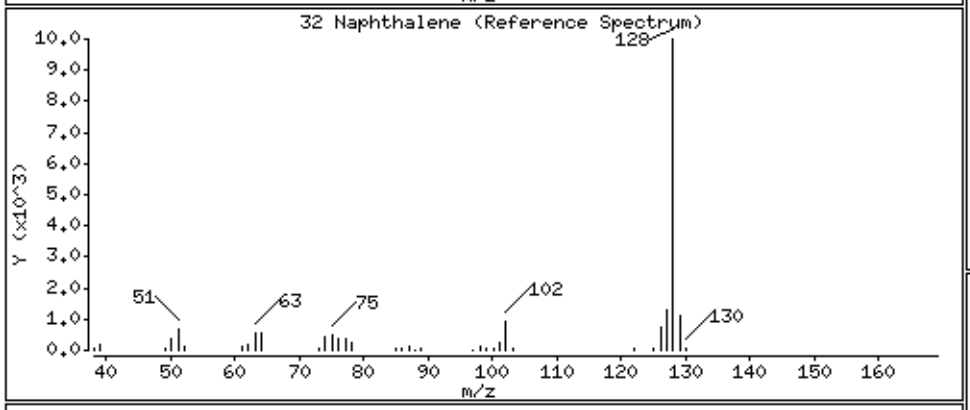
32 Naphthalene Concentration: 150 ug/Kg

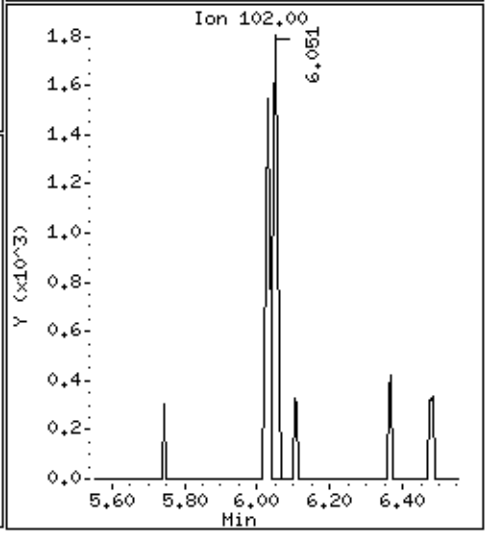


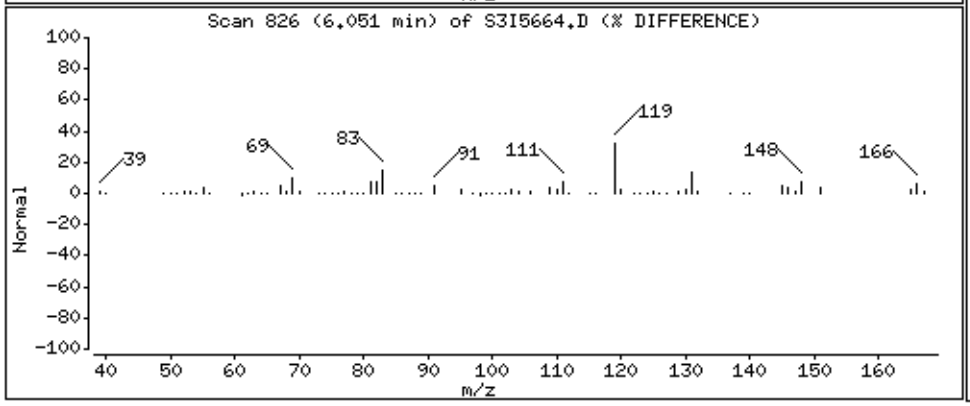












Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D

Date : 10-JUL-2013 23:01

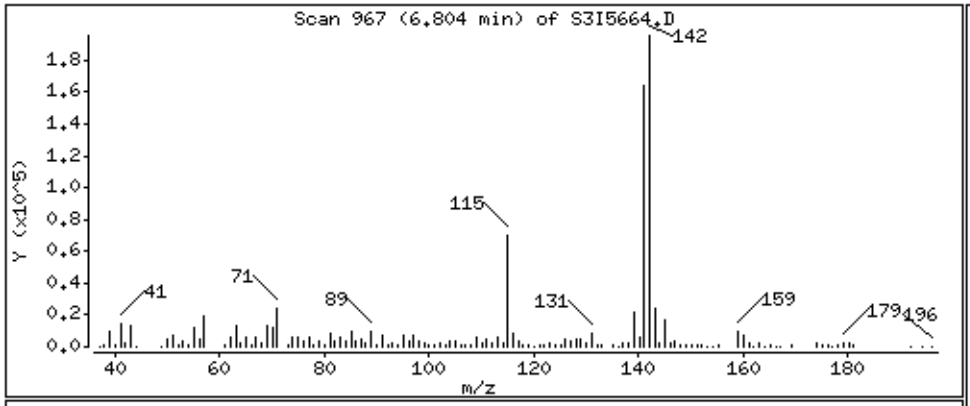
Client ID: PC-01 Instrument: S3.i

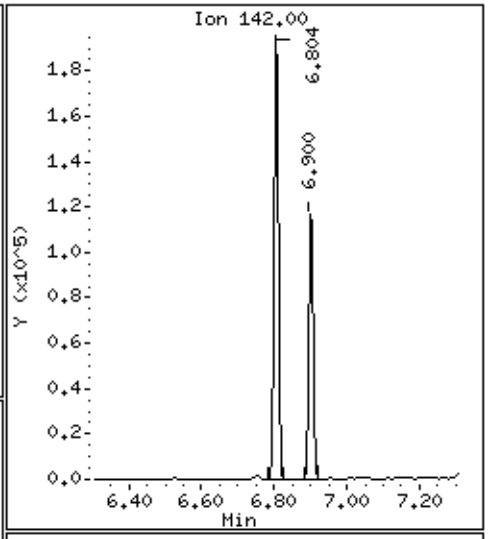
Sample Info: M1032-01A,,72594

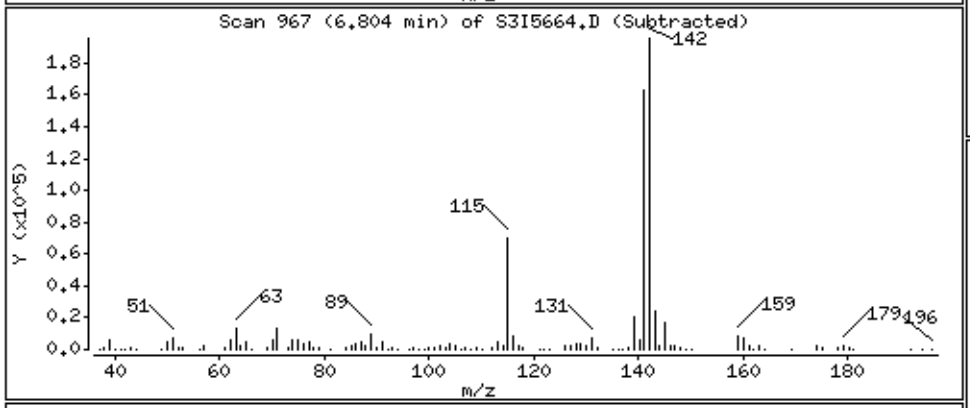
Volume Injected (uL): 1.0 Operator: PK SRC: LIMS

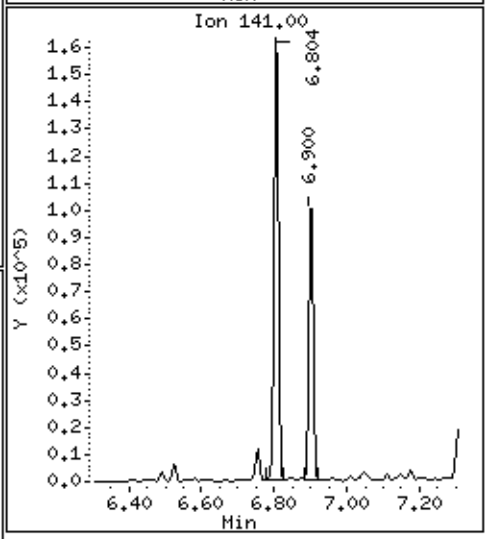
Column phase: Rxi-5Sil MS Column diameter: 0.25

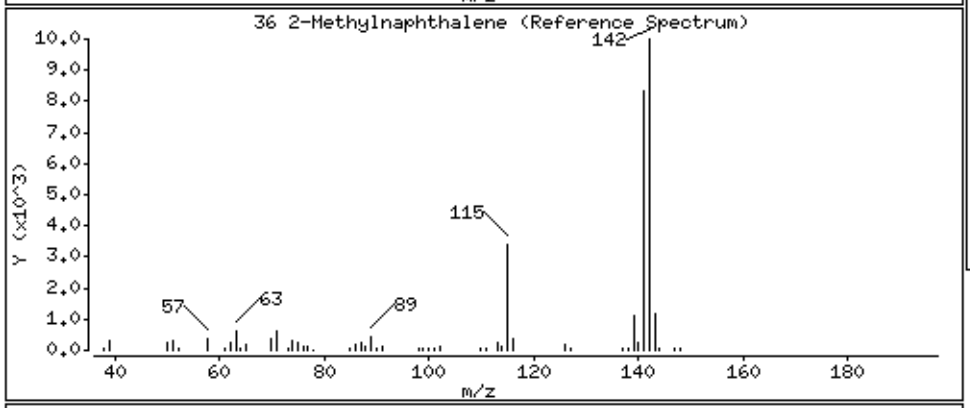
36 2-Methylnaphthalene Concentration: 2000 ug/Kg

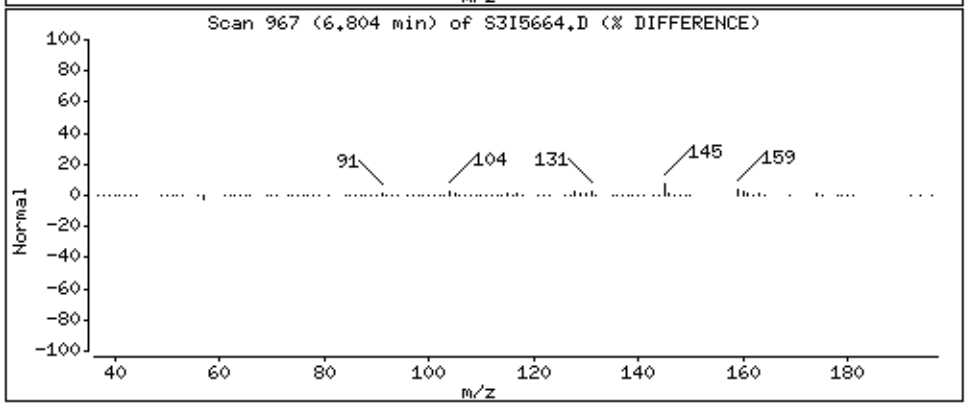












Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D

Date : 10-JUL-2013 23:01

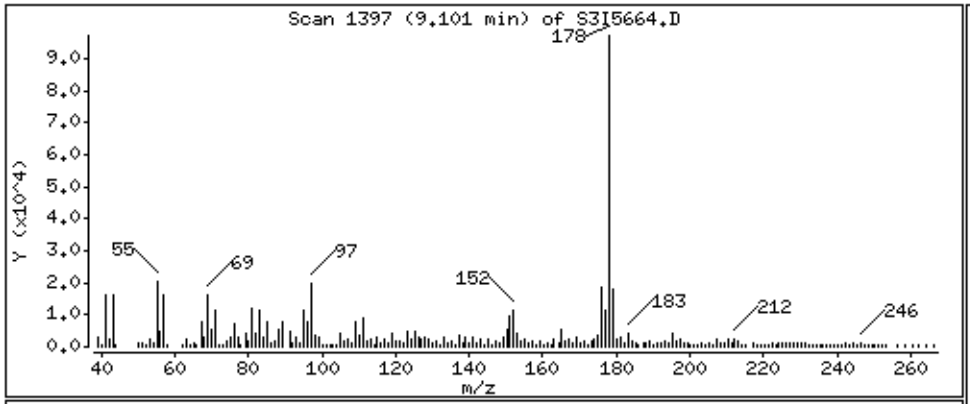
Client ID: PC-01 Instrument: S3.i

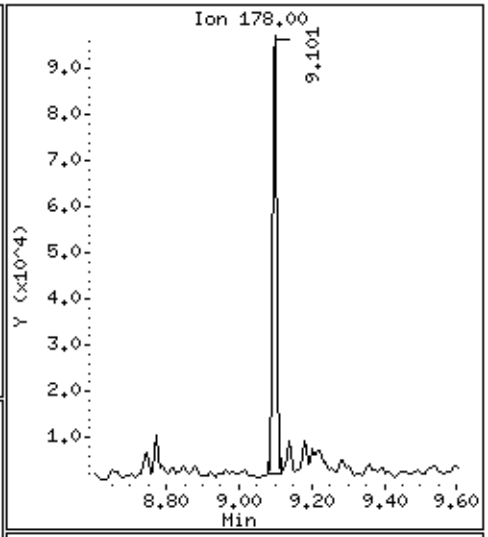
Sample Info: M1032-01A,,72594

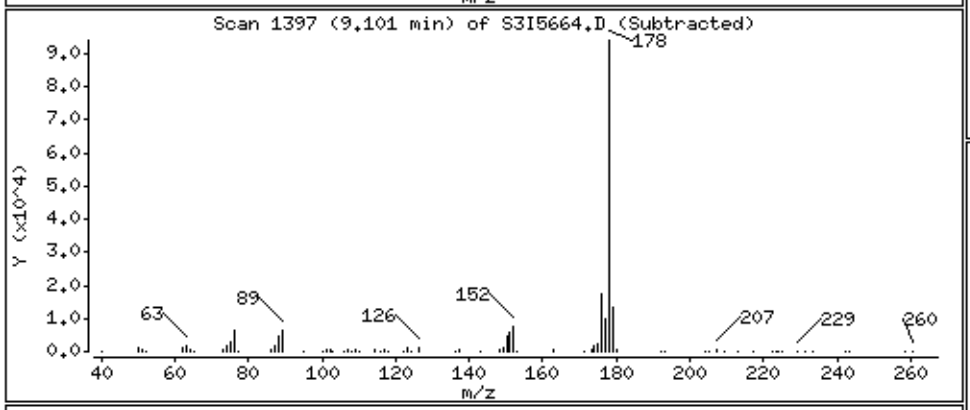
Volume Injected (uL): 1.0 Operator: PK SRC: LIMS

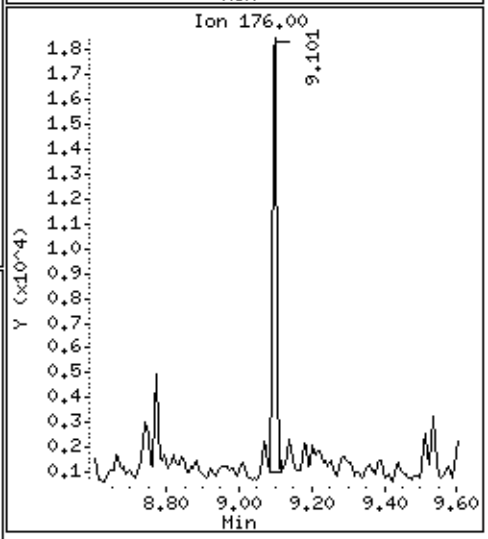
Column phase: Rxi-5Sil MS Column diameter: 0.25

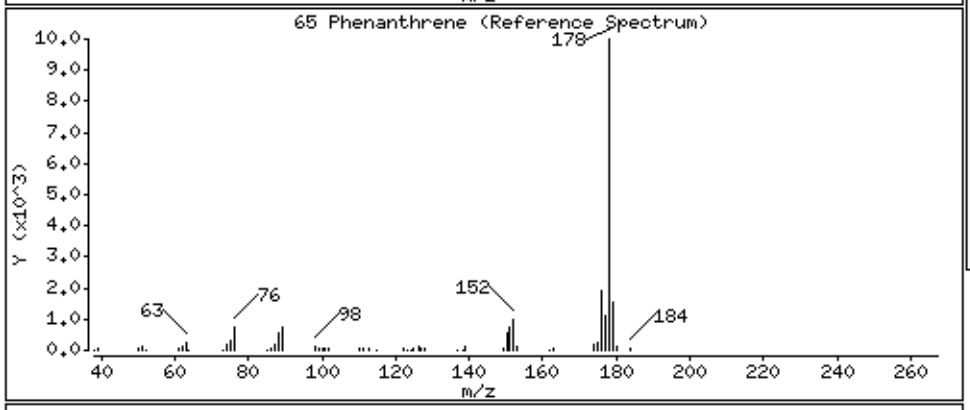
65 Phenanthrene Concentration: 540 ug/Kg

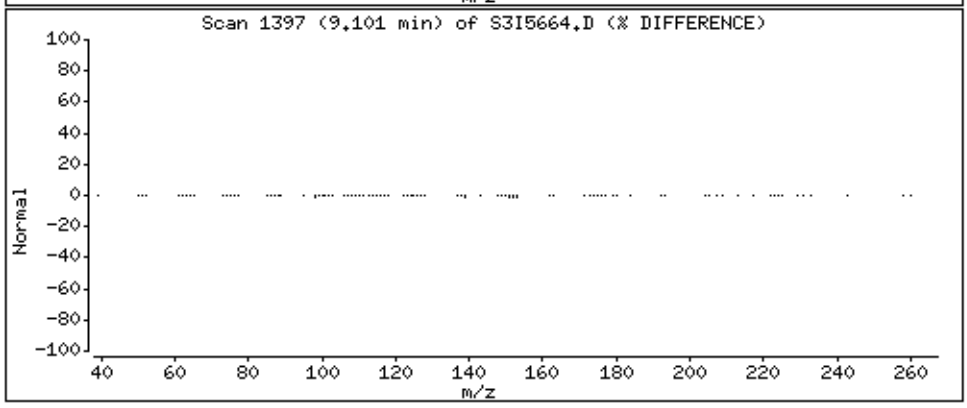












Data File: \\avogadro\organics\S3.I\130710B.B\S3I5664.D

Date : 10-JUL-2013 23:01

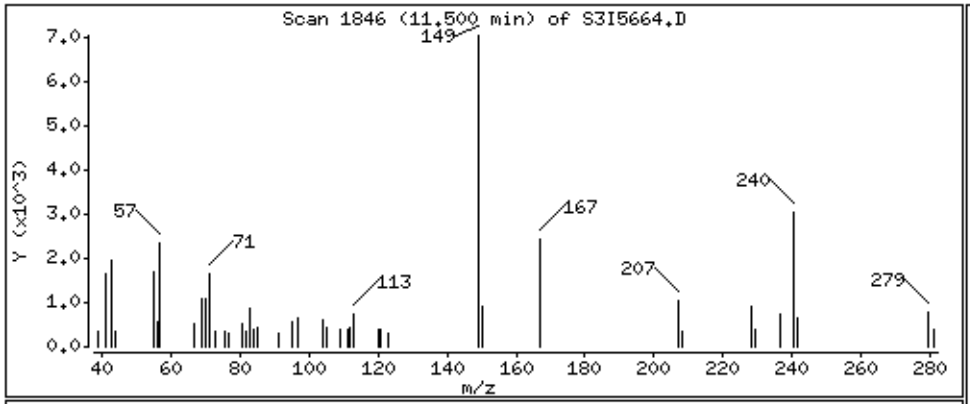
Client ID: PC-01 Instrument: S3.i

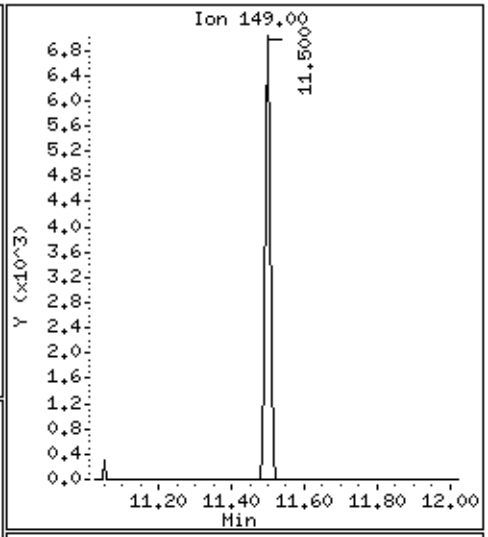
Sample Info: M1032-01A,,72594

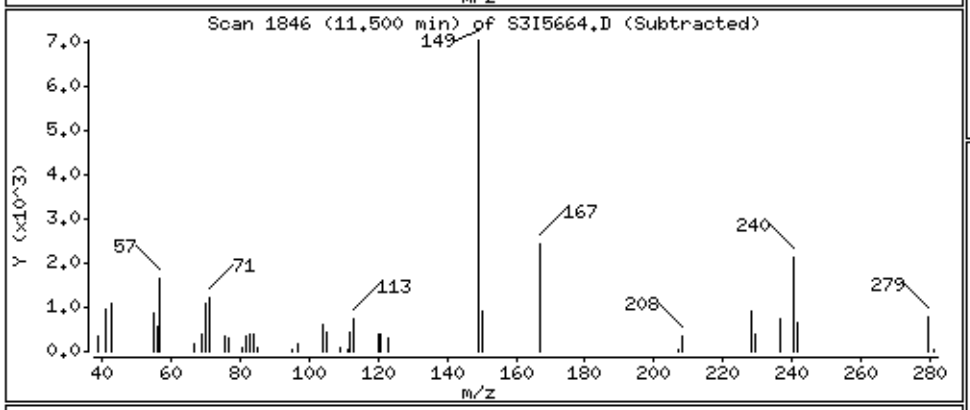
Volume Injected (uL): 1.0 Operator: PK SRC: LIMS

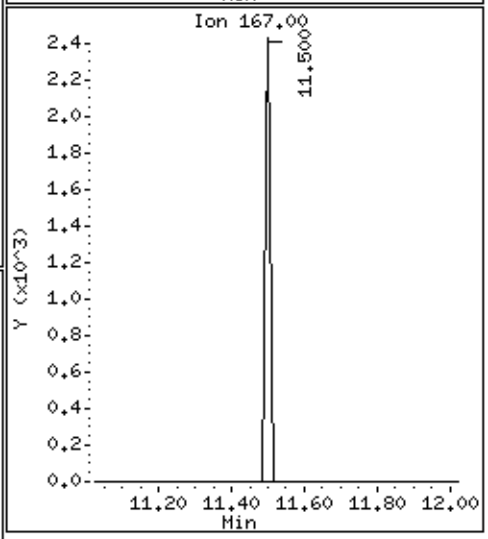
Column phase: Rxi-5Sil MS Column diameter: 0.25

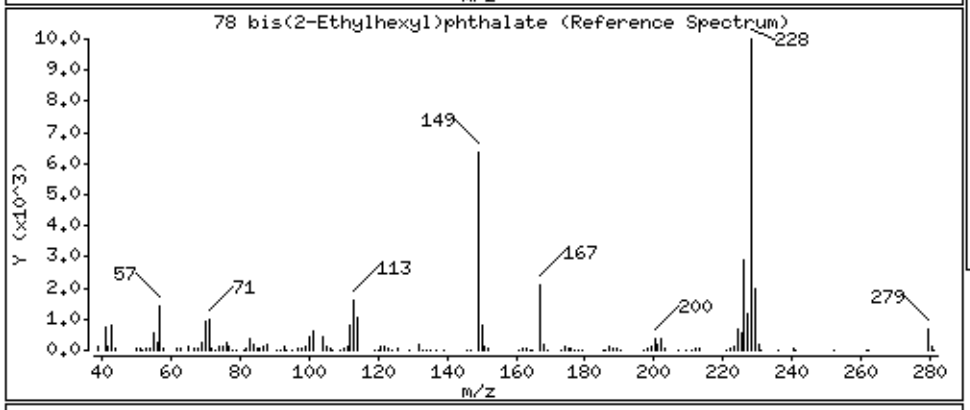
78 bis(2-Ethylhexyl)phthalate Concentration: 76 ug/Kg

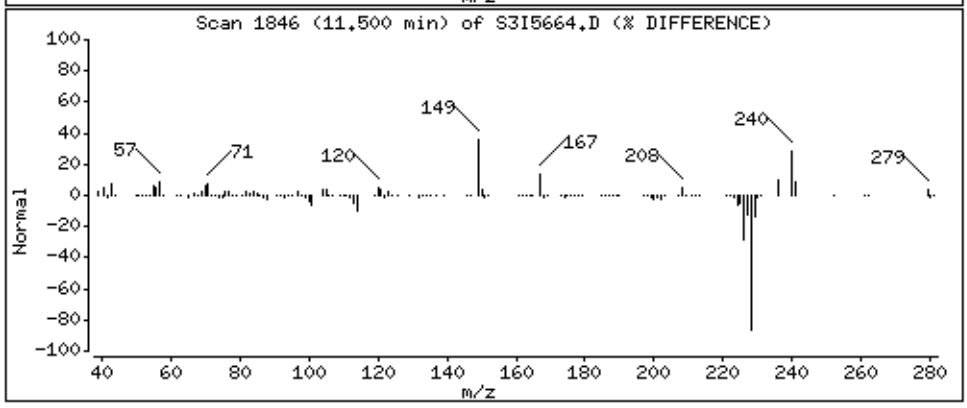












1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PC-02

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-02A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S3I5665.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 5.3 Decanted: (Y/N) N Date Received: 06/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/10/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	Bis(2-chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2´-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
111-91-1	Bis(2-chloroethoxy)methane	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	690	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	690	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	690	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	690	U
100-02-7	4-Nitrophenol	690	U
132-64-9	Dibenzofuran	340	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PC-02

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1032-02A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S3I5665.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 5.3 Decanted: (Y/N) N Date Received: 06/22/2013

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/10/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	N-Nitrosodiphenylamine	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3´-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	Bis(2-ethylhexyl)phthalate	70	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5665.D
Report Date: 11-Jul-2013 10:00

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130710B.B\S3I5665.D
Lab Smp Id: M1032-02A Client Smp ID: PC-02
Inj Date : 10-JUL-2013 23:28
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : M1032-02A,,72594
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130710B.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 10:00 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

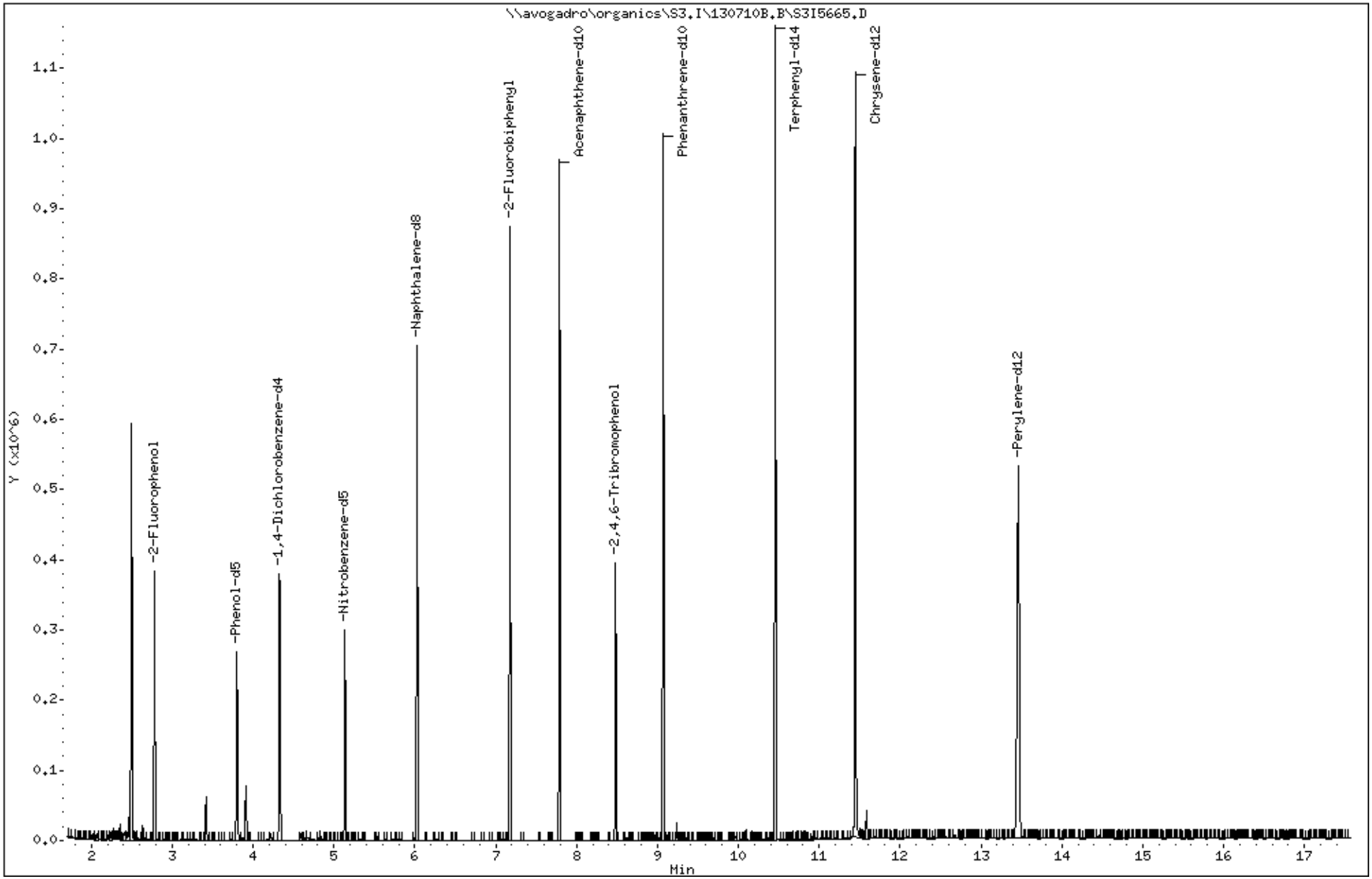
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	3 2-Fluorophenol	112	2.783	2.782	(0.643)	90702	38.3942	2500
$	5 Phenol-d5	99	3.803	3.808	(0.879)	115687	37.1628	2400
*	12 1,4-Dichlorobenzene-d4	152	4.327	4.331	(1.000)	78199	40.0000	
$	22 Nitrobenzene-d5	82	5.139	5.138	(0.853)	101131	37.4323	2400
*	31 Naphthalene-d8	136	6.026	6.030	(1.000)	280507	40.0000	
$	41 2-Fluorobiphenyl	172	7.174	7.179	(0.921)	229585	39.0775	2600
*	48 Acenaphthene-d10	164	7.789	7.793	(1.000)	182967	40.0000	
$	60 2,4,6-Tribromophenol	330	8.483	8.493	(0.935)	39054	41.4908	2700
*	64 Phenanthrene-d10	188	9.076	9.080	(1.000)	362891	40.0000	
$	72 Terphenyl-d14	244	10.454	10.485	(0.913)	349227	50.0157	3300
*	76 Chrysene-d12	240	11.448	11.495	(1.000)	428271	40.0000	
	78 bis(2-Ethylhexyl)phthalate	149	11.469	11.522	(1.002)	5694	1.00788	66(aH)
*	83 Perylene-d12	264	13.462	13.525	(1.000)	387048	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5665.D
Date : 10-JUL-2013 23:28
Client ID: PC-02
Instrument: S3.i
Sample Info: M1032-02A,,72594
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130710B.B\S3I5665.D

Date : 10-JUL-2013 23:28

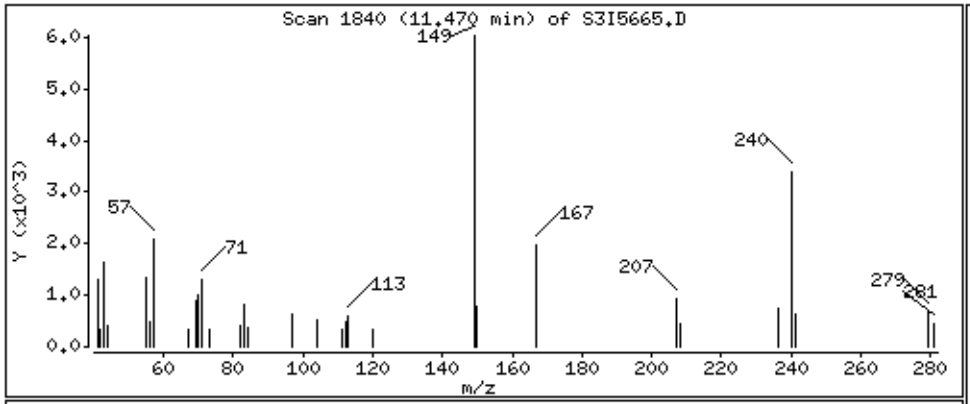
Client ID: PC-02 Instrument: S3.i

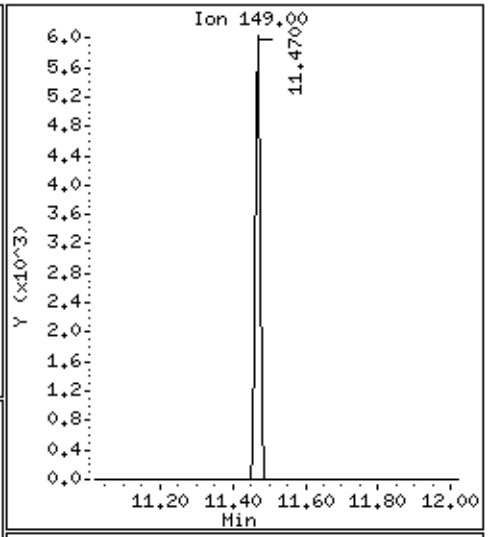
Sample Info: M1032-02A,,72594

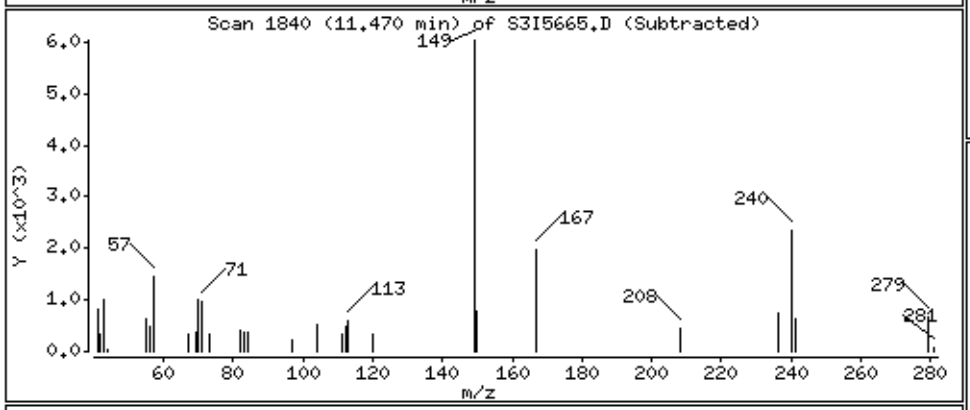
Volume Injected (uL): 1.0 Operator: PK SRC: LIMS

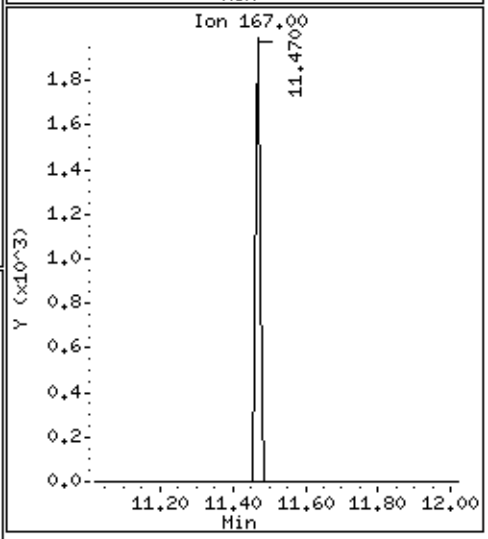
Column phase: Rxi-5Sil MS Column diameter: 0.25

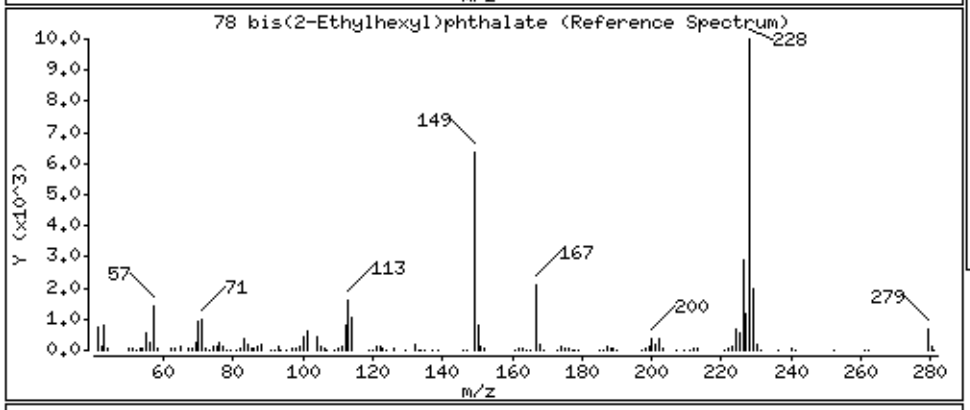
78 bis(2-Ethylhexyl)phthalate Concentration: 66 ug/Kg

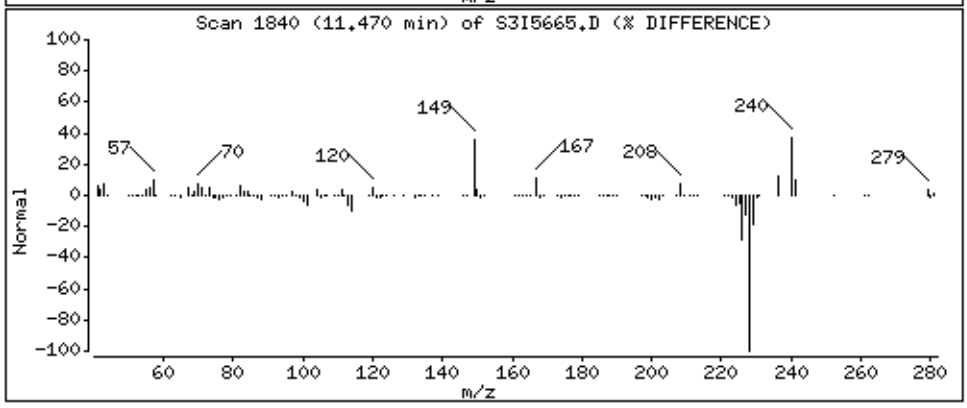












6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date(s): 07/09/2013 07/09/2013

Calibration Times: 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = S3I5623.D RRF010 = S3I5625.D RRF025 = S3I5621B.D RRF040 = S3I5626.D RRF060 = S3I5624.D
RRF080 = S3I5622.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
Phenol	1.689	1.827	1.933	1.710	1.700	1.675					1.756	5.9
Bis(2-chloroethyl)ether	0.825	0.842	0.899	0.792	0.794	0.779					0.822	5.4
2-Chlorophenol	1.233	1.331	1.392	1.243	1.255	1.228					1.280	5.2
1,3-Dichlorobenzene	1.367	1.453	1.513	1.348	1.359	1.321					1.394	5.3
1,4-Dichlorobenzene	1.416	1.487	1.546	1.373	1.382	1.344					1.425	5.4
1,2-Dichlorobenzene	1.327	1.395	1.435	1.287	1.302	1.260					1.334	5.1
2-Methylphenol	1.106	1.203	1.309	1.160	1.162	1.158					1.183	5.8
2,2´-oxybis(1-Chloropropane)	1.492	1.614	1.680	1.480	1.478	1.425					1.528	6.4
4-Methylphenol	1.202	1.285	1.430	1.247	1.257	1.252					1.279	6.2
N-Nitroso-di-n-propylamine	0.931	0.983	1.090	0.951	0.940	0.926					0.970	6.4
Hexachloroethane	0.501	0.511	0.551	0.481	0.491	0.479					0.502	5.3
Nitrobenzene	0.369	0.387	0.398	0.359	0.354	0.351					0.369	5.2
Isophorone	0.680	0.705	0.773	0.671	0.652	0.649					0.688	6.7
2-Nitrophenol	0.190	0.197	0.211	0.196	0.193	0.195					0.197	3.7
2,4-Dimethylphenol	0.256	0.316	0.382	0.355	0.350	0.351					0.335	13.1
2,4-Dichlorophenol	0.298	0.319	0.344	0.304	0.302	0.304					0.312	5.5
1,2,4-Trichlorobenzene	0.344	0.360	0.373	0.333	0.333	0.332					0.346	5.0
Naphthalene	1.046	1.072	1.124	0.994	0.975	0.962					1.029	6.1
4-Chloroaniline	0.424	0.435	0.475	0.416	0.406	0.402					0.426	6.3
Bis(2-chloroethoxy)methane	0.402	0.407	0.440	0.385	0.381	0.379					0.399	5.8
Hexachlorobutadiene	0.215	0.228	0.233	0.213	0.210	0.211					0.218	4.5
4-Chloro-3-methylphenol	0.329	0.349	0.380	0.329	0.327	0.326					0.340	6.3
2-Methylnaphthalene	0.748	0.764	0.813	0.706	0.702	0.686					0.737	6.5
Hexachlorocyclopentadiene	0.274	0.316	0.338	0.248	0.330	0.330					0.306	11.9
2,4,6-Trichlorophenol	0.344	0.365	0.413	0.348	0.356	0.354					0.363	7.0
2,4,5-Trichlorophenol		0.393	0.442	0.372	0.383	0.381					0.394	7.1
2-Chloronaphthalene	0.997	1.062	1.163	0.957	0.965	0.937					1.014	8.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date(s): 07/09/2013 07/09/2013

Calibration Times: 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = S3I5623.D RRF010 = S3I5625.D RRF025 = S3I5621B.D RRF040 = S3I5626.D RRF060 = S3I5624.D
RRF080 = S3I5622.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
2-Nitroaniline		0.312	0.355	0.297	0.300	0.292					0.311	8.2
Dimethylphthalate	1.240	1.294	1.446	1.182	1.184	1.160					1.251	8.6
Acenaphthylene	1.695	1.784	1.982	1.608	1.608	1.568					1.707	9.1
2,6-Dinitrotoluene	0.293	0.308	0.344	0.288	0.296	0.287					0.303	7.2
3-Nitroaniline		0.334	0.385	0.314	0.323	0.318					0.335	8.7
Acenaphthene	1.091	1.128	1.235	1.020	1.007	0.989					1.078	8.6
2,4-Dinitrophenol		0.096	0.145	0.162	0.177	0.180					0.152	22.4
4-Nitrophenol		0.169	0.194	0.167	0.169	0.163					0.172	7.1
Dibenzofuran	1.554	1.625	1.794	1.473	1.461	1.424					1.555	8.9
2,4-Dinitrotoluene	0.391	0.413	0.475	0.395	0.402	0.397					0.412	7.8
Diethylphthalate	1.250	1.281	1.435	1.154	1.168	1.135					1.237	9.1
4-Chlorophenyl-phenylether	0.675	0.711	0.800	0.656	0.661	0.636					0.690	8.6
Fluorene	1.315	1.371	1.543	1.264	1.264	1.213					1.328	8.9
4-Nitroaniline		0.337	0.380	0.333	0.322	0.318					0.338	7.3
4,6-Dinitro-2-methylphenol		0.098	0.121	0.122	0.128	0.128					0.119	10.5
N-Nitrosodiphenylamine	0.553	0.595	0.645	0.531	0.527	0.514					0.561	8.9
4-Bromophenyl-phenylether	0.204	0.220	0.244	0.206	0.212	0.210					0.216	6.8
Hexachlorobenzene	0.216	0.225	0.248	0.215	0.220	0.218					0.224	5.6
Pentachlorophenol		0.096	0.115	0.126	0.137	0.141					0.123	15.0
Phenanthrene	0.956	1.020	1.099	0.903	0.899	0.872					0.958	9.1
Anthracene	0.977	1.047	1.142	0.932	0.932	0.899					0.988	9.2
Carbazole	0.910	0.974	1.055	0.863	0.868	0.842					0.919	8.9
Di-n-butylphthalate	1.032	1.093	1.206	0.993	0.990	0.948					1.044	8.9
Fluoranthene	1.140	1.196	1.316	1.080	1.083	1.052					1.144	8.6
Pyrene	0.877	0.928	1.026	0.821	0.811	0.776					0.873	10.5
Butylbenzylphthalate	0.369	0.381	0.421	0.348	0.347	0.337					0.367	8.4
3,3´-Dichlorobenzidine	0.370	0.383	0.436	0.349	0.363	0.355					0.376	8.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date(s): 07/09/2013 07/09/2013

Calibration Times: 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = S3I5623.D RRF010 = S3I5625.D RRF025 = S3I5621B.D RRF040 = S3I5626.D RRF060 = S3I5624.D
RRF080 = S3I5622.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
Benzo(a)anthracene	0.990	1.032	1.134	0.921	0.918	0.891					0.981	9.3
Chrysene	0.885	0.934	1.028	0.828	0.823	0.784					0.880	10.2
Bis(2-ethylhexyl)phthalate	0.544	0.549	0.616	0.497	0.491	0.469					0.528	10.1
Di-n-octylphthalate	0.909	0.955	1.073	0.881	0.888	0.841					0.924	8.9
Benzo(b)fluoranthene	0.959	1.038	1.167	0.948	0.981	0.941					1.006	8.6
Benzo(k)fluoranthene	1.038	1.061	1.181	0.983	0.969	0.958					1.032	8.1
Benzo(a)pyrene	0.956	1.014	1.142	0.936	0.947	0.915					0.985	8.5
Indeno(1,2,3-cd)pyrene	0.901	0.971	1.080	0.898	0.914	0.899					0.944	7.6
Dibenzo(a,h)anthracene	0.873	0.967	1.109	0.921	0.918	0.942					0.955	8.5
Benzo(g,h,i)perylene	0.935	0.992	1.109	0.924	0.939	0.922					0.970	7.5

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: M1032 SAS No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date(s): 07/09/2013 07/09/2013

Calibration Times: 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = S3I5623.D RRF010 = S3I5625.D RRF025 = S3I5621B.D RRF040 = S3I5626.D RRF060 = S3I5624.D
RRF080 = S3I5622.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
Nitrobenzene-d5	0.379	0.403	0.415	0.375	0.372	0.367					0.385	5.0
2-Fluorobiphenyl	1.272	1.341	1.467	1.219	1.220	1.187					1.284	8.2
Terphenyl-d14	0.649	0.683	0.759	0.619	0.608	0.594					0.652	9.4
Phenol-d5	1.527	1.624	1.767	1.544	1.556	1.536					1.592	5.8
2-Fluorophenol	1.155	1.247	1.315	1.190	1.182	1.163					1.208	5.1
2,4,6-Tribromophenol	0.093	0.104	0.113	0.101	0.105	0.107					0.104	6.5

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5621B.D
Report Date: 10-Jul-2013 13:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5621B.D
Lab Smp Id: SSTD0253Z Client Smp ID: SSTD0253Z
Inj Date : 09-JUL-2013 14:36
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0253Z,SSTD0253Z
Misc Info : 2,3
Comment   :
Method   : \\avogadro\organics\S3.I\130709A.B\s3_8270C_N.m
Meth Date : 10-Jul-2013 13:13 pkaczorows Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

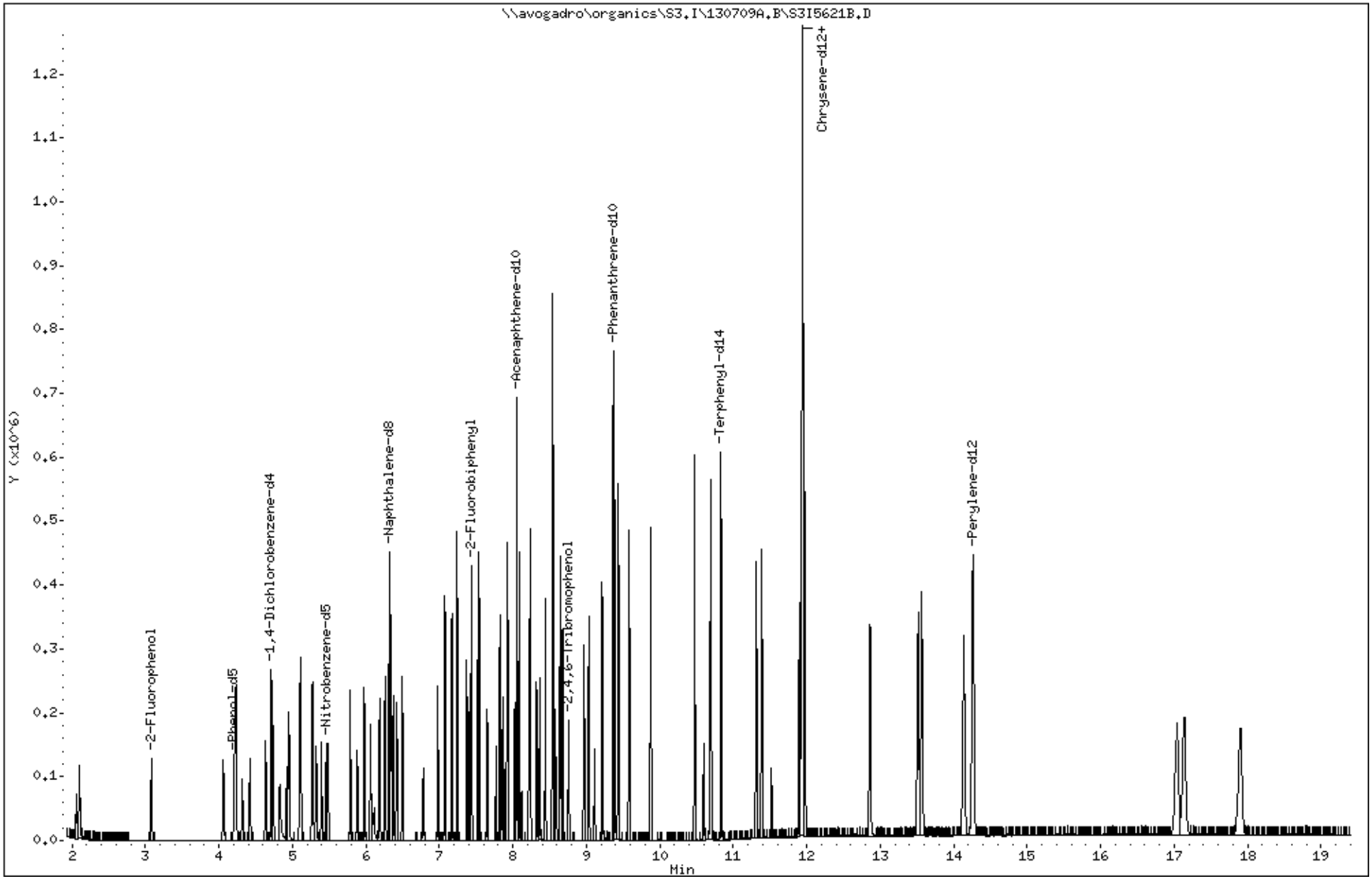
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
$	109 1,4-Dioxane-d8	96	1.873	1.873	(0.398)	11923	25.0000	27
	108 1,4-Dioxane	58	1.890	1.890	(0.401)	9132	25.0000	27
	1 N-Nitrosodimethylamine	74	2.060	2.060	(0.438)	27772	25.0000	27
	2 Pyridine	79	2.098	2.098	(0.445)	43788	25.0000	26
$	3 2-Fluorophenol	112	3.081	3.081	(0.654)	42250	25.0000	27
	101 Benzaldehyde	77	4.058	4.058	(0.862)	33745	25.0000	27
$	5 Phenol-d5	99	4.208	4.208	(0.893)	56802	25.0000	28
	6 Phenol	94	4.229	4.229	(0.898)	62143	25.0000	28
	7 Aniline	66	4.229	4.229	(0.898)	45796	25.0000	27
	8 bis(2-Chloroethyl)Ether	63	4.315	4.315	(0.916)	28887	25.0000	27
	10 2-Chlorophenol	128	4.422	4.422	(0.939)	44742	25.0000	27
	11 1,3-Dichlorobenzene	146	4.635	4.635	(0.984)	48638	25.0000	27
*	12 1,4-Dichlorobenzene-d4	152	4.710	4.710	(1.000)	51425	40.0000	
	13 1,4-Dichlorobenzene	146	4.737	4.737	(1.006)	49689	25.0000	27
	117 2-Ethyl-1-hexanol	57	4.828	4.828	(1.025)	44599	25.0000	28
	15 Benzyl Alcohol	108	4.924	4.924	(1.045)	30808	25.0000	28
	16 1,2-Dichlorobenzene	146	4.951	4.951	(1.051)	46130	25.0000	27
	17 2-Methylphenol	108	5.105	5.105	(1.084)	42058	25.0000	28
	18 2,2'-oxybis(1-Chloropropane)	45	5.105	5.105	(1.084)	53998	25.0000	27
	99 Acetophenone	105	5.266	5.266	(1.118)	65492	25.0000	28

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19	N-Nitroso-di-n-propylamine	70	5.276	5.276	(1.120)	35026	25.0000	28
	20	4-Methylphenol	108	5.325	5.325	(1.130)	45968	25.0000	28
	21	Hexachloroethane	117	5.394	5.394	(1.145)	17698	25.0000	27
$	22	Nitrobenzene-d5	82	5.458	5.458	(0.864)	50060	25.0000	27
	23	Nitrobenzene	77	5.485	5.485	(0.868)	47978	25.0000	27
	24	Isophorone	82	5.784	5.784	(0.915)	93121	25.0000	28
	25	2-Nitrophenol	139	5.880	5.880	(0.931)	25403	25.0000	27
	26	2,4-Dimethylphenol	107	5.976	5.976	(0.946)	46032	25.0000	28
	27	bis(2-Chloroethoxy)methane	93	6.062	6.062	(0.959)	53013	25.0000	28
	28	Benzoic Acid	105	6.115	6.115	(0.968)	28526	25.0000	30
	29	2,4-Dichlorophenol	162	6.185	6.185	(0.979)	41450	25.0000	28
	30	1,2,4-Trichlorobenzene	180	6.259	6.259	(0.991)	44975	25.0000	27
*	31	Naphthalene-d8	136	6.318	6.318	(1.000)	192777	40.0000	
	32	Naphthalene	128	6.340	6.340	(1.003)	135366	25.0000	27
	115	alpha-Terpineol	59	6.372	6.372	(1.008)	27811	25.0000	28
	33	4-Chloroaniline	127	6.420	6.420	(1.016)	57229	25.0000	28
	34	Hexachlorobutadiene	225	6.494	6.494	(1.028)	28129	25.0000	27
	102	Caprolactam	113	6.783	6.783	(1.074)	18999	25.0000	29
	35	4-Chloro-3-Methylphenol	107	6.975	6.975	(1.104)	45732	25.0000	28
	36	2-Methylnaphthalene	142	7.071	7.071	(1.119)	98013	25.0000	28
	114	1-Methylnaphthalene	142	7.173	7.173	(1.135)	92356	25.0000	28
	38	Hexachlorocyclopentadiene	237	7.237	7.237	(0.899)	27657	25.0000	28
	112	1,2,4,5-Tetrachlorobenzene	216	7.242	7.242	(0.899)	52306	25.0000	28
	39	2,4,6-Trichlorophenol	196	7.371	7.371	(0.915)	33802	25.0000	28
	40	2,4,5-Trichlorophenol	196	7.413	7.413	(0.920)	36191	25.0000	28
$	41	2-Fluorobiphenyl	172	7.435	7.435	(0.923)	120068	25.0000	28
	98	1,1'-Biphenyl	154	7.531	7.531	(0.935)	132706	25.0000	28
	42	2-Chloronaphthalene	162	7.541	7.541	(0.936)	95173	25.0000	29
	43	2-Nitroaniline	65	7.648	7.648	(0.950)	29044	25.0000	28
	44	Dimethylphthalate	163	7.819	7.819	(0.971)	118337	25.0000	29
	45	2,6-Dinitrotoluene	165	7.867	7.867	(0.977)	28180	25.0000	28
	46	Acenaphthylene	152	7.926	7.926	(0.984)	162200	25.0000	29
	47	3-Nitroaniline	138	8.028	8.028	(0.997)	31496	25.0000	29
*	48	Acenaphthene-d10	164	8.054	8.054	(1.000)	130916	40.0000	
	49	Acenaphthene	153	8.086	8.086	(1.004)	101024	25.0000	29
	50	2,4-Dinitrophenol	184	8.118	8.118	(1.008)	11857	25.0000	24
	51	4-Nitrophenol	109	8.220	8.220	(1.021)	15834	25.0000	28
	53	2,4-Dinitrotoluene	165	8.231	8.231	(1.022)	38898	25.0000	29
	52	Dibenzofuran	168	8.236	8.236	(1.023)	146800	25.0000	29
	110	2,3,4,6-Tetrachlorophenol	232	8.364	8.364	(1.038)	34144	25.0000	29
	54	Diethylphthalate	149	8.439	8.439	(1.048)	117453	25.0000	29
	56	4-Chlorophenyl-phenylether	204	8.540	8.540	(1.060)	65443	25.0000	29
	55	Fluorene	166	8.540	8.540	(1.060)	126258	25.0000	29
	57	4-Nitroaniline	138	8.567	8.567	(1.064)	31120	25.0000	28
	58	4,6-Dinitro-2-methylphenol	198	8.594	8.594	(0.917)	20387	25.0000	25
	59	N-Nitrosodiphenylamine	169	8.647	8.647	(0.923)	108154	25.0000	29
	97	Azobenzene	77	8.674	8.674	(0.926)	109554	25.0000	28
$	60	2,4,6-Tribromophenol	330	8.759	8.759	(0.935)	19021	25.0000	27
	61	4-Bromophenyl-phenylether	248	8.968	8.968	(0.957)	40865	25.0000	28
	62	Hexachlorobenzene	284	9.032	9.032	(0.964)	41673	25.0000	28
	100	Atrazine	200	9.112	9.112	(0.973)	15322	25.0000	29
	63	Pentachlorophenol	266	9.214	9.214	(0.983)	19242	25.0000	23
	111	Pentachloronitrobenzene	237	9.219	9.219	(0.984)	17716	25.0000	28
*	64	Phenanthrene-d10	188	9.369	9.369	(1.000)	268492	40.0000	

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5621B.D
Report Date: 10-Jul-2013 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.390	9.390	(1.002)	184422	25.0000	29
66	Anthracene	178	9.433	9.433	(1.007)	191601	25.0000	29
67	Carbazole	167	9.582	9.582	(1.023)	177072	25.0000	29
68	Di-n-butylphthalate	149	9.876	9.876	(1.054)	202450	25.0000	29
69	Fluoranthene	202	10.474	10.474	(1.118)	220824	25.0000	29
70	Benzidine	184	10.592	10.592	(0.887)	55943	25.0000	27
71	Pyrene	202	10.693	10.693	(0.895)	227003	25.0000	29
$ 72	Terphenyl-d14	244	10.832	10.832	(0.907)	168007	25.0000	29
73	Butylbenzylphthalate	149	11.313	11.313	(0.947)	93101	25.0000	29
74	3,3'-Dichlorobenzidine	252	11.901	11.901	(0.996)	96381	25.0000	29
78	bis(2-Ethylhexyl)phthalate	149	11.949	11.949	(1.000)	136305	25.0000	29
75	Benzo(a)anthracene	228	11.927	11.927	(0.999)	251000	25.0000	29
* 76	Chrysene-d12	240	11.943	11.943	(1.000)	354026	40.0000	
77	Chrysene	228	11.975	11.975	(1.003)	227535	25.0000	29
79	Di-n-octylphthalate	149	12.857	12.857	(0.901)	235097	25.0000	29
80	Benzo(b)fluoranthene	252	13.514	13.514	(0.948)	255644	25.0000	29
81	Benzo(k)fluoranthene	252	13.562	13.562	(0.951)	258752	25.0000	29
82	Benzo(a)pyrene	252	14.139	14.139	(0.991)	250221	25.0000	29
* 83	Perylene-d12	264	14.262	14.262	(1.000)	350494	40.0000	
84	Indeno(1,2,3-cd)pyrene	276	17.040	17.040	(1.195)	236476	25.0000	28
85	Dibenzo(a,h)anthracene	278	17.136	17.136	(1.202)	242844	25.0000	29
86	Benzo(g,h,i)perylene	276	17.905	17.905	(1.255)	242939	25.0000	28

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5621B.D
Date : 09-JUL-2013 14:36
Client ID: SSTD0253Z
Instrument: S3.i
Sample Info: SSTD0253Z,SSTD0253Z
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130709A.B\S3I5622.D
Report Date: 10-Jul-2013 13:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5622.D
Lab Smp Id: SSTD0803Z Client Smp ID: SSTD0803Z
Inj Date : 09-JUL-2013 15:05
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0803Z,SSTD0803Z
Misc Info : 1,6
Comment   :
Method   : \\avogadro\organics\S3.I\130709A.B\s3_8270C_N.m
Meth Date : 10-Jul-2013 13:13 pkaczorows Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
$	109	1,4-Dioxane-d8	96	1.874	1.873	(0.398)	56712	80.0000	75
	108	1,4-Dioxane	58	1.890	1.890	(0.401)	44097	80.0000	76
	1	N-Nitrosodimethylamine	74	2.056	2.060	(0.436)	130830	80.0000	76
	2	Pyridine	79	2.093	2.098	(0.444)	214201	80.0000	76
$	3	2-Fluorophenol	112	3.082	3.081	(0.654)	202448	80.0000	77
	101	Benzaldehyde	77	4.059	4.058	(0.862)	126089	80.0000	59
$	5	Phenol-d5	99	4.220	4.208	(0.896)	267321	80.0000	77
	6	Phenol	94	4.241	4.229	(0.900)	291483	80.0000	76
	7	Aniline	66	4.236	4.229	(0.899)	215256	80.0000	76
	8	bis(2-Chloroethyl)Ether	63	4.321	4.315	(0.917)	135577	80.0000	76
	10	2-Chlorophenol	128	4.428	4.422	(0.940)	213657	80.0000	77
	11	1,3-Dichlorobenzene	146	4.636	4.635	(0.984)	229967	80.0000	76
*	12	1,4-Dichlorobenzene-d4	152	4.711	4.710	(1.000)	87028	40.0000	
	13	1,4-Dichlorobenzene	146	4.738	4.737	(1.006)	233886	80.0000	75
	117	2-Ethyl-1-hexanol	57	4.829	4.828	(1.025)	214493	80.0000	78
	15	Benzyl Alcohol	108	4.930	4.924	(1.046)	149457	80.0000	79
	16	1,2-Dichlorobenzene	146	4.952	4.951	(1.051)	219305	80.0000	76
	17	2-Methylphenol	108	5.117	5.105	(1.086)	201521	80.0000	78
	18	2,2'-oxybis(1-Chloropropane)	45	5.106	5.105	(1.084)	248023	80.0000	75
	99	Acetophenone	105	5.277	5.266	(1.120)	307578	80.0000	77

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
19	N-Nitroso-di-n-propylamine	70	5.293	5.276	(1.124)	161157	80.0000	76
20	4-Methylphenol	108	5.331	5.325	(1.132)	217971	80.0000	78
21	Hexachloroethane	117	5.395	5.394	(1.145)	83322	80.0000	76
$ 22	Nitrobenzene-d5	82	5.464	5.458	(0.865)	236962	80.0000	76
23	Nitrobenzene	77	5.491	5.485	(0.869)	226385	80.0000	76
24	Isophorone	82	5.796	5.784	(0.917)	418843	80.0000	75
25	2-Nitrophenol	139	5.886	5.880	(0.932)	126106	80.0000	79
26	2,4-Dimethylphenol	107	5.988	5.976	(0.948)	226625	80.0000	84(A)
27	bis(2-Chloroethoxy)methane	93	6.068	6.062	(0.960)	244579	80.0000	76
28	Benzoic Acid	105	6.180	6.115	(0.978)	132106	80.0000	82(A)
29	2,4-Dichlorophenol	162	6.191	6.185	(0.980)	196170	80.0000	78
30	1,2,4-Trichlorobenzene	180	6.260	6.259	(0.991)	214245	80.0000	77
* 31	Naphthalene-d8	136	6.319	6.318	(1.000)	322765	40.0000	
32	Naphthalene	128	6.346	6.340	(1.004)	621032	80.0000	75
115	alpha-Terpineol	59	6.378	6.372	(1.009)	127628	80.0000	77
33	4-Chloroaniline	127	6.426	6.420	(1.017)	259404	80.0000	75
34	Hexachlorobutadiene	225	6.495	6.494	(1.028)	136440	80.0000	77
102	Caprolactam	113	6.837	6.783	(1.082)	75303	80.0000	69
35	4-Chloro-3-Methylphenol	107	6.987	6.975	(1.106)	210126	80.0000	77
36	2-Methylnaphthalene	142	7.078	7.071	(1.120)	442955	80.0000	74
114	1-Methylnaphthalene	142	7.174	7.173	(1.135)	415435	80.0000	75
38	Hexachlorocyclopentadiene	237	7.243	7.237	(0.899)	148980	80.0000	86(A)
112	1,2,4,5-Tetrachlorobenzene	216	7.249	7.242	(0.899)	248213	80.0000	76
39	2,4,6-Trichlorophenol	196	7.377	7.371	(0.915)	159591	80.0000	78
40	2,4,5-Trichlorophenol	196	7.420	7.413	(0.920)	172169	80.0000	78
$ 41	2-Fluorobiphenyl	172	7.441	7.435	(0.923)	535772	80.0000	74
98	1,1'-Biphenyl	154	7.532	7.531	(0.934)	585134	80.0000	73
42	2-Chloronaphthalene	162	7.548	7.541	(0.936)	423134	80.0000	74
43	2-Nitroaniline	65	7.655	7.648	(0.950)	132027	80.0000	75
44	Dimethylphthalate	163	7.831	7.819	(0.972)	523719	80.0000	74
45	2,6-Dinitrotoluene	165	7.879	7.867	(0.977)	129510	80.0000	76
46	Acenaphthylene	152	7.932	7.926	(0.984)	707958	80.0000	73
47	3-Nitroaniline	138	8.039	8.028	(0.997)	143365	80.0000	76
* 48	Acenaphthene-d10	164	8.061	8.054	(1.000)	225725	40.0000	
49	Acenaphthene	153	8.087	8.086	(1.003)	446558	80.0000	73
50	2,4-Dinitrophenol	184	8.125	8.118	(1.008)	81367	80.0000	95(A)
51	4-Nitrophenol	109	8.226	8.220	(1.021)	73436	80.0000	76(Q)
53	2,4-Dinitrotoluene	165	8.237	8.231	(1.022)	179266	80.0000	77
52	Dibenzofuran	168	8.242	8.236	(1.023)	643005	80.0000	73
110	2,3,4,6-Tetrachlorophenol	232	8.365	8.364	(1.038)	154620	80.0000	76(H)
54	Diethylphthalate	149	8.445	8.439	(1.048)	512225	80.0000	73
56	4-Chlorophenyl-phenylether	204	8.541	8.540	(1.060)	287331	80.0000	74
55	Fluorene	166	8.547	8.540	(1.060)	547544	80.0000	73
57	4-Nitroaniline	138	8.584	8.567	(1.065)	143784	80.0000	76
58	4,6-Dinitro-2-methylphenol	198	8.600	8.594	(0.918)	116622	80.0000	86(A)
59	N-Nitrosodiphenylamine	169	8.648	8.647	(0.924)	468286	80.0000	73
97	Azobenzene	77	8.680	8.674	(0.927)	478825	80.0000	74
$ 60	2,4,6-Tribromophenol	330	8.760	8.759	(0.936)	97197	80.0000	82
61	4-Bromophenyl-phenylether	248	8.963	8.968	(0.957)	190786	80.0000	78
62	Hexachlorobenzene	284	9.033	9.032	(0.965)	198792	80.0000	78
100	Atrazine	200	9.108	9.112	(0.973)	41293	80.0000	46
63	Pentachlorophenol	266	9.215	9.214	(0.984)	128846	80.0000	92(A)
111	Pentachloronitrobenzene	237	9.220	9.219	(0.985)	82700	80.0000	78
* 64	Phenanthrene-d10	188	9.364	9.369	(1.000)	455294	40.0000	

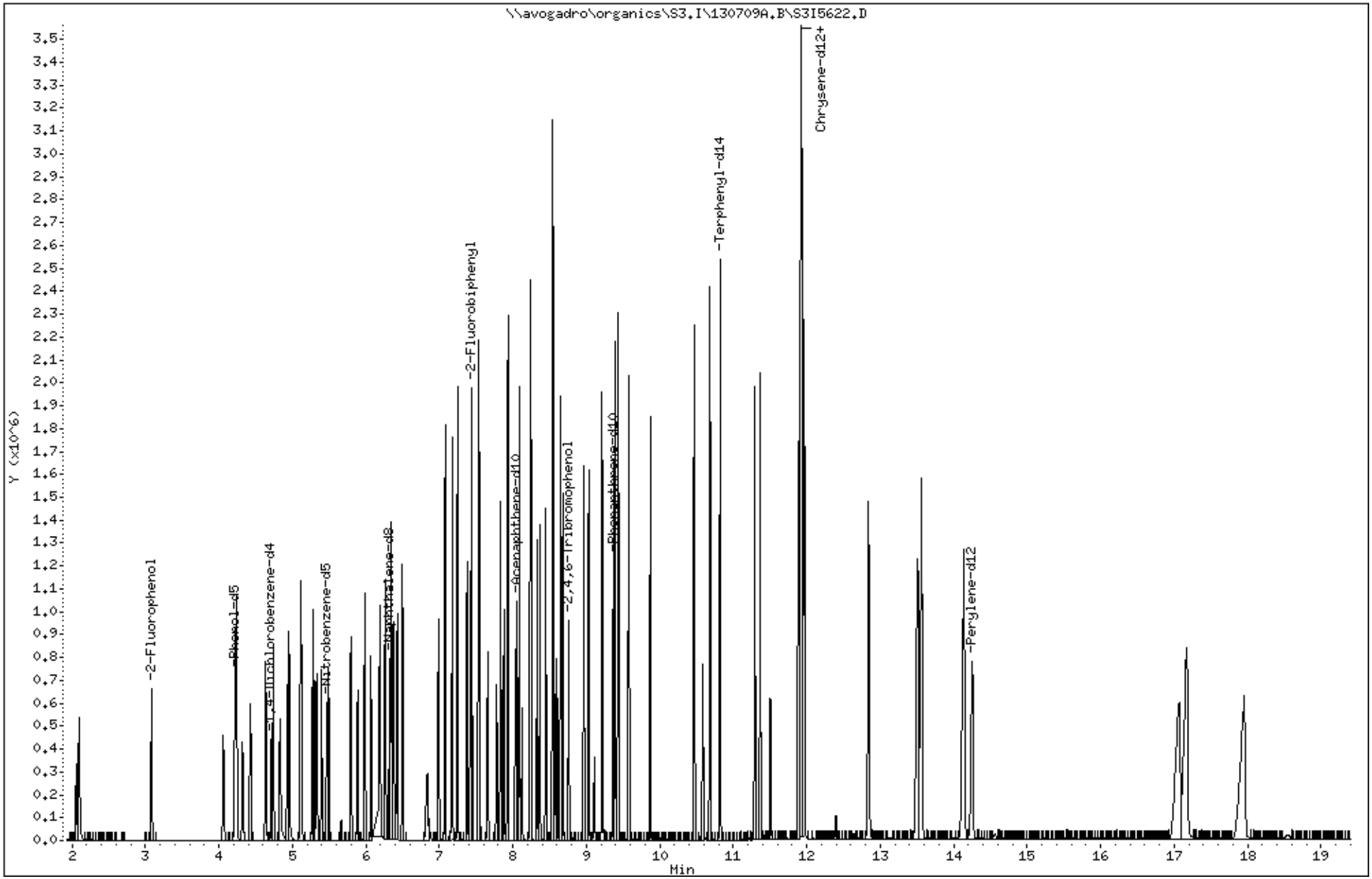
Data File: \\avogadro\organics\S3.I\130709A.B\S3I5622.D
Report Date: 10-Jul-2013 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.385	9.390	(1.002)	793683	80.0000	73
66	Anthracene	178	9.434	9.433	(1.007)	818865	80.0000	73
67	Carbazole	167	9.578	9.582	(1.023)	766977	80.0000	73
68	Di-n-butylphthalate	149	9.872	9.876	(1.054)	863630	80.0000	73
69	Fluoranthene	202	10.470	10.474	(1.118)	958057	80.0000	74
70	Benzidine	184	10.582	10.592	(0.887)	285687	80.0000	78
71	Pyrene	202	10.684	10.693	(0.895)	966985	80.0000	71
$ 72	Terphenyl-d14	244	10.823	10.832	(0.907)	739589	80.0000	73
73	Butylbenzylphthalate	149	11.293	11.313	(0.946)	420152	80.0000	73
74	3,3'-Dichlorobenzidine	252	11.886	11.901	(0.996)	442763	80.0000	76
78	bis(2-Ethylhexyl)phthalate	149	11.928	11.949	(1.000)	584282	80.0000	71
75	Benzo(a)anthracene	228	11.912	11.927	(0.998)	1110610	80.0000	73
* 76	Chrysene-d12	240	11.934	11.943	(1.000)	622954	40.0000	
77	Chrysene	228	11.966	11.975	(1.003)	976712	80.0000	71
79	Di-n-octylphthalate	149	12.842	12.857	(0.901)	1044681	80.0000	73
80	Benzo(b)fluoranthene	252	13.510	13.514	(0.948)	1169159	80.0000	75
81	Benzo(k)fluoranthene	252	13.563	13.562	(0.952)	1189855	80.0000	74
82	Benzo(a)pyrene	252	14.140	14.139	(0.992)	1136449	80.0000	74
* 83	Perylene-d12	264	14.252	14.262	(1.000)	621252	40.0000	
84	Indeno(1,2,3-cd)pyrene	276	17.067	17.040	(1.198)	1117303	80.0000	76
85	Dibenzo(a,h)anthracene	278	17.169	17.136	(1.205)	1170324	80.0000	79
86	Benzo(g,h,i)perylene	276	17.949	17.905	(1.259)	1146056	80.0000	76

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\S3.I\130709A.B\S3I5622.D
Date : 09-JUL-2013 15:05
Client ID: SSTD0803Z
Instrument: S3.i
Sample Info: SSTD0803Z,SSTD0803Z
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130709A.B\S3I5623.D
Report Date: 10-Jul-2013 13:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5623.D
Lab Smp Id: SSTD0053Z Client Smp ID: SSTD0053Z
Inj Date : 09-JUL-2013 15:34
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0053Z,SSTD0053Z
Misc Info : 1,1
Comment   :
Method   : \\avogadro\organics\S3.I\130709A.B\s3_8270C_N.m
Meth Date : 10-Jul-2013 13:13 pkaczorows Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
$	109	1,4-Dioxane-d8	96	1.877	1.873	(0.398)	3848	5.00000	5(a)
	108	1,4-Dioxane	58	1.893	1.890	(0.402)	2841	5.00000	5(a)
	1	N-Nitrosodimethylamine	74	2.058	2.060	(0.437)	8583	5.00000	5(a)
	2	Pyridine	79	2.101	2.098	(0.446)	14118	5.00000	5(a)
$	3	2-Fluorophenol	112	3.079	3.081	(0.653)	12811	5.00000	5(a)
	101	Benzaldehyde	77	4.056	4.058	(0.861)	11141	5.00000	5(a)
$	5	Phenol-d5	99	4.200	4.208	(0.891)	16938	5.00000	5(a)
	6	Phenol	94	4.222	4.229	(0.896)	18742	5.00000	5(a)
	7	Aniline	66	4.222	4.229	(0.896)	14071	5.00000	5(a)
	8	bis(2-Chloroethyl)Ether	63	4.313	4.315	(0.915)	9148	5.00000	5(a)
	10	2-Chlorophenol	128	4.419	4.422	(0.938)	13675	5.00000	5(a)
	11	1,3-Dichlorobenzene	146	4.633	4.635	(0.983)	15164	5.00000	5(a)
*	12	1,4-Dichlorobenzene-d4	152	4.713	4.710	(1.000)	88752	40.0000	
	13	1,4-Dichlorobenzene	146	4.735	4.737	(1.005)	15711	5.00000	5(a)
	117	2-Ethyl-1-hexanol	57	4.825	4.828	(1.024)	12623	5.00000	4(a)
	15	Benzyl Alcohol	108	4.922	4.924	(1.044)	8873	5.00000	5(a)
	16	1,2-Dichlorobenzene	146	4.948	4.951	(1.050)	14721	5.00000	5(a)
	17	2-Methylphenol	108	5.103	5.105	(1.083)	12272	5.00000	5(a)
	18	2,2'-oxybis(1-Chloropropane)	45	5.103	5.105	(1.083)	16549	5.00000	5(a)
	99	Acetophenone	105	5.264	5.266	(1.117)	19800	5.00000	5(a)

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	5.274	5.276	(1.119)	10331	5.00000	5(a)
	20 4-Methylphenol	108	5.317	5.325	(1.128)	13333	5.00000	5(a)
	21 Hexachloroethane	117	5.392	5.394	(1.144)	5563	5.00000	5(a)
$	22 Nitrobenzene-d5	82	5.456	5.458	(0.864)	15088	5.00000	5(a)
	23 Nitrobenzene	77	5.483	5.485	(0.868)	14675	5.00000	5(a)
	24 Isophorone	82	5.782	5.784	(0.915)	27031	5.00000	5(a)
	25 2-Nitrophenol	139	5.878	5.880	(0.931)	7573	5.00000	5(a)
	26 2,4-Dimethylphenol	107	5.974	5.976	(0.946)	10198	5.00000	4(a)
	27 bis(2-Chloroethoxy)methane	93	6.060	6.062	(0.959)	15991	5.00000	5(a)
	28 Benzoic Acid	105	6.086	6.115	(0.964)	7676	5.00000	5(a)
	29 2,4-Dichlorophenol	162	6.182	6.185	(0.979)	11866	5.00000	5(a)
	30 1,2,4-Trichlorobenzene	180	6.257	6.259	(0.991)	13700	5.00000	5(a)
*	31 Naphthalene-d8	136	6.316	6.318	(1.000)	318233	40.0000	
	32 Naphthalene	128	6.337	6.340	(1.003)	41621	5.00000	5(a)
	115 alpha-Terpineol	59	6.369	6.372	(1.008)	7835	5.00000	5(a)
	33 4-Chloroaniline	127	6.417	6.420	(1.016)	16856	5.00000	5(a)
	34 Hexachlorobutadiene	225	6.492	6.494	(1.028)	8535	5.00000	5(a)
	102 Caprolactam	113	6.765	6.783	(1.071)	5147	5.00000	5(a)
	35 4-Chloro-3-Methylphenol	107	6.973	6.975	(1.104)	13094	5.00000	5(a)
	36 2-Methylnaphthalene	142	7.075	7.071	(1.120)	29761	5.00000	5(a)
	114 1-Methylnaphthalene	142	7.171	7.173	(1.135)	27362	5.00000	5(a)
	38 Hexachlorocyclopentadiene	237	7.240	7.237	(0.899)	7575	5.00000	4(a)
	112 1,2,4,5-Tetrachlorobenzene	216	7.240	7.242	(0.899)	15436	5.00000	5(a)
	39 2,4,6-Trichlorophenol	196	7.368	7.371	(0.915)	9521	5.00000	5(a)
	40 2,4,5-Trichlorophenol	196	7.411	7.413	(0.920)	10188	5.00000	5(a)
$	41 2-Fluorobiphenyl	172	7.438	7.435	(0.924)	35234	5.00000	5(a)
	98 1,1'-Biphenyl	154	7.529	7.531	(0.935)	39967	5.00000	5(a)
	42 2-Chloronaphthalene	162	7.539	7.541	(0.936)	27599	5.00000	5(a)
	43 2-Nitroaniline	65	7.646	7.648	(0.950)	8164	5.00000	5(a)
	44 Dimethylphthalate	163	7.817	7.819	(0.971)	34349	5.00000	5(a)
	45 2,6-Dinitrotoluene	165	7.865	7.867	(0.977)	8125	5.00000	5(a)
	46 Acenaphthylene	152	7.924	7.926	(0.984)	46932	5.00000	5(a)
	47 3-Nitroaniline	138	8.020	8.028	(0.996)	8643	5.00000	5(a)
*	48 Acenaphthene-d10	164	8.052	8.054	(1.000)	221552	40.0000	
	49 Acenaphthene	153	8.079	8.086	(1.003)	30201	5.00000	5(a)
	50 2,4-Dinitrophenol	184	8.116	8.118	(1.008)	1398	5.00000	2(a)
	51 4-Nitrophenol	109	8.212	8.220	(1.020)	4361	5.00000	4(a)
	53 2,4-Dinitrotoluene	165	8.228	8.231	(1.022)	10816	5.00000	5(a)
	52 Dibenzofuran	168	8.234	8.236	(1.023)	43026	5.00000	5(a)
	110 2,3,4,6-Tetrachlorophenol	232	8.357	8.364	(1.038)	9440	5.00000	5(H)
	54 Diethylphthalate	149	8.437	8.439	(1.048)	34621	5.00000	5(a)
	56 4-Chlorophenyl-phenylether	204	8.533	8.540	(1.060)	18683	5.00000	5(a)
	55 Fluorene	166	8.533	8.540	(1.060)	36405	5.00000	5(a)
	57 4-Nitroaniline	138	8.560	8.567	(1.063)	8589	5.00000	5(a)
	58 4,6-Dinitro-2-methylphenol	198	8.586	8.594	(0.918)	3923	5.00000	3(aQ)
	59 N-Nitrosodiphenylamine	169	8.640	8.647	(0.924)	31359	5.00000	5(a)
	97 Azobenzene	77	8.672	8.674	(0.927)	31898	5.00000	5(a)
$	60 2,4,6-Tribromophenol	330	8.752	8.759	(0.936)	5280	5.00000	4(a)
	61 4-Bromophenyl-phenylether	248	8.955	8.968	(0.958)	11593	5.00000	5(a)
	62 Hexachlorobenzene	284	9.019	9.032	(0.965)	12230	5.00000	5(a)
	100 Atrazine	200	9.094	9.112	(0.973)	5646	5.00000	6(a)
	63 Pentachlorophenol	266	9.201	9.214	(0.984)	3988	5.00000	3(a)
	111 Pentachloronitrobenzene	237	9.201	9.219	(0.984)	4999	5.00000	5(a)
*	64 Phenanthrene-d10	188	9.350	9.369	(1.000)	453993	40.0000	

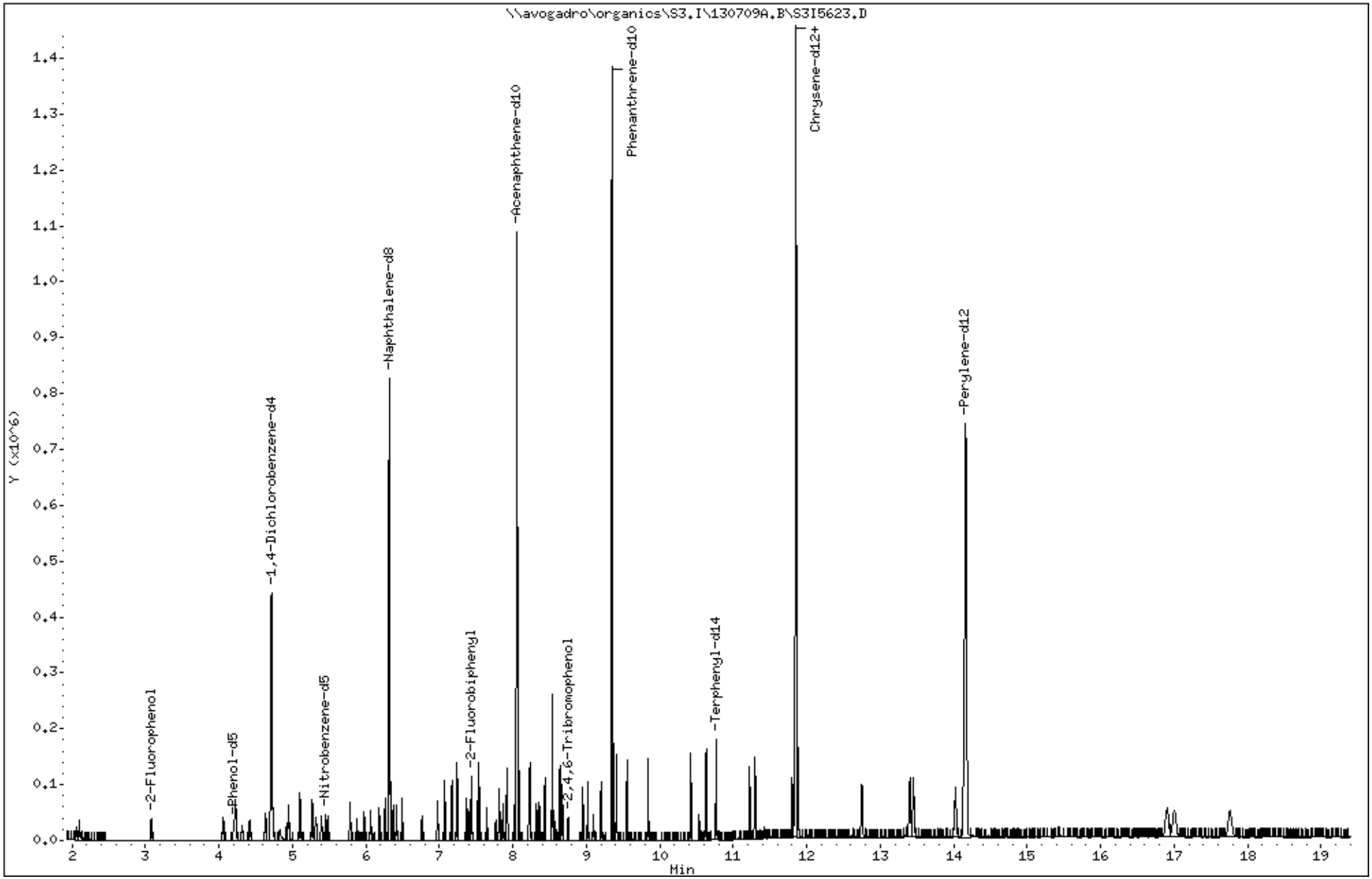
Data File: \\avogadro\organics\S3.I\130709A.B\S3I5623.D
Report Date: 10-Jul-2013 13:14

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	65 Phenanthrene	178	9.366	9.390	(1.002)	54227	5.00000	5(a)
	66 Anthracene	178	9.409	9.433	(1.006)	55417	5.00000	5(a)
	67 Carbazole	167	9.553	9.582	(1.022)	51649	5.00000	5(a)
	68 Di-n-butylphthalate	149	9.842	9.876	(1.053)	58547	5.00000	5(a)
	69 Fluoranthene	202	10.424	10.474	(1.115)	64702	5.00000	5(a)
	70 Benzidine	184	10.536	10.592	(0.889)	17346	5.00000	5(a)
	71 Pyrene	202	10.632	10.693	(0.897)	65871	5.00000	5(a)
$	72 Terphenyl-d14	244	10.766	10.832	(0.908)	48757	5.00000	5(a)
	73 Butylbenzylphthalate	149	11.225	11.313	(0.947)	27721	5.00000	5(a)
	74 3,3'-Dichlorobenzidine	252	11.802	11.901	(0.995)	27802	5.00000	5(a)
	78 bis(2-Ethylhexyl)phthalate	149	11.850	11.949	(1.000)	40847	5.00000	5(a)
	75 Benzo(a)anthracene	228	11.840	11.927	(0.999)	74303	5.00000	5(a)
*	76 Chrysene-d12	240	11.856	11.943	(1.000)	600563	40.0000	
	77 Chrysene	228	11.882	11.975	(1.002)	66435	5.00000	5(a)
	79 Di-n-octylphthalate	149	12.753	12.857	(0.892)	67707	5.00000	5(a)
	80 Benzo(b)fluoranthene	252	13.405	13.514	(0.938)	71457	5.00000	5(aH)
	81 Benzo(k)fluoranthene	252	13.453	13.562	(0.941)	77358	5.00000	5(aH)
	82 Benzo(a)pyrene	252	14.025	14.139	(0.981)	71212	5.00000	5(aH)
*	83 Perylene-d12	264	14.164	14.262	(1.000)	596072	40.0000	(H)
	84 Indeno(1,2,3-cd)pyrene	276	16.909	17.040	(1.183)	67160	5.00000	5(aH)
	85 Dibenzo(a,h)anthracene	278	17.006	17.136	(1.190)	65032	5.00000	4(a)
	86 Benzo(g,h,i)perylene	276	17.764	17.905	(1.243)	69667	5.00000	5(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5623.D
Date : 09-JUL-2013 15:34
Client ID: SSTD0053Z
Instrument: S3.i
Sample Info: SSTD0053Z,SSTD0053Z
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130709A.B\S3I5624.D
Report Date: 10-Jul-2013 13:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5624.D
Lab Smp Id: SSTD0603Z Client Smp ID: SSTD0603Z
Inj Date : 09-JUL-2013 16:03
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0603Z,SSTD0603Z
Misc Info : 1,5
Comment   :
Method   : \\avogadro\organics\S3.I\130709A.B\s3_8270C_N.m
Meth Date : 10-Jul-2013 13:13 pkaczorows Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
$	109	1,4-Dioxane-d8	96	1.874	1.873	(0.398)	44211	60.0000	58
	108	1,4-Dioxane	58	1.890	1.890	(0.401)	34591	60.0000	59
	1	N-Nitrosodimethylamine	74	2.056	2.060	(0.436)	102593	60.0000	59
	2	Pyridine	79	2.093	2.098	(0.444)	165639	60.0000	58
$	3	2-Fluorophenol	112	3.076	3.081	(0.653)	155772	60.0000	59
	101	Benzaldehyde	77	4.054	4.058	(0.861)	117059	60.0000	54
$	5	Phenol-d5	99	4.214	4.208	(0.895)	205149	60.0000	59
	6	Phenol	94	4.236	4.229	(0.899)	224136	60.0000	58
	7	Aniline	66	4.230	4.229	(0.898)	165108	60.0000	58
	8	bis(2-Chloroethyl)Ether	63	4.316	4.315	(0.916)	104684	60.0000	58
	10	2-Chlorophenol	128	4.423	4.422	(0.939)	165408	60.0000	59
	11	1,3-Dichlorobenzene	146	4.636	4.635	(0.984)	179232	60.0000	58
*	12	1,4-Dichlorobenzene-d4	152	4.711	4.710	(1.000)	87894	40.0000	
	13	1,4-Dichlorobenzene	146	4.738	4.737	(1.006)	182259	60.0000	58
	117	2-Ethyl-1-hexanol	57	4.829	4.828	(1.025)	164686	60.0000	60
	15	Benzyl Alcohol	108	4.930	4.924	(1.046)	113645	60.0000	60
	16	1,2-Dichlorobenzene	146	4.952	4.951	(1.051)	171617	60.0000	58
	17	2-Methylphenol	108	5.112	5.105	(1.085)	153225	60.0000	59
	18	2,2'-oxybis(1-Chloropropane)	45	5.101	5.105	(1.083)	194837	60.0000	58
	99	Acetophenone	105	5.272	5.266	(1.119)	236752	60.0000	59

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	5.288	5.276	(1.122)	123994	60.0000	58
	20 4-Methylphenol	108	5.325	5.325	(1.130)	165730	60.0000	59
	21 Hexachloroethane	117	5.395	5.394	(1.145)	64759	60.0000	59
$	22 Nitrobenzene-d5	82	5.464	5.458	(0.865)	183498	60.0000	58
	23 Nitrobenzene	77	5.486	5.485	(0.868)	174383	60.0000	57
	24 Isophorone	82	5.790	5.784	(0.916)	321580	60.0000	57
	25 2-Nitrophenol	139	5.881	5.880	(0.931)	95010	60.0000	59
	26 2,4-Dimethylphenol	107	5.983	5.976	(0.947)	172695	60.0000	63
	27 bis(2-Chloroethoxy)methane	93	6.063	6.062	(0.959)	187738	60.0000	57
	28 Benzoic Acid	105	6.164	6.115	(0.975)	91083	60.0000	55
	29 2,4-Dichlorophenol	162	6.186	6.185	(0.979)	149203	60.0000	58
	30 1,2,4-Trichlorobenzene	180	6.260	6.259	(0.991)	164015	60.0000	58
*	31 Naphthalene-d8	136	6.319	6.318	(1.000)	328843	40.0000	
	32 Naphthalene	128	6.340	6.340	(1.003)	481109	60.0000	57
	115 alpha-Terpineol	59	6.373	6.372	(1.008)	97108	60.0000	57
	33 4-Chloroaniline	127	6.421	6.420	(1.016)	200323	60.0000	57
	34 Hexachlorobutadiene	225	6.495	6.494	(1.028)	103575	60.0000	58
	102 Caprolactam	113	6.816	6.783	(1.079)	66352	60.0000	60
	35 4-Chloro-3-Methylphenol	107	6.982	6.975	(1.105)	161060	60.0000	58
	36 2-Methylnaphthalene	142	7.078	7.071	(1.120)	346280	60.0000	57
	114 1-Methylnaphthalene	142	7.174	7.173	(1.135)	319890	60.0000	57
	38 Hexachlorocyclopentadiene	237	7.243	7.237	(0.899)	112313	60.0000	65
	112 1,2,4,5-Tetrachlorobenzene	216	7.249	7.242	(0.900)	191398	60.0000	59
	39 2,4,6-Trichlorophenol	196	7.372	7.371	(0.915)	121370	60.0000	59
	40 2,4,5-Trichlorophenol	196	7.420	7.413	(0.921)	130573	60.0000	59
$	41 2-Fluorobiphenyl	172	7.441	7.435	(0.924)	415396	60.0000	57
	98 1,1'-Biphenyl	154	7.532	7.531	(0.935)	450909	60.0000	56
	42 2-Chloronaphthalene	162	7.548	7.541	(0.937)	328491	60.0000	57
	43 2-Nitroaniline	65	7.655	7.648	(0.950)	102287	60.0000	58
	44 Dimethylphthalate	163	7.826	7.819	(0.971)	403218	60.0000	57
	45 2,6-Dinitrotoluene	165	7.879	7.867	(0.978)	100796	60.0000	59
	46 Acenaphthylene	152	7.927	7.926	(0.984)	547446	60.0000	56
	47 3-Nitroaniline	138	8.034	8.028	(0.997)	109842	60.0000	58
*	48 Acenaphthene-d10	164	8.055	8.054	(1.000)	227007	40.0000	
	49 Acenaphthene	153	8.087	8.086	(1.004)	343005	60.0000	56
	50 2,4-Dinitrophenol	184	8.119	8.118	(1.008)	60162	60.0000	70
	51 4-Nitrophenol	109	8.221	8.220	(1.021)	57378	60.0000	59(Q)
	53 2,4-Dinitrotoluene	165	8.237	8.231	(1.023)	136940	60.0000	58
	52 Dibenzofuran	168	8.242	8.236	(1.023)	497471	60.0000	56
	110 2,3,4,6-Tetrachlorophenol	232	8.365	8.364	(1.038)	115530	60.0000	56(H)
	54 Diethylphthalate	149	8.445	8.439	(1.048)	397864	60.0000	57
	56 4-Chlorophenyl-phenylether	204	8.541	8.540	(1.060)	225141	60.0000	58
	55 Fluorene	166	8.541	8.540	(1.060)	430417	60.0000	57
	57 4-Nitroaniline	138	8.579	8.567	(1.065)	109680	60.0000	58
	58 4,6-Dinitro-2-methylphenol	198	8.600	8.594	(0.918)	87593	60.0000	64
	59 N-Nitrosodiphenylamine	169	8.648	8.647	(0.924)	361734	60.0000	56
	97 Azobenzene	77	8.680	8.674	(0.927)	371435	60.0000	57
$	60 2,4,6-Tribromophenol	330	8.760	8.759	(0.936)	71946	60.0000	61
	61 4-Bromophenyl-phenylether	248	8.963	8.968	(0.957)	145676	60.0000	59
	62 Hexachlorobenzene	284	9.033	9.032	(0.965)	151035	60.0000	59
	100 Atrazine	200	9.108	9.112	(0.973)	29800	60.0000	33
	63 Pentachlorophenol	266	9.215	9.214	(0.984)	93910	60.0000	67
	111 Pentachloronitrobenzene	237	9.215	9.219	(0.984)	63484	60.0000	59
*	64 Phenanthrene-d10	188	9.364	9.369	(1.000)	457286	40.0000	

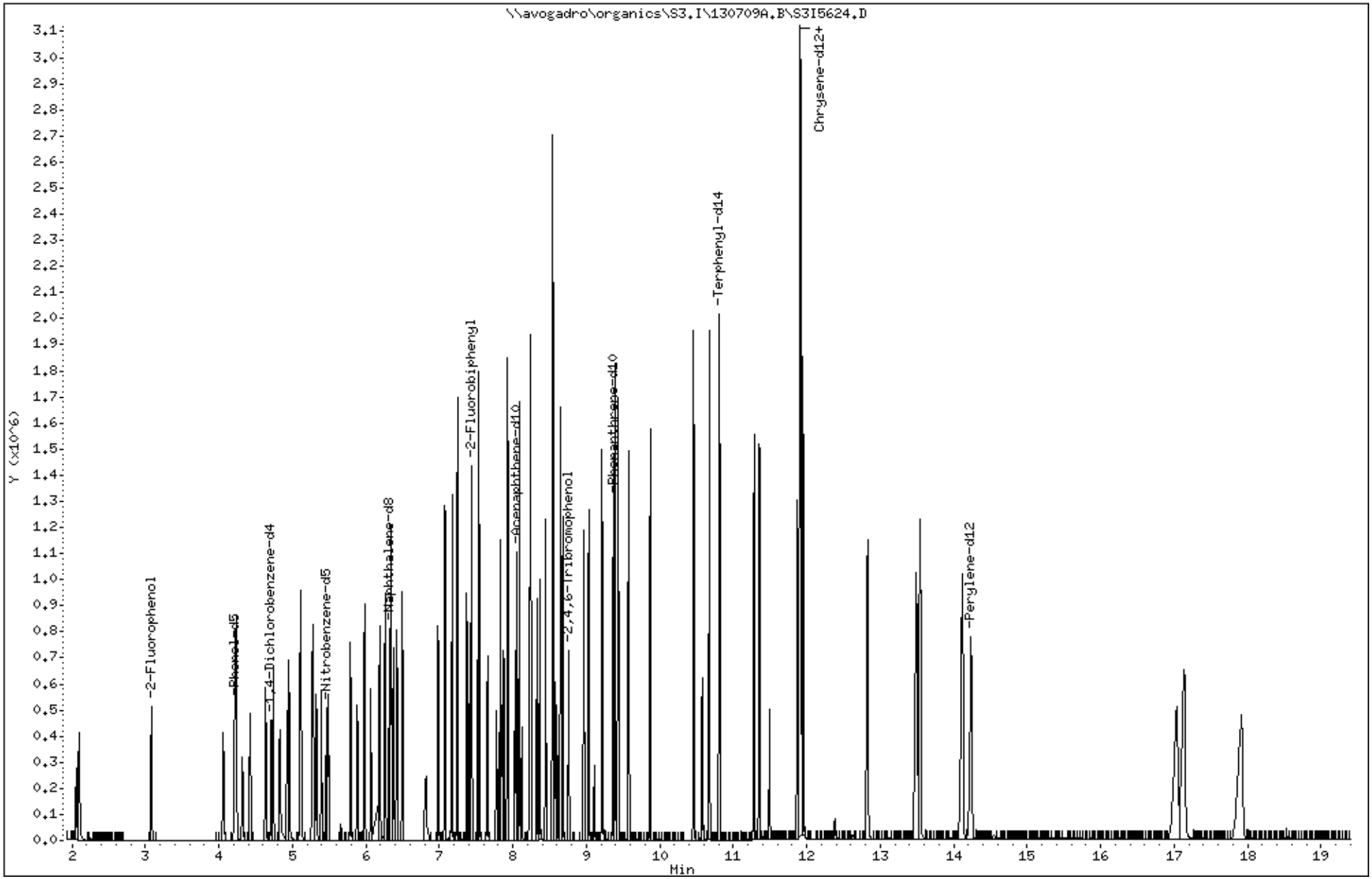
Data File: \\avogadro\organics\S3.I\130709A.B\S3I5624.D
Report Date: 10-Jul-2013 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.385	9.390	(1.002)	616655	60.0000	56
66	Anthracene	178	9.428	9.433	(1.007)	639107	60.0000	56
67	Carbazole	167	9.578	9.582	(1.023)	595433	60.0000	57
68	Di-n-butylphthalate	149	9.866	9.876	(1.054)	678776	60.0000	57
69	Fluoranthene	202	10.459	10.474	(1.117)	742846	60.0000	57
70	Benzidine	184	10.577	10.592	(0.887)	218888	60.0000	60
71	Pyrene	202	10.673	10.693	(0.896)	759192	60.0000	56
$ 72	Terphenyl-d14	244	10.812	10.832	(0.907)	569150	60.0000	56
73	Butylbenzylphthalate	149	11.282	11.313	(0.947)	324668	60.0000	57
74	3,3'-Dichlorobenzidine	252	11.875	11.901	(0.996)	339465	60.0000	58
78	bis(2-Ethylhexyl)phthalate	149	11.912	11.949	(1.000)	459699	60.0000	56
75	Benzo(a)anthracene	228	11.902	11.927	(0.999)	859285	60.0000	56
* 76	Chrysene-d12	240	11.918	11.943	(1.000)	623772	40.0000	
77	Chrysene	228	11.950	11.975	(1.003)	770407	60.0000	56
79	Di-n-octylphthalate	149	12.826	12.857	(0.901)	810638	60.0000	58
80	Benzo(b)fluoranthene	252	13.494	13.514	(0.948)	894972	60.0000	58
81	Benzo(k)fluoranthene	252	13.542	13.562	(0.951)	884360	60.0000	56
82	Benzo(a)pyrene	252	14.119	14.139	(0.992)	864669	60.0000	58
* 83	Perylene-d12	264	14.236	14.262	(1.000)	608445	40.0000	
84	Indeno(1,2,3-cd)pyrene	276	17.030	17.040	(1.196)	834207	60.0000	58
85	Dibenzo(a,h)anthracene	278	17.137	17.136	(1.204)	837824	60.0000	58
86	Benzo(g,h,i)perylene	276	17.917	17.905	(1.259)	856580	60.0000	58

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5624.D
Date : 09-JUL-2013 16:03
Client ID: SSTD0603Z
Instrument: S3.i
Sample Info: SSTD0603Z,SSTD0603Z
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130709A.B\S3I5625.D
Report Date: 10-Jul-2013 13:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5625.D
Lab Smp Id: SSTD0103Z Client Smp ID: SSTD0103Z
Inj Date : 09-JUL-2013 16:31
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0103Z,SSTD0103Z
Misc Info : 1,2
Comment   :
Method   : \\avogadro\organics\S3.I\130709A.B\s3_8270C_N.m
Meth Date : 10-Jul-2013 13:13 pkaczorows Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
$	109	1,4-Dioxane-d8	96	1.874	1.873	(0.398)	8195	10.0000	10
	108	1,4-Dioxane	58	1.890	1.890	(0.401)	6360	10.0000	10
	1	N-Nitrosodimethylamine	74	2.056	2.060	(0.436)	18861	10.0000	10
	2	Pyridine	79	2.093	2.098	(0.444)	30882	10.0000	10
$	3	2-Fluorophenol	112	3.076	3.081	(0.653)	28315	10.0000	10
	101	Benzaldehyde	77	4.054	4.058	(0.861)	30295	10.0000	14
$	5	Phenol-d5	99	4.198	4.208	(0.891)	36876	10.0000	10
	6	Phenol	94	4.220	4.229	(0.896)	41486	10.0000	10
	7	Aniline	66	4.220	4.229	(0.896)	31096	10.0000	10
	8	bis(2-Chloroethyl)Ether	63	4.310	4.315	(0.915)	19109	10.0000	10
	10	2-Chlorophenol	128	4.417	4.422	(0.938)	30230	10.0000	10
	11	1,3-Dichlorobenzene	146	4.631	4.635	(0.983)	32991	10.0000	10
*	12	1,4-Dichlorobenzene-d4	152	4.711	4.710	(1.000)	90832	40.0000	
	13	1,4-Dichlorobenzene	146	4.732	4.737	(1.005)	33756	10.0000	10
	117	2-Ethyl-1-hexanol	57	4.823	4.828	(1.024)	29244	10.0000	10
	15	Benzyl Alcohol	108	4.919	4.924	(1.044)	19842	10.0000	10
	16	1,2-Dichlorobenzene	146	4.946	4.951	(1.050)	31683	10.0000	10
	17	2-Methylphenol	108	5.101	5.105	(1.083)	27312	10.0000	10
	18	2,2'-oxybis(1-Chloropropane)	45	5.101	5.105	(1.083)	36642	10.0000	10
	99	Acetophenone	105	5.261	5.266	(1.117)	42321	10.0000	10

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5625.D
Report Date: 10-Jul-2013 13:14

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	19 N-Nitroso-di-n-propylamine	70	5.272	5.276	(1.119)	22330	10.0000	10
	20 4-Methylphenol	108	5.315	5.325	(1.128)	29175	10.0000	10
	21 Hexachloroethane	117	5.390	5.394	(1.144)	11596	10.0000	10
$	22 Nitrobenzene-d5	82	5.454	5.458	(0.864)	33260	10.0000	10
	23 Nitrobenzene	77	5.480	5.485	(0.868)	31954	10.0000	10
	24 Isophorone	82	5.779	5.784	(0.915)	58235	10.0000	10
	25 2-Nitrophenol	139	5.876	5.880	(0.931)	16287	10.0000	10
	26 2,4-Dimethylphenol	107	5.972	5.976	(0.946)	26096	10.0000	9(a)
	27 bis(2-Chloroethoxy)methane	93	6.057	6.062	(0.959)	33660	10.0000	10
	28 Benzoic Acid	105	6.100	6.115	(0.966)	17761	10.0000	11(a)
	29 2,4-Dichlorophenol	162	6.180	6.185	(0.979)	26368	10.0000	10
	30 1,2,4-Trichlorobenzene	180	6.255	6.259	(0.991)	29730	10.0000	10
*	31 Naphthalene-d8	136	6.314	6.318	(1.000)	330445	40.0000	
	32 Naphthalene	128	6.335	6.340	(1.003)	88556	10.0000	10
	115 alpha-Terpineol	59	6.367	6.372	(1.008)	17555	10.0000	10
	33 4-Chloroaniline	127	6.415	6.420	(1.016)	35971	10.0000	10
	34 Hexachlorobutadiene	225	6.490	6.494	(1.028)	18847	10.0000	10
	102 Caprolactam	113	6.768	6.783	(1.072)	11556	10.0000	10
	35 4-Chloro-3-Methylphenol	107	6.971	6.975	(1.104)	28836	10.0000	10
	36 2-Methylnaphthalene	142	7.072	7.071	(1.120)	63156	10.0000	10
	114 1-Methylnaphthalene	142	7.168	7.173	(1.135)	59040	10.0000	10
	38 Hexachlorocyclopentadiene	237	7.238	7.237	(0.899)	17801	10.0000	10
	112 1,2,4,5-Tetrachlorobenzene	216	7.243	7.242	(0.899)	33387	10.0000	10
	39 2,4,6-Trichlorophenol	196	7.366	7.371	(0.914)	20574	10.0000	10
	40 2,4,5-Trichlorophenol	196	7.409	7.413	(0.920)	22124	10.0000	10(a)
$	41 2-Fluorobiphenyl	172	7.436	7.435	(0.923)	75486	10.0000	10
	98 1,1'-Biphenyl	154	7.526	7.531	(0.934)	84600	10.0000	10
	42 2-Chloronaphthalene	162	7.542	7.541	(0.936)	59784	10.0000	10
	43 2-Nitroaniline	65	7.644	7.648	(0.949)	17587	10.0000	10(a)
	44 Dimethylphthalate	163	7.815	7.819	(0.970)	72861	10.0000	10
	45 2,6-Dinitrotoluene	165	7.868	7.867	(0.977)	17356	10.0000	10
	46 Acenaphthylene	152	7.922	7.926	(0.983)	100412	10.0000	10
	47 3-Nitroaniline	138	8.023	8.028	(0.996)	18785	10.0000	10(a)
*	48 Acenaphthene-d10	164	8.055	8.054	(1.000)	225165	40.0000	
	49 Acenaphthene	153	8.082	8.086	(1.003)	63472	10.0000	10
	50 2,4-Dinitrophenol	184	8.114	8.118	(1.007)	5421	10.0000	6(a)
	51 4-Nitrophenol	109	8.216	8.220	(1.020)	9527	10.0000	10(a)
	53 2,4-Dinitrotoluene	165	8.226	8.231	(1.021)	23260	10.0000	10
	52 Dibenzofuran	168	8.237	8.236	(1.023)	91490	10.0000	10
	110 2,3,4,6-Tetrachlorophenol	232	8.360	8.364	(1.038)	20875	10.0000	10(H)
	54 Diethylphthalate	149	8.435	8.439	(1.047)	72085	10.0000	10
	56 4-Chlorophenyl-phenylether	204	8.531	8.540	(1.059)	40019	10.0000	10
	55 Fluorene	166	8.536	8.540	(1.060)	77200	10.0000	10
	57 4-Nitroaniline	138	8.557	8.567	(1.062)	18952	10.0000	10(a)
	58 4,6-Dinitro-2-methylphenol	198	8.584	8.594	(0.918)	10992	10.0000	8(a)
	59 N-Nitrosodiphenylamine	169	8.638	8.647	(0.924)	67038	10.0000	11
	97 Azobenzene	77	8.670	8.674	(0.927)	67651	10.0000	10
$	60 2,4,6-Tribromophenol	330	8.750	8.759	(0.936)	11703	10.0000	10
	61 4-Bromophenyl-phenylether	248	8.953	8.968	(0.958)	24828	10.0000	10
	62 Hexachlorobenzene	284	9.017	9.032	(0.965)	25340	10.0000	10
	100 Atrazine	200	9.092	9.112	(0.973)	11212	10.0000	13
	63 Pentachlorophenol	266	9.193	9.214	(0.983)	10761	10.0000	8(a)
	111 Pentachloronitrobenzene	237	9.198	9.219	(0.984)	10389	10.0000	10
*	64 Phenanthrene-d10	188	9.348	9.369	(1.000)	450429	40.0000	

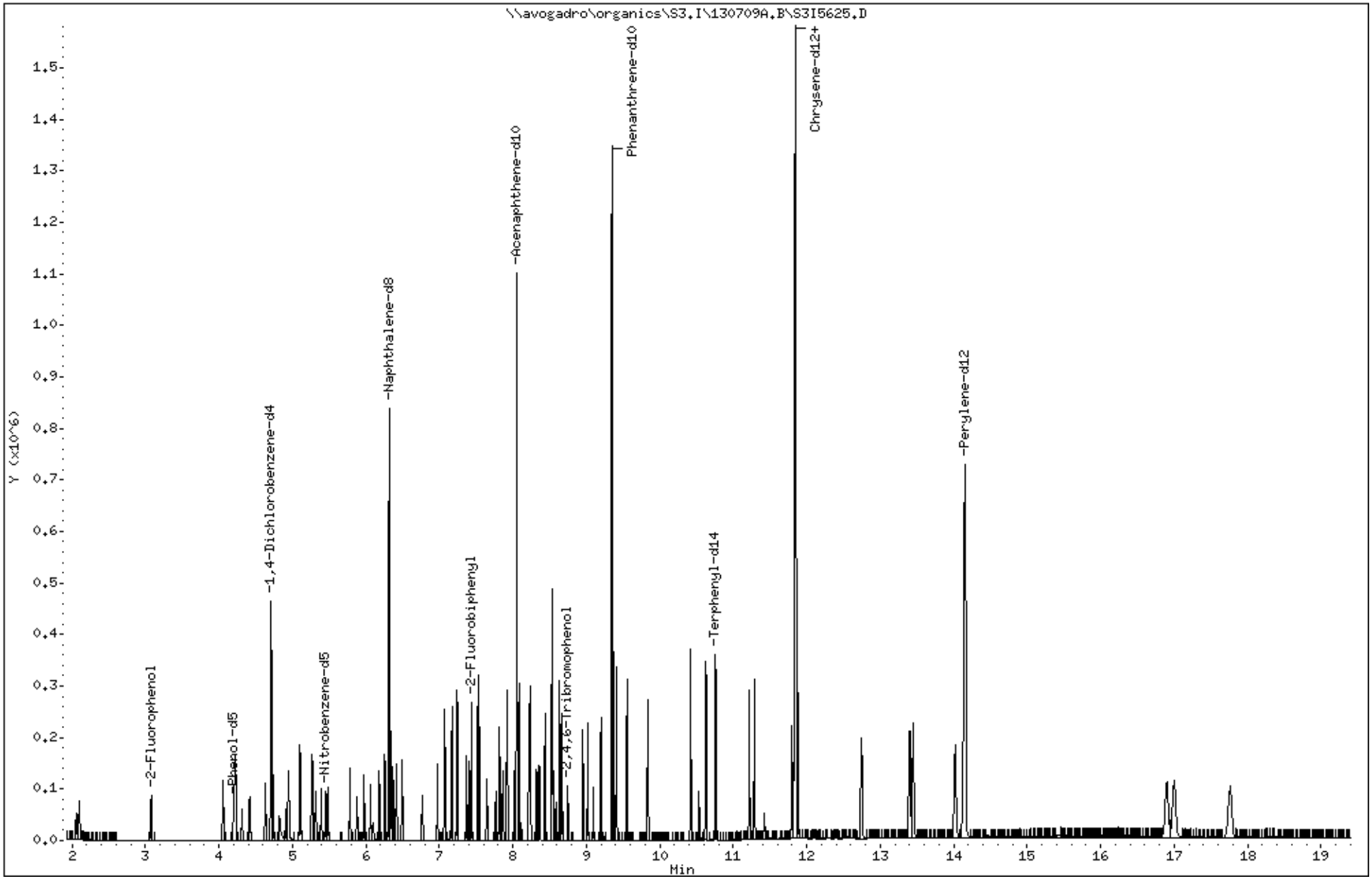
Data File: \\avogadro\organics\S3.I\130709A.B\S3I5625.D
Report Date: 10-Jul-2013 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.364	9.390	(1.002)	114853	10.0000	11
66	Anthracene	178	9.407	9.433	(1.006)	117915	10.0000	10
67	Carbazole	167	9.551	9.582	(1.022)	109718	10.0000	11
68	Di-n-butylphthalate	149	9.840	9.876	(1.053)	123061	10.0000	10
69	Fluoranthene	202	10.416	10.474	(1.114)	134684	10.0000	10
70	Benzidine	184	10.534	10.592	(0.882)	37326	10.0000	11(a)
71	Pyrene	202	10.625	10.693	(0.890)	138473	10.0000	11
$ 72	Terphenyl-d14	244	10.758	10.832	(0.901)	101973	10.0000	10
73	Butylbenzylphthalate	149	11.218	11.313	(0.940)	56918	10.0000	10
74	3,3'-Dichlorobenzidine	252	11.800	11.901	(0.988)	57153	10.0000	10
78	bis(2-Ethylhexyl)phthalate	149	11.843	11.949	(0.992)	81944	10.0000	10(H)
75	Benzo(a)anthracene	228	11.832	11.927	(0.991)	154006	10.0000	10(H)
* 76	Chrysene-d12	240	11.848	11.943	(1.000)	597018	40.0000	(H)
77	Chrysene	228	11.875	11.975	(0.995)	139333	10.0000	11(H)
79	Di-n-octylphthalate	149	12.746	12.857	(0.892)	140091	10.0000	10
80	Benzo(b)fluoranthene	252	13.403	13.514	(0.938)	152328	10.0000	10(H)
81	Benzo(k)fluoranthene	252	13.445	13.562	(0.941)	155653	10.0000	10
82	Benzo(a)pyrene	252	14.022	14.139	(0.981)	148701	10.0000	10(H)
* 83	Perylene-d12	264	14.156	14.262	(1.000)	586859	40.0000	(H)
84	Indeno(1,2,3-cd)pyrene	276	16.902	17.040	(1.183)	142502	10.0000	10(H)
85	Dibenzo(a,h)anthracene	278	17.003	17.136	(1.190)	141855	10.0000	10
86	Benzo(g,h,i)perylene	276	17.762	17.905	(1.243)	145478	10.0000	10(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5625.D
Date : 09-JUL-2013 16:31
Client ID: SSTD0103Z
Instrument: S3.i
Sample Info: SSTD0103Z,SSTD0103Z
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130709A.B\S3I5626.D
Report Date: 10-Jul-2013 13:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5626.D
Lab Smp Id: SSTD0403Z Client Smp ID: SSTD0403Z
Inj Date : 09-JUL-2013 17:00
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0403Z,SSTD0403Z
Misc Info : 1,4
Comment   :
Method   : \\avogadro\organics\S3.I\130709A.B\s3_8270C_N.m
Meth Date : 10-Jul-2013 13:13 pkaczorows Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
$	109	1,4-Dioxane-d8	96	1.875	1.873	(0.398)	33445	40.0000	39
	108	1,4-Dioxane	58	1.891	1.890	(0.401)	25969	40.0000	40
	1	N-Nitrosodimethylamine	74	2.056	2.060	(0.437)	76008	40.0000	39
	2	Pyridine	79	2.094	2.098	(0.444)	124210	40.0000	39
$	3	2-Fluorophenol	112	3.077	3.081	(0.653)	116353	40.0000	39
	101	Benzaldehyde	77	4.054	4.058	(0.861)	83897	40.0000	35
$	5	Phenol-d5	99	4.204	4.208	(0.892)	151040	40.0000	39
	6	Phenol	94	4.225	4.229	(0.897)	167265	40.0000	39
	7	Aniline	66	4.225	4.229	(0.897)	123393	40.0000	39
	8	bis(2-Chloroethyl)Ether	63	4.316	4.315	(0.916)	77438	40.0000	38
	10	2-Chlorophenol	128	4.418	4.422	(0.938)	121561	40.0000	39
	11	1,3-Dichlorobenzene	146	4.631	4.635	(0.983)	131845	40.0000	39
*	12	1,4-Dichlorobenzene-d4	152	4.711	4.710	(1.000)	97814	40.0000	
	13	1,4-Dichlorobenzene	146	4.733	4.737	(1.005)	134316	40.0000	38
	117	2-Ethyl-1-hexanol	57	4.824	4.828	(1.024)	122087	40.0000	40
	15	Benzyl Alcohol	108	4.920	4.924	(1.044)	84126	40.0000	40
	16	1,2-Dichlorobenzene	146	4.946	4.951	(1.050)	125896	40.0000	38
	17	2-Methylphenol	108	5.107	5.105	(1.084)	113490	40.0000	39
	18	2,2'-oxybis(1-Chloropropane)	45	5.101	5.105	(1.083)	144752	40.0000	39
	99	Acetophenone	105	5.267	5.266	(1.118)	173549	40.0000	39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	19 N-Nitroso-di-n-propylamine	70	5.278	5.276	(1.120)	93051	40.0000	39
	20 4-Methylphenol	108	5.320	5.325	(1.129)	121968	40.0000	39
	21 Hexachloroethane	117	5.390	5.394	(1.144)	47049	40.0000	38
$	22 Nitrobenzene-d5	82	5.459	5.458	(0.865)	135510	40.0000	39
	23 Nitrobenzene	77	5.481	5.485	(0.868)	129634	40.0000	39
	24 Isophorone	82	5.785	5.784	(0.916)	242462	40.0000	39
	25 2-Nitrophenol	139	5.881	5.880	(0.931)	70742	40.0000	40
	26 2,4-Dimethylphenol	107	5.977	5.976	(0.947)	128105	40.0000	42
	27 bis(2-Chloroethoxy)methane	93	6.063	6.062	(0.960)	138939	40.0000	38
	28 Benzoic Acid	105	6.138	6.115	(0.972)	57963	40.0000	32
	29 2,4-Dichlorophenol	162	6.180	6.185	(0.979)	109940	40.0000	39
	30 1,2,4-Trichlorobenzene	180	6.261	6.259	(0.992)	120443	40.0000	38
*	31 Naphthalene-d8	136	6.314	6.318	(1.000)	361282	40.0000	
	32 Naphthalene	128	6.341	6.340	(1.004)	359196	40.0000	39
	115 alpha-Terpineol	59	6.367	6.372	(1.008)	72585	40.0000	39
	33 4-Chloroaniline	127	6.415	6.420	(1.016)	150469	40.0000	39
	34 Hexachlorobutadiene	225	6.496	6.494	(1.029)	77044	40.0000	39
	102 Caprolactam	113	6.795	6.783	(1.076)	48270	40.0000	40
	35 4-Chloro-3-Methylphenol	107	6.976	6.975	(1.105)	118852	40.0000	39
	36 2-Methylnaphthalene	142	7.073	7.071	(1.120)	254902	40.0000	38
	114 1-Methylnaphthalene	142	7.169	7.173	(1.135)	237560	40.0000	38
	38 Hexachlorocyclopentadiene	237	7.238	7.237	(0.899)	62732	40.0000	32
	112 1,2,4,5-Tetrachlorobenzene	216	7.244	7.242	(0.899)	139198	40.0000	38
	39 2,4,6-Trichlorophenol	196	7.372	7.371	(0.915)	87909	40.0000	38
	40 2,4,5-Trichlorophenol	196	7.414	7.413	(0.920)	93901	40.0000	38
$	41 2-Fluorobiphenyl	172	7.436	7.435	(0.923)	308039	40.0000	38
	98 1,1'-Biphenyl	154	7.527	7.531	(0.934)	337134	40.0000	38
	42 2-Chloronaphthalene	162	7.543	7.541	(0.936)	241877	40.0000	38
	43 2-Nitroaniline	65	7.650	7.648	(0.950)	75018	40.0000	38
	44 Dimethylphthalate	163	7.820	7.819	(0.971)	298588	40.0000	38
	45 2,6-Dinitrotoluene	165	7.874	7.867	(0.977)	72825	40.0000	38
	46 Acenaphthylene	152	7.927	7.926	(0.984)	406358	40.0000	38
	47 3-Nitroaniline	138	8.029	8.028	(0.997)	79454	40.0000	38
*	48 Acenaphthene-d10	164	8.056	8.054	(1.000)	252680	40.0000	
	49 Acenaphthene	153	8.082	8.086	(1.003)	257748	40.0000	38
	50 2,4-Dinitrophenol	184	8.114	8.118	(1.007)	40906	40.0000	43
	51 4-Nitrophenol	109	8.216	8.220	(1.020)	42301	40.0000	39(Q)
	53 2,4-Dinitrotoluene	165	8.232	8.231	(1.022)	99698	40.0000	38
	52 Dibenzofuran	168	8.237	8.236	(1.023)	372160	40.0000	38
	110 2,3,4,6-Tetrachlorophenol	232	8.360	8.364	(1.038)	88047	40.0000	39(H)
	54 Diethylphthalate	149	8.440	8.439	(1.048)	291662	40.0000	37
	56 4-Chlorophenyl-phenylether	204	8.536	8.540	(1.060)	165757	40.0000	38
	55 Fluorene	166	8.536	8.540	(1.060)	319276	40.0000	38
	57 4-Nitroaniline	138	8.568	8.567	(1.064)	84034	40.0000	40
	58 4,6-Dinitro-2-methylphenol	198	8.590	8.594	(0.918)	62068	40.0000	41
	59 N-Nitrosodiphenylamine	169	8.643	8.647	(0.924)	269805	40.0000	38
	97 Azobenzene	77	8.675	8.674	(0.927)	277276	40.0000	38
$	60 2,4,6-Tribromophenol	330	8.755	8.759	(0.936)	51098	40.0000	39
	61 4-Bromophenyl-phenylether	248	8.958	8.968	(0.958)	104819	40.0000	38
	62 Hexachlorobenzene	284	9.022	9.032	(0.965)	109416	40.0000	38
	100 Atrazine	200	9.103	9.112	(0.973)	48103	40.0000	48
	63 Pentachlorophenol	266	9.204	9.214	(0.984)	64161	40.0000	41
	111 Pentachloronitrobenzene	237	9.209	9.219	(0.985)	46117	40.0000	39
*	64 Phenanthrene-d10	188	9.354	9.369	(1.000)	508105	40.0000	

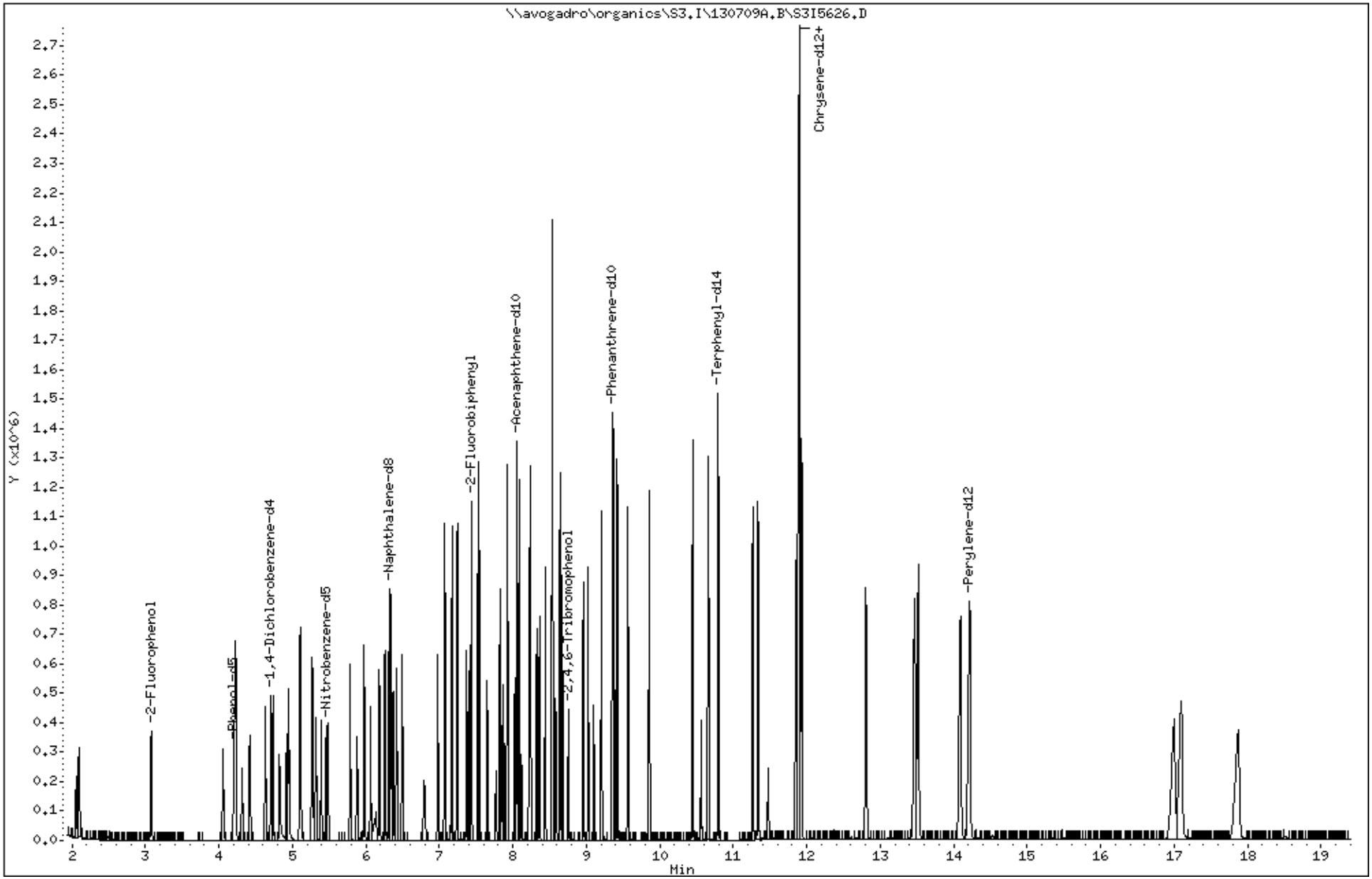
Data File: \\avogadro\organics\S3.I\130709A.B\S3I5626.D
Report Date: 10-Jul-2013 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
65	Phenanthrene	178	9.375	9.390	(1.002)	458867	40.0000	38
66	Anthracene	178	9.418	9.433	(1.007)	473495	40.0000	38
67	Carbazole	167	9.567	9.582	(1.023)	438461	40.0000	38
68	Di-n-butylphthalate	149	9.856	9.876	(1.054)	504739	40.0000	38
69	Fluoranthene	202	10.449	10.474	(1.117)	548632	40.0000	38
70	Benzidine	184	10.561	10.592	(0.887)	139846	40.0000	35
71	Pyrene	202	10.662	10.693	(0.896)	559537	40.0000	38
$ 72	Terphenyl-d14	244	10.796	10.832	(0.907)	422047	40.0000	38
73	Butylbenzylphthalate	149	11.266	11.313	(0.947)	237076	40.0000	38
74	3,3'-Dichlorobenzidine	252	11.854	11.901	(0.996)	238133	40.0000	37
78	bis(2-Ethylhexyl)phthalate	149	11.897	11.949	(1.000)	338548	40.0000	38
75	Benzo(a)anthracene	228	11.886	11.927	(0.999)	627970	40.0000	38
* 76	Chrysene-d12	240	11.902	11.943	(1.000)	681864	40.0000	
77	Chrysene	228	11.929	11.975	(1.002)	564676	40.0000	38
79	Di-n-octylphthalate	149	12.805	12.857	(0.901)	589198	40.0000	38
80	Benzo(b)fluoranthene	252	13.467	13.514	(0.947)	634163	40.0000	38
81	Benzo(k)fluoranthene	252	13.521	13.562	(0.951)	657253	40.0000	38
82	Benzo(a)pyrene	252	14.092	14.139	(0.991)	625503	40.0000	38
* 83	Perylene-d12	264	14.215	14.262	(1.000)	668620	40.0000	
84	Indeno(1,2,3-cd)pyrene	276	16.998	17.040	(1.196)	600629	40.0000	38
85	Dibenzo(a,h)anthracene	278	17.094	17.136	(1.203)	615572	40.0000	38
86	Benzo(g,h,i)perylene	276	17.874	17.905	(1.257)	618127	40.0000	38

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5626.D
Date : 09-JUL-2013 17:00
Client ID: SSTD0403Z
Instrument: S3.i
Sample Info: SSTD0403Z,SSTD0403Z
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date: 07/10/2013 Time: 17:09

Lab File ID: S3I5651.D Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253C Init. Calib. Time(s): 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF025	MIN RRF	%D	MAX %D
Phenol	1.756	1.932	0.800	10.0	20.0
Bis(2-chloroethyl)ether	0.822	0.899	0.700	9.5	20.0
2-Chlorophenol	1.280	1.426	0.800	11.4	20.0
1,3-Dichlorobenzene	1.394	1.514	0.010	8.6	20.0
1,4-Dichlorobenzene	1.425	1.536	0.010	7.8	20.0
1,2-Dichlorobenzene	1.334	1.485	0.010	11.3	20.0
2-Methylphenol	1.183	1.315	0.700	11.2	20.0
2,2´-oxybis(1-Chloropropane)	1.528	1.643	0.010	7.5	20.0
4-Methylphenol	1.279	1.315	0.600	2.8	20.0
N-Nitroso-di-n-propylamine	0.970	1.098	0.500	13.2	20.0
Hexachloroethane	0.502	0.551	0.300	9.7	20.0
Nitrobenzene	0.369	0.405	0.200	9.6	20.0
Isophorone	0.688	0.765	0.400	11.2	20.0
2-Nitrophenol	0.197	0.213	0.100	8.2	20.0
2,4-Dimethylphenol	0.335	0.380	0.200	13.4	20.0
2,4-Dichlorophenol	0.312	0.344	0.200	10.2	20.0
1,2,4-Trichlorobenzene	0.346	0.374	0.010	8.1	20.0
Naphthalene	1.029	1.138	0.700	10.6	20.0
4-Chloroaniline	0.426	0.487	0.010	14.1	20.0
Bis(2-chloroethoxy)methane	0.399	0.447	0.300	12.1	20.0
Hexachlorobutadiene	0.218	0.236	0.010	7.9	20.0
4-Chloro-3-methylphenol	0.340	0.377	0.200	11.0	20.0
2-Methylnaphthalene	0.737	0.826	0.400	12.1	20.0
Hexachlorocyclopentadiene	0.306	0.360	0.050	17.5	20.0
2,4,6-Trichlorophenol	0.363	0.408	0.200	12.3	20.0
2,4,5-Trichlorophenol	0.394	0.436	0.200	10.6	20.0
2-Chloronaphthalene	1.014	1.152	0.800	13.6	20.0
2-Nitroaniline	0.311	0.351	0.010	12.7	20.0
Dimethylphthalate	1.251	1.441	0.010	15.2	20.0
Acenaphthylene	1.707	1.969	0.900	15.3	20.0
2,6-Dinitrotoluene	0.303	0.348	0.200	15.0	20.0
3-Nitroaniline	0.335	0.382	0.010	14.1	20.0
Acenaphthene	1.078	1.223	0.900	13.4	20.0
2,4-Dinitrophenol	0.152	0.155	0.010	1.7	20.0
4-Nitrophenol	0.172	0.189	0.010	9.7	20.0
Dibenzofuran	1.555	1.813	0.800	16.6	20.0
2,4-Dinitrotoluene	0.412	0.478	0.200	16.0	20.0
Diethylphthalate	1.237	1.424	0.010	15.1	20.0
4-Chlorophenyl-phenylether	0.690	0.800	0.400	16.0	20.0
Fluorene	1.328	1.545	0.900	16.3	20.0
4-Nitroaniline	0.338	0.384	0.010	13.5	20.0
4,6-Dinitro-2-methylphenol	0.119	0.126	0.010	5.7	20.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date: 07/10/2013 Time: 17:09

Lab File ID: S3I5651.D Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253C Init. Calib. Time(s): 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.561	0.631	0.010	12.6	20.0
4-Bromophenyl-phenylether	0.216	0.242	0.100	11.9	20.0
Hexachlorobenzene	0.224	0.251	0.100	11.9	20.0
Pentachlorophenol	0.123	0.124	0.050	1.1	20.0
Phenanthrene	0.958	1.089	0.700	13.6	20.0
Anthracene	0.988	1.120	0.700	13.4	20.0
Carbazole	0.919	1.049	0.010	14.2	20.0
Di-n-butylphthalate	1.044	1.195	0.010	14.5	20.0
Fluoranthene	1.144	1.328	0.600	16.0	20.0
Pyrene	0.873	1.030	0.600	18.0	20.0
Butylbenzylphthalate	0.367	0.436	0.010	18.7	20.0
3,3´-Dichlorobenzidine	0.376	0.454	0.010	20.6	20.0
Benzo(a)anthracene	0.981	1.150	0.800	17.2	20.0
Chrysene	0.880	1.053	0.700	19.6	20.0
Bis(2-ethylhexyl)phthalate	0.528	0.618	0.010	17.2	20.0
Di-n-octylphthalate	0.924	1.101	0.010	19.0	20.0
Benzo(b)fluoranthene	1.006	1.154	0.700	14.7	20.0
Benzo(k)fluoranthene	1.032	1.199	0.700	16.2	20.0
Benzo(a)pyrene	0.985	1.143	0.700	16.1	20.0
Indeno(1,2,3-cd)pyrene	0.944	1.056	0.500	11.9	20.0
Dibenzo(a,h)anthracene	0.955	1.065	0.400	11.6	20.0
Benzo(g,h,i)perylene	0.970	1.089	0.500	12.3	20.0

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date: 07/10/2013 Time: 17:09

Lab File ID: S3I5651.D Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253C Init. Calib. Time(s): 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.385	0.419	0.010	8.6	20.0
2-Fluorobiphenyl	1.284	1.453	0.010	13.1	20.0
Terphenyl-d14	0.652	0.765	0.010	17.3	20.0
Phenol-d5	1.592	1.785	0.010	12.1	20.0
2-Fluorophenol	1.208	1.314	0.010	8.8	20.0
2,4,6-Tribromophenol	0.104	0.117	0.010	12.8	20.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date: 07/11/2013 Time: 12:50

Lab File ID: S3I5681B.D Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253D Init. Calib. Time(s): 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF025	MIN RRF	%D	MAX %D
Phenol	1.756	1.929	0.800	9.9	20.0
Bis(2-chloroethyl)ether	0.822	0.914	0.700	11.3	20.0
2-Chlorophenol	1.280	1.402	0.800	9.5	20.0
1,3-Dichlorobenzene	1.394	1.510	0.010	8.4	20.0
1,4-Dichlorobenzene	1.425	1.539	0.010	8.0	20.0
1,2-Dichlorobenzene	1.334	1.471	0.010	10.2	20.0
2-Methylphenol	1.183	1.340	0.700	13.3	20.0
2,2´-oxybis(1-Chloropropane)	1.528	1.709	0.010	11.9	20.0
4-Methylphenol	1.279	1.340	0.600	4.8	20.0
N-Nitroso-di-n-propylamine	0.970	1.109	0.500	14.3	20.0
Hexachloroethane	0.502	0.547	0.300	8.9	20.0
Nitrobenzene	0.369	0.408	0.200	10.5	20.0
Isophorone	0.688	0.774	0.400	12.4	20.0
2-Nitrophenol	0.197	0.213	0.100	8.2	20.0
2,4-Dimethylphenol	0.335	0.382	0.200	14.1	20.0
2,4-Dichlorophenol	0.312	0.343	0.200	9.8	20.0
1,2,4-Trichlorobenzene	0.346	0.376	0.010	8.7	20.0
Naphthalene	1.029	1.129	0.700	9.7	20.0
4-Chloroaniline	0.426	0.475	0.010	11.5	20.0
Bis(2-chloroethoxy)methane	0.399	0.445	0.300	11.5	20.0
Hexachlorobutadiene	0.218	0.233	0.010	6.9	20.0
4-Chloro-3-methylphenol	0.340	0.382	0.200	12.3	20.0
2-Methylnaphthalene	0.737	0.829	0.400	12.5	20.0
Hexachlorocyclopentadiene	0.306	0.358	0.050	17.0	20.0
2,4,6-Trichlorophenol	0.363	0.409	0.200	12.6	20.0
2,4,5-Trichlorophenol	0.394	0.437	0.200	10.8	20.0
2-Chloronaphthalene	1.014	1.149	0.800	13.3	20.0
2-Nitroaniline	0.311	0.357	0.010	14.7	20.0
Dimethylphthalate	1.251	1.441	0.010	15.1	20.0
Acenaphthylene	1.707	1.968	0.900	15.2	20.0
2,6-Dinitrotoluene	0.303	0.339	0.200	11.9	20.0
3-Nitroaniline	0.335	0.373	0.010	11.4	20.0
Acenaphthene	1.078	1.214	0.900	12.6	20.0
2,4-Dinitrophenol	0.152	0.177	0.010	16.4	20.0
4-Nitrophenol	0.172	0.186	0.010	7.8	20.0
Dibenzofuran	1.555	1.792	0.800	15.2	20.0
2,4-Dinitrotoluene	0.412	0.469	0.200	13.8	20.0
Diethylphthalate	1.237	1.426	0.010	15.2	20.0
4-Chlorophenyl-phenylether	0.690	0.792	0.400	14.8	20.0
Fluorene	1.328	1.529	0.900	15.1	20.0
4-Nitroaniline	0.338	0.358	0.010	5.9	20.0
4,6-Dinitro-2-methylphenol	0.119	0.137	0.010	15.0	20.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date: 07/11/2013 Time: 12:50

Lab File ID: S3I5681B.D Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253D Init. Calib. Time(s): 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{\text{RRF}}$	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.561	0.641	0.010	14.4	20.0
4-Bromophenyl-phenylether	0.216	0.242	0.100	12.1	20.0
Hexachlorobenzene	0.224	0.253	0.100	13.2	20.0
Pentachlorophenol	0.123	0.142	0.050	15.6	20.0
Phenanthrene	0.958	1.099	0.700	14.7	20.0
Anthracene	0.988	1.132	0.700	14.6	20.0
Carbazole	0.919	1.037	0.010	12.8	20.0
Di-n-butylphthalate	1.044	1.191	0.010	14.1	20.0
Fluoranthene	1.144	1.301	0.600	13.6	20.0
Pyrene	0.873	1.048	0.600	20.0	20.0
Butylbenzylphthalate	0.367	0.428	0.010	16.7	20.0
3,3´-Dichlorobenzidine	0.376	0.438	0.010	16.5	20.0
Benzo(a)anthracene	0.981	1.140	0.800	16.2	20.0
Chrysene	0.880	1.063	0.700	20.8	20.0
Bis(2-ethylhexyl)phthalate	0.528	0.604	0.010	14.5	20.0
Di-n-octylphthalate	0.924	1.059	0.010	14.5	20.0
Benzo(b)fluoranthene	1.006	1.149	0.700	14.3	20.0
Benzo(k)fluoranthene	1.032	1.185	0.700	14.8	20.0
Benzo(a)pyrene	0.985	1.118	0.700	13.5	20.0
Indeno(1,2,3-cd)pyrene	0.944	1.033	0.500	9.4	20.0
Dibenzo(a,h)anthracene	0.955	1.046	0.400	9.6	20.0
Benzo(g,h,i)perylene	0.970	1.061	0.500	9.3	20.0

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Instrument ID: S3 Calibration Date: 07/11/2013 Time: 12:50

Lab File ID: S3I5681B.D Init. Calib. Date(s): 07/09/2013 07/09/2013

EPA Sample No.(SSTD020##) SSTD0253D Init. Calib. Time(s): 14:36 17:00

GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.385	0.420	0.010	9.0	20.0
2-Fluorobiphenyl	1.284	1.462	0.010	13.9	20.0
Terphenyl-d14	0.652	0.790	0.010	21.2	20.0
Phenol-d5	1.592	1.759	0.010	10.5	20.0
2-Fluorophenol	1.208	1.316	0.010	8.9	20.0
2,4,6-Tribromophenol	0.104	0.117	0.010	13.1	20.0

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5651.D
Report Date: 11-Jul-2013 10:00

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130710B.B\S3I5651.D
Lab Smp Id: SSTD0253C Client Smp ID: SSTD0253C
Inj Date : 10-JUL-2013 17:09
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0253C,SSTD0253C
Misc Info : 2,3
Comment   :
Method   : \\avogadro\organics\S3.I\130710B.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 10:00 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

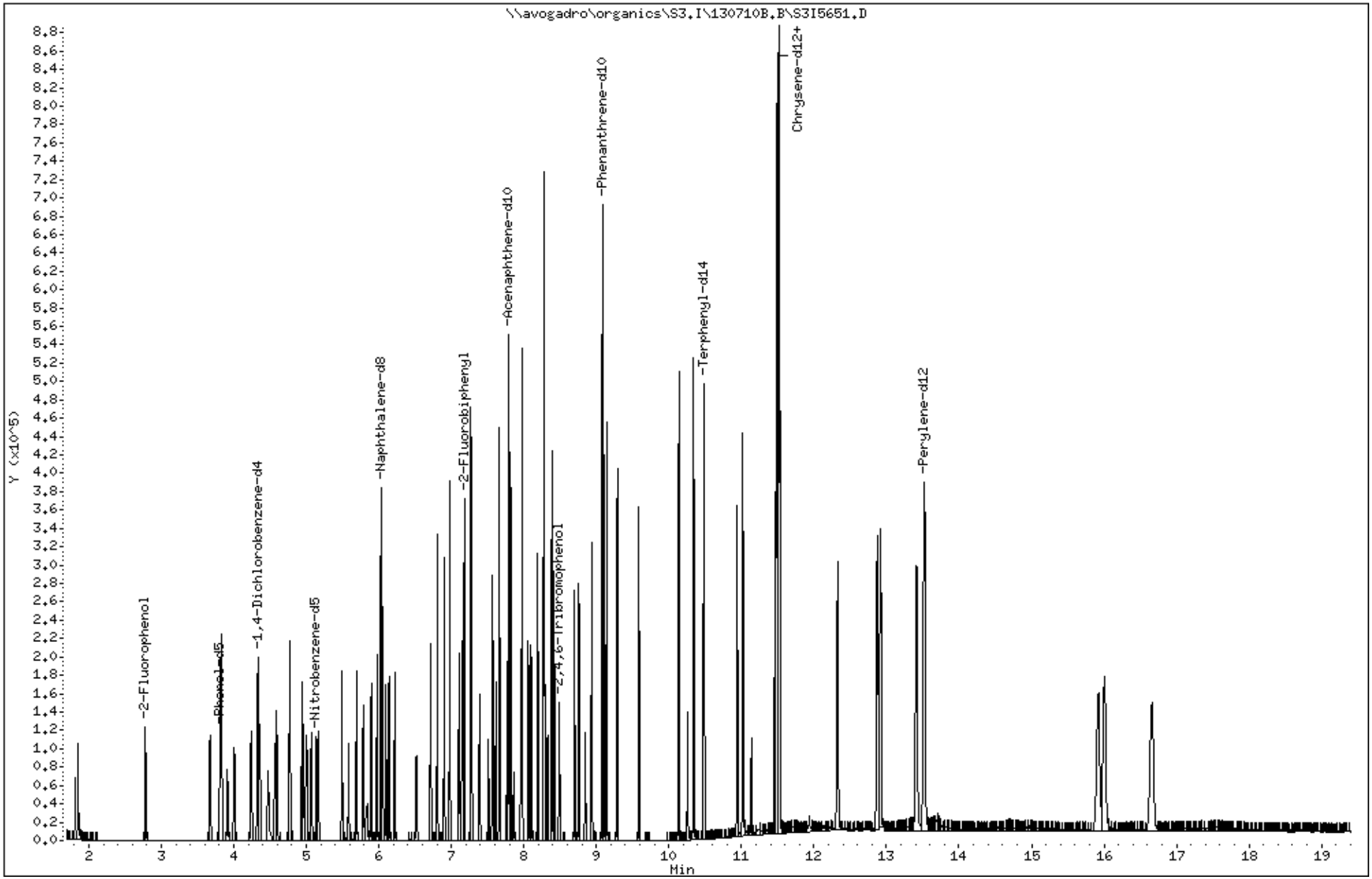
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 N-Nitrosodimethylamine	74	1.810	1.810	(0.418)	21258	25.0000	26
	2 Pyridine	79	1.847	1.847	(0.427)	33484	25.0000	25
$	3 2-Fluorophenol	112	2.782	2.782	(0.642)	33338	25.0000	27
	101 Benzaldehyde	77	3.674	3.674	(0.848)	26941	25.0000	27
$	5 Phenol-d5	99	3.808	3.808	(0.879)	45280	25.0000	28
	6 Phenol	94	3.829	3.829	(0.884)	48999	25.0000	28
	7 Aniline	66	3.824	3.824	(0.883)	36351	25.0000	28
	8 bis(2-Chloroethyl)Ether	63	3.914	3.914	(0.904)	22809	25.0000	27
	10 2-Chlorophenol	128	4.005	4.005	(0.925)	36169	25.0000	28
	11 1,3-Dichlorobenzene	146	4.240	4.240	(0.979)	38394	25.0000	27
*	12 1,4-Dichlorobenzene-d4	152	4.331	4.331	(1.000)	40584	40.0000	
	13 1,4-Dichlorobenzene	146	4.358	4.358	(1.006)	38970	25.0000	27
	117 2-Ethyl-1-hexanol	57	4.470	4.470	(1.032)	35145	25.0000	28
	15 Benzyl Alcohol	108	4.566	4.566	(1.054)	25047	25.0000	28
	16 1,2-Dichlorobenzene	146	4.593	4.593	(1.060)	37674	25.0000	28
	17 2-Methylphenol	108	4.769	4.769	(1.101)	33360	25.0000	28
	18 2,2'-oxybis(1-Chloropropane)	45	4.769	4.769	(1.101)	41677	25.0000	27
	99 Acetophenone	105	4.940	4.940	(1.141)	51599	25.0000	28
	19 N-Nitroso-di-n-propylamine	70	4.956	4.956	(1.144)	27861	25.0000	28
	20 4-Methylphenol	108	4.769	4.769	(1.101)	33360	25.0000	26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	21 Hexachloroethane	117	5.068	5.068	(1.170)	13970	25.0000	27
$	22 Nitrobenzene-d5	82	5.138	5.138	(0.852)	39734	25.0000	27
	23 Nitrobenzene	77	5.165	5.165	(0.856)	38446	25.0000	27
	24 Isophorone	82	5.490	5.490	(0.911)	72617	25.0000	28
	25 2-Nitrophenol	139	5.587	5.587	(0.926)	20234	25.0000	27
	26 2,4-Dimethylphenol	107	5.693	5.693	(0.944)	36070	25.0000	28
	27 bis(2-Chloroethoxy)methane	93	5.784	5.784	(0.959)	42467	25.0000	28
	28 Benzoic Acid	105	5.838	5.838	(0.968)	22019	25.0000	29
	29 2,4-Dichlorophenol	162	5.896	5.896	(0.978)	32644	25.0000	28
	30 1,2,4-Trichlorobenzene	180	5.977	5.977	(0.991)	35509	25.0000	27
*	31 Naphthalene-d8	136	6.030	6.030	(1.000)	151888	40.0000	
	32 Naphthalene	128	6.051	6.051	(1.004)	108070	25.0000	28
	115 alpha-Terpineol	59	6.094	6.094	(1.011)	21804	25.0000	28
	33 4-Chloroaniline	127	6.142	6.142	(1.019)	46187	25.0000	28
	34 Hexachlorobutadiene	225	6.222	6.222	(1.032)	22384	25.0000	27
	102 Caprolactam	113	6.521	6.521	(1.082)	15069	25.0000	29
	35 4-Chloro-3-Methylphenol	107	6.714	6.714	(1.113)	35809	25.0000	28
	36 2-Methylnaphthalene	142	6.805	6.805	(1.128)	78426	25.0000	28
	114 1-Methylnaphthalene	142	6.901	6.901	(1.144)	73117	25.0000	28
	38 Hexachlorocyclopentadiene	237	6.976	6.976	(0.895)	23628	25.0000	29
	112 1,2,4,5-Tetrachlorobenzene	216	6.981	6.981	(0.896)	42044	25.0000	28
	39 2,4,6-Trichlorophenol	196	7.109	7.109	(0.912)	26806	25.0000	28
	40 2,4,5-Trichlorophenol	196	7.146	7.146	(0.917)	28666	25.0000	28
$	41 2-Fluorobiphenyl	172	7.179	7.179	(0.921)	95469	25.0000	28
	98 1,1'-Biphenyl	154	7.269	7.269	(0.933)	106623	25.0000	28
	42 2-Chloronaphthalene	162	7.280	7.280	(0.934)	75656	25.0000	28
	43 2-Nitroaniline	65	7.387	7.387	(0.948)	23056	25.0000	28
	44 Dimethylphthalate	163	7.569	7.569	(0.971)	94649	25.0000	29
	45 2,6-Dinitrotoluene	165	7.617	7.617	(0.977)	22878	25.0000	29
	46 Acenaphthylene	152	7.659	7.659	(0.983)	129340	25.0000	29
	47 3-Nitroaniline	138	7.766	7.766	(0.997)	25085	25.0000	28
*	48 Acenaphthene-d10	164	7.793	7.793	(1.000)	105111	40.0000	
	49 Acenaphthene	153	7.820	7.820	(1.003)	80316	25.0000	28
	50 2,4-Dinitrophenol	184	7.857	7.857	(1.008)	10153	25.0000	25
	51 4-Nitrophenol	109	7.958	7.958	(1.021)	12412	25.0000	27
	53 2,4-Dinitrotoluene	165	7.975	7.975	(1.023)	31421	25.0000	29
	52 Dibenzofuran	168	7.975	7.975	(1.023)	119107	25.0000	29
	110 2,3,4,6-Tetrachlorophenol	232	8.103	8.103	(1.040)	27385	25.0000	29
	54 Diethylphthalate	149	8.194	8.194	(1.051)	93545	25.0000	29
	56 4-Chlorophenyl-phenylether	204	8.279	8.279	(1.062)	52573	25.0000	29
	55 Fluorene	166	8.279	8.279	(1.062)	101503	25.0000	29
	57 4-Nitroaniline	138	8.306	8.306	(1.066)	25203	25.0000	29
	58 4,6-Dinitro-2-methylphenol	198	8.332	8.332	(0.918)	17279	25.0000	26
	59 N-Nitrosodiphenylamine	169	8.386	8.386	(0.924)	86416	25.0000	28
	97 Azobenzene	77	8.418	8.418	(0.927)	87782	25.0000	28
$	60 2,4,6-Tribromophenol	330	8.493	8.493	(0.935)	16015	25.0000	28
	61 4-Bromophenyl-phenylether	248	8.701	8.701	(0.958)	33081	25.0000	28
	62 Hexachlorobenzene	284	8.760	8.760	(0.965)	34280	25.0000	28
	100 Atrazine	200	8.845	8.845	(0.974)	12474	25.0000	29
	63 Pentachlorophenol	266	8.931	8.931	(0.984)	17010	25.0000	25
	111 Pentachloronitrobenzene	237	8.936	8.936	(0.984)	14215	25.0000	28
*	64 Phenanthrene-d10	188	9.080	9.080	(1.000)	218948	40.0000	
	65 Phenanthrene	178	9.102	9.102	(1.002)	148956	25.0000	28
	66 Anthracene	178	9.144	9.144	(1.007)	153331	25.0000	28

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5651.D
Report Date: 11-Jul-2013 10:00

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
	67 Carbazole	167	9.289	9.289	(1.023)	143550	25.0000	28
	68 Di-n-butylphthalate	149	9.588	9.588	(1.056)	163584	25.0000	29
	69 Fluoranthene	202	10.138	10.138	(1.116)	181722	25.0000	29
	70 Benzidine	184	10.256	10.256	(0.892)	47077	25.0000	28
	71 Pyrene	202	10.341	10.341	(0.900)	184113	25.0000	29
$	72 Terphenyl-d14	244	10.485	10.485	(0.912)	136678	25.0000	29
	73 Butylbenzylphthalate	149	10.939	10.939	(0.952)	77882	25.0000	30
	74 3,3'-Dichlorobenzidine	252	11.463	11.463	(0.997)	81051	25.0000	30
	78 bis(2-Ethylhexyl)phthalate	149	11.522	11.522	(1.002)	110510	25.0000	29
	75 Benzo(a)anthracene	228	11.484	11.484	(0.999)	205529	25.0000	29
*	76 Chrysene-d12	240	11.495	11.495	(1.000)	285896	40.0000	
	77 Chrysene	228	11.522	11.522	(1.002)	188080	25.0000	30
	79 Di-n-octylphthalate	149	12.323	12.323	(0.911)	195008	25.0000	30
	80 Benzo(b)fluoranthene	252	12.873	12.873	(0.952)	204473	25.0000	29
	81 Benzo(k)fluoranthene	252	12.916	12.916	(0.955)	212484	25.0000	29
	82 Benzo(a)pyrene	252	13.418	13.418	(0.992)	202535	25.0000	29
*	83 Perylene-d12	264	13.525	13.525	(1.000)	283512	40.0000	
	84 Indeno(1,2,3-cd)pyrene	276	15.924	15.924	(1.177)	187190	25.0000	28
	85 Dibenzo(a,h)anthracene	278	16.009	16.009	(1.184)	188790	25.0000	28
	86 Benzo(g,h,i)perylene	276	16.666	16.666	(1.232)	192969	25.0000	28

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5651.D
Date : 10-JUL-2013 17:09
Client ID: SSTD0253C
Instrument: S3.i
Sample Info: SSTD0253C,SSTD0253C
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130711.B\S3I5681B.D
Report Date: 11-Jul-2013 15:01

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130711.B\S3I5681B.D
Lab Smp Id: SSTD0253D Client Smp ID: SSTD0253D
Inj Date : 11-JUL-2013 12:50
Operator : PK   SRC: PK Inst ID: S3.i
Smp Info : SSTD0253D,SSTD0253D
Misc Info : 2,3
Comment   :
Method   : \\avogadro\organics\S3.I\130711.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 15:01 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	1	N-Nitrosodimethylamine	74	1.794	1.794	(0.418)	31873	25.0000	27
	2	Pyridine	79	1.826	1.826	(0.425)	49763	25.0000	26
$	3	2-Fluorophenol	112	2.750	2.750	(0.641)	48256	25.0000	27
	101	Benzaldehyde	77	3.637	3.637	(0.847)	39995	25.0000	28
$	5	Phenol-d5	99	3.765	3.765	(0.877)	64524	25.0000	28
	6	Phenol	94	3.781	3.781	(0.881)	70753	25.0000	27
	7	Aniline	66	3.787	3.787	(0.882)	53506	25.0000	28
	8	bis(2-Chloroethyl)Ether	63	3.877	3.877	(0.903)	33528	25.0000	28
	10	2-Chlorophenol	128	3.968	3.968	(0.924)	51412	25.0000	27
	11	1,3-Dichlorobenzene	146	4.203	4.203	(0.979)	55402	25.0000	27
*	12	1,4-Dichlorobenzene-d4	152	4.294	4.294	(1.000)	58690	40.0000	
	13	1,4-Dichlorobenzene	146	4.321	4.321	(1.006)	56445	25.0000	27
	117	2-Ethyl-1-hexanol	57	4.433	4.433	(1.032)	42019	25.0000	23
	15	Benzyl Alcohol	108	4.529	4.529	(1.055)	35071	25.0000	28
	16	1,2-Dichlorobenzene	146	4.556	4.556	(1.061)	53959	25.0000	28
	17	2-Methylphenol	108	4.732	4.732	(1.102)	49152	25.0000	28
	18	2,2'-oxybis(1-Chloropropane)	45	4.737	4.737	(1.103)	62694	25.0000	28
	99	Acetophenone	105	4.908	4.908	(1.143)	76019	25.0000	28
	19	N-Nitroso-di-n-propylamine	70	4.924	4.924	(1.147)	40677	25.0000	28
	20	4-Methylphenol	108	4.732	4.732	(1.102)	49152	25.0000	26

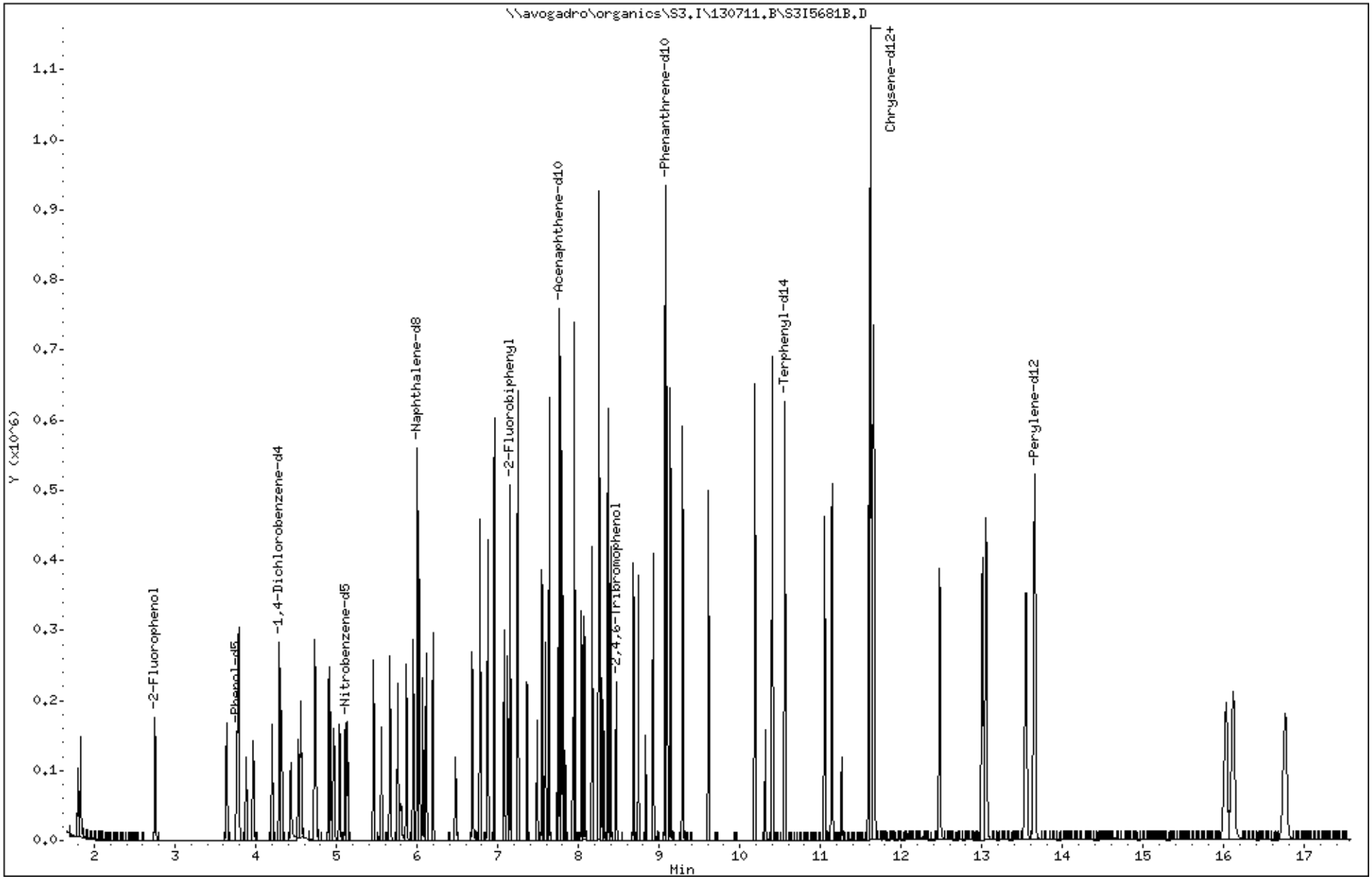
Data File: \\avogadro\organics\S3.I\130711.B\S3I5681B.D
Report Date: 11-Jul-2013 15:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	21 Hexachloroethane	117	5.037	5.037	(1.173)	20068	25.0000	27
$	22 Nitrobenzene-d5	82	5.111	5.111	(0.851)	58188	25.0000	27
	23 Nitrobenzene	77	5.133	5.133	(0.855)	56603	25.0000	28
	24 Isophorone	82	5.459	5.459	(0.909)	107263	25.0000	28
	25 2-Nitrophenol	139	5.555	5.555	(0.925)	29546	25.0000	27
	26 2,4-Dimethylphenol	107	5.662	5.662	(0.943)	52970	25.0000	28
	27 bis(2-Chloroethoxy)methane	93	5.758	5.758	(0.959)	61653	25.0000	28
	28 Benzoic Acid	105	5.801	5.801	(0.966)	37363	25.0000	34
	29 2,4-Dichlorophenol	162	5.865	5.865	(0.977)	47485	25.0000	27
	30 1,2,4-Trichlorobenzene	180	5.950	5.950	(0.991)	52115	25.0000	27
*	31 Naphthalene-d8	136	6.004	6.004	(1.000)	221768	40.0000	
	32 Naphthalene	128	6.025	6.025	(1.004)	156496	25.0000	27
	115 alpha-Terpineol	59	6.068	6.068	(1.011)	32198	25.0000	28
	33 4-Chloroaniline	127	6.110	6.110	(1.018)	65905	25.0000	28
	34 Hexachlorobutadiene	225	6.196	6.196	(1.032)	32356	25.0000	27
	102 Caprolactam	113	6.479	6.479	(1.079)	21272	25.0000	28
	35 4-Chloro-3-Methylphenol	107	6.682	6.682	(1.113)	52907	25.0000	28
	36 2-Methylnaphthalene	142	6.778	6.778	(1.129)	114889	25.0000	28
	114 1-Methylnaphthalene	142	6.880	6.880	(1.146)	106314	25.0000	28
	38 Hexachlorocyclopentadiene	237	6.954	6.954	(0.895)	33988	25.0000	29
	112 1,2,4,5-Tetrachlorobenzene	216	6.954	6.954	(0.895)	60861	25.0000	28
	39 2,4,6-Trichlorophenol	196	7.083	7.083	(0.912)	38849	25.0000	28
	40 2,4,5-Trichlorophenol	196	7.120	7.120	(0.917)	41495	25.0000	28
$	41 2-Fluorobiphenyl	172	7.152	7.152	(0.921)	138823	25.0000	28
	98 1,1'-Biphenyl	154	7.243	7.243	(0.933)	154633	25.0000	29
	42 2-Chloronaphthalene	162	7.254	7.254	(0.934)	109026	25.0000	28
	43 2-Nitroaniline	65	7.360	7.360	(0.948)	33901	25.0000	29
	44 Dimethylphthalate	163	7.542	7.542	(0.971)	136748	25.0000	29
	45 2,6-Dinitrotoluene	165	7.590	7.590	(0.977)	32183	25.0000	28
	46 Acenaphthylene	152	7.638	7.638	(0.983)	186797	25.0000	29
	47 3-Nitroaniline	138	7.740	7.740	(0.997)	35396	25.0000	28
*	48 Acenaphthene-d10	164	7.766	7.766	(1.000)	151883	40.0000	
	49 Acenaphthene	153	7.798	7.798	(1.004)	115265	25.0000	28
	50 2,4-Dinitrophenol	184	7.831	7.831	(1.008)	16802	25.0000	29
	51 4-Nitrophenol	109	7.927	7.927	(1.021)	17630	25.0000	27
	53 2,4-Dinitrotoluene	165	7.948	7.948	(1.023)	44528	25.0000	28
	52 Dibenzofuran	168	7.953	7.953	(1.024)	170120	25.0000	29
	110 2,3,4,6-Tetrachlorophenol	232	8.071	8.071	(1.039)	36893	25.0000	27
	54 Diethylphthalate	149	8.167	8.167	(1.052)	135350	25.0000	29
	56 4-Chlorophenyl-phenylether	204	8.258	8.258	(1.063)	75155	25.0000	29
	55 Fluorene	166	8.253	8.253	(1.063)	145098	25.0000	29
	57 4-Nitroaniline	138	8.279	8.279	(1.066)	33990	25.0000	27
	58 4,6-Dinitro-2-methylphenol	198	8.306	8.306	(0.915)	26548	25.0000	29
	59 N-Nitrosodiphenylamine	169	8.365	8.365	(0.922)	124017	25.0000	28
	97 Azobenzene	77	8.397	8.397	(0.925)	127068	25.0000	29
$	60 2,4,6-Tribromophenol	330	8.466	8.466	(0.933)	22689	25.0000	28
	61 4-Bromophenyl-phenylether	248	8.680	8.680	(0.956)	46830	25.0000	28
	62 Hexachlorobenzene	284	8.744	8.744	(0.964)	48998	25.0000	28
	100 Atrazine	200	8.835	8.835	(0.974)	17127	25.0000	28
	63 Pentachlorophenol	266	8.920	8.920	(0.983)	27477	25.0000	29
	111 Pentachloronitrobenzene	237	8.931	8.931	(0.984)	20038	25.0000	28
*	64 Phenanthrene-d10	188	9.075	9.075	(1.000)	309350	40.0000	
	65 Phenanthrene	178	9.097	9.097	(1.002)	212488	25.0000	29
	66 Anthracene	178	9.139	9.139	(1.007)	218907	25.0000	29

Data File: \\avogadro\organics\S3.I\130711.B\S3I5681B.D
Report Date: 11-Jul-2013 15:01

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	67	Carbazole	167	9.289	9.289	(1.024)	200408	25.0000	28
	68	Di-n-butylphthalate	149	9.609	9.609	(1.059)	230181	25.0000	28
	69	Fluoranthene	202	10.186	10.186	(1.122)	251483	25.0000	28
	70	Benzidine	184	10.315	10.315	(0.887)	58638	25.0000	26
	71	Pyrene	202	10.400	10.400	(0.895)	256199	25.0000	30
$	72	Terphenyl-d14	244	10.555	10.555	(0.908)	193200	25.0000	30
	73	Butylbenzylphthalate	149	11.052	11.052	(0.951)	104756	25.0000	29
	74	3,3'-Dichlorobenzidine	252	11.591	11.591	(0.997)	107094	25.0000	29
	78	bis(2-Ethylhexyl)phthalate	149	11.661	11.661	(1.003)	147778	25.0000	29
	75	Benzo(a)anthracene	228	11.613	11.613	(0.999)	278733	25.0000	29
*	76	Chrysene-d12	240	11.623	11.623	(1.000)	391224	40.0000	
	77	Chrysene	228	11.650	11.650	(1.002)	260006	25.0000	30
	79	Di-n-octylphthalate	149	12.473	12.473	(0.914)	254302	25.0000	29
	80	Benzo(b)fluoranthene	252	13.007	13.007	(0.953)	276004	25.0000	28
	81	Benzo(k)fluoranthene	252	13.050	13.050	(0.956)	284493	25.0000	29
	82	Benzo(a)pyrene	252	13.547	13.547	(0.992)	268452	25.0000	28
*	83	Perylene-d12	264	13.653	13.653	(1.000)	384223	40.0000	
	84	Indeno(1,2,3-cd)pyrene	276	16.025	16.025	(1.174)	248095	25.0000	27
	85	Dibenzo(a,h)anthracene	278	16.116	16.116	(1.180)	251283	25.0000	27
	86	Benzo(g,h,i)perylene	276	16.763	16.763	(1.228)	254710	25.0000	27

Data File: \\avogadro\organics\S3.I\130711.B\S3I5681B.D
Date : 11-JUL-2013 12:50
Client ID: SSTD0253D
Instrument: S3.i
Sample Info: SSTD0253D,SSTD0253D
Volume Injected (uL): 1.0
Operator: PK SRC: PK
Column phase: Rxi-5Sil MS
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130709A.B\S3I5620.D
Lab Smp Id: DFTPP3Z Client Smp ID: DFTPP3Z
Inj Date : 09-JUL-2013 13:14
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : DFTPP3Z,DFTPP3Z
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\130709A.B\S3_dftppSOM.m
Meth Date : 25-Apr-2013 13:45 pkaczorows Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.380	4.427	-0.047	198	1070592			0.00- 100.00	100.00
4.380	4.427	-0.047	51	318016			10.00- 80.00	29.70
4.380	4.427	-0.047	68	0	0.0	0.0	0.00- 2.00	0.00
4.380	4.427	-0.047	69	353664			0.00- 0.00	33.03
4.380	4.427	-0.047	70	2191			0.00- 2.00	0.62
4.380	4.427	-0.047	127	447488			10.00- 80.00	41.80
4.380	4.427	-0.047	197	0	0.0	0.0	0.00- 2.00	0.00
4.380	4.427	-0.047	199	74832			5.00- 9.00	6.99
4.380	4.427	-0.047	275	316864			10.00- 60.00	29.60
4.380	4.427	-0.047	365	43176			1.00- 0.00	4.03
4.380	4.427	-0.047	441	139712			0.01- 99.99	73.53
4.380	4.427	-0.047	442	976576			50.00- 100.00	91.22
4.380	4.427	-0.047	443	190016			15.00- 24.00	19.46

Data File: \\avogadro\organics\S3.I\130709A.B\S3I5620.D

Date : 09-JUL-2013 13:14

Client ID: DFTPP3Z

Instrument: S3.i

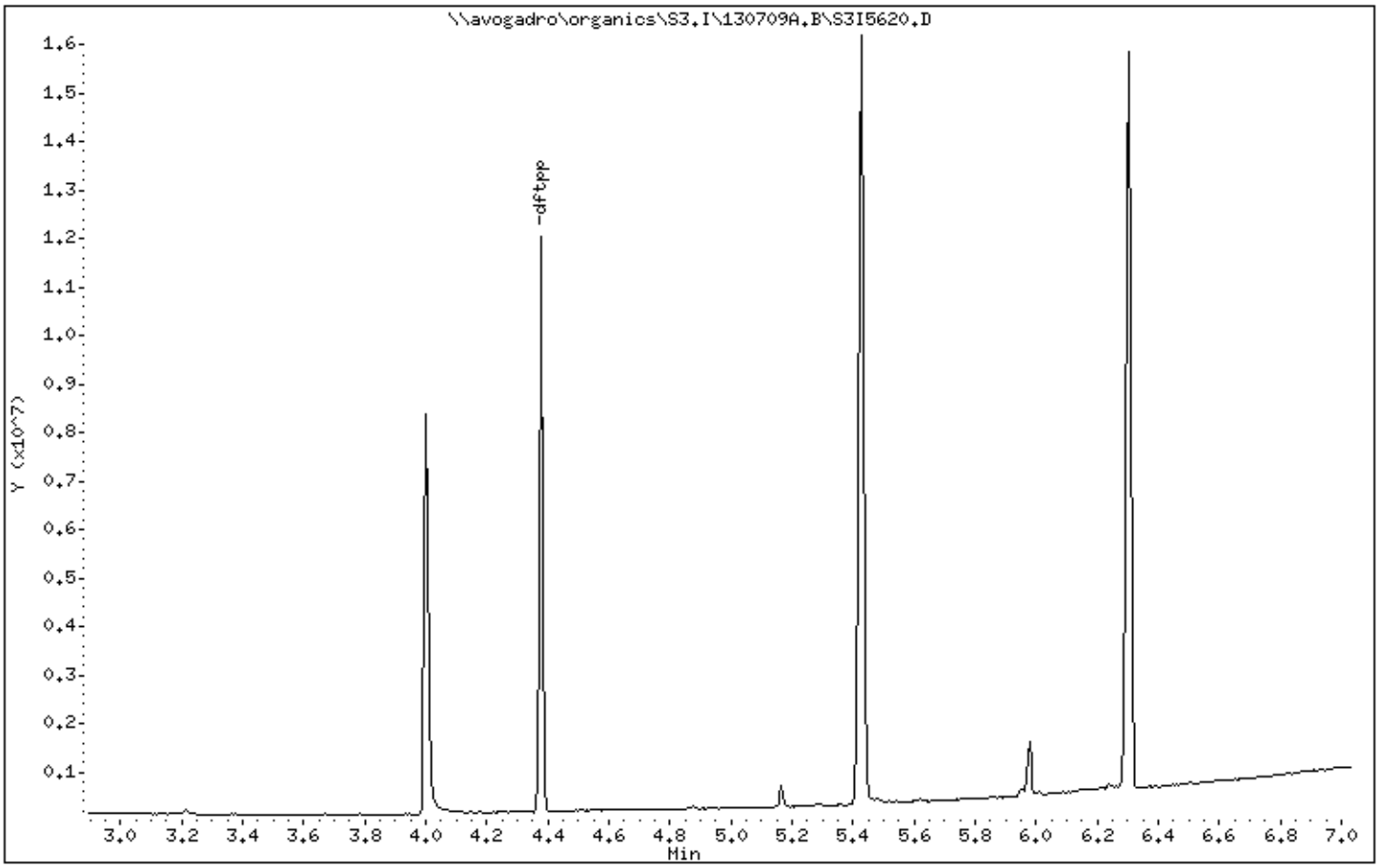
Sample Info: DFTPP3Z,DFTPP3Z

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130709A.B\S3I5620.D

Date : 09-JUL-2013 13:14

Client ID: DFTPP3Z

Instrument: S3.i

Sample Info: DFTPP3Z,DFTPP3Z

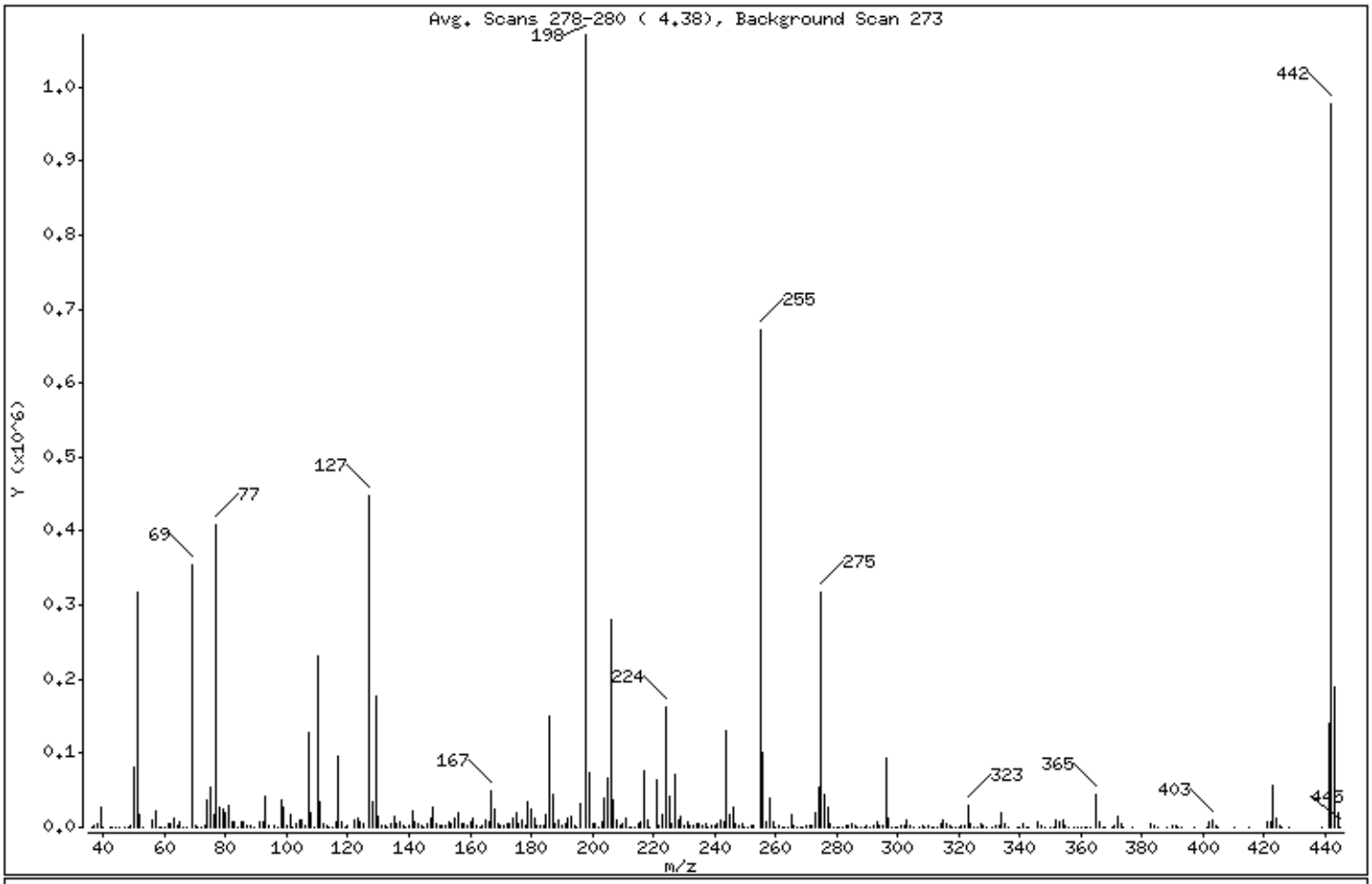
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	29.70
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	33.03
70	Less than 2.00% of mass 69	0.20 (0.62)
127	10.00 - 80.00% of mass 198	41.80
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.99
275	10.00 - 60.00% of mass 198	29.60
365	Greater than 1.00% of mass 198	4.03
441	Present, but less than mass 443	13.05
442	50.00 - 100.00% of mass 198	91.22
443	15.00 - 24.00% of mass 442	17.75 (19.46)

Date : 09-JUL-2013 13:14

Client ID: DFTPP3Z Instrument: S3.i

Sample Info: DFTPP3Z,DFTPP3Z

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5620.D
Spectrum: Avg. Scans 278-280 (4.38), Background Scan 273
Location of Maximum: 198.00
Number of points: 347

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	164	132.00	1944	221.00	63840	310.00	1453
37.00	1432	133.00	1151	222.00	2040	311.00	330
38.00	4088	134.00	4194	223.00	16728	312.00	374
39.00	26392	135.00	14055	224.00	162624	313.00	1117
40.00	1094	136.00	5973	225.00	41784	314.00	4690
42.00	234	137.00	7337	226.00	4339	315.00	10304
43.00	422	138.00	1508	227.00	72176	316.00	5876
44.00	741	139.00	966	228.00	10558	317.00	1466
45.00	322	140.00	2458	229.00	14749	318.00	162
47.00	49	141.00	23072	230.00	2485	319.00	111
48.00	369	142.00	8163	231.00	6498	320.00	574
49.00	2051	143.00	4839	232.00	1554	321.00	3305
50.00	81920	144.00	1485	233.00	1446	322.00	1806
51.00	318016	145.00	1173	234.00	4729	323.00	30600
52.00	16824	146.00	3931	235.00	5208	324.00	6054
53.00	354	147.00	11934	236.00	2749	325.00	862
56.00	8915	148.00	27720	237.00	5847	326.00	714
57.00	21952	149.00	5800	238.00	230	327.00	5364
58.00	1056	150.00	1588	239.00	1811	328.00	2832
59.00	200	151.00	3181	240.00	2564	329.00	460
60.00	273	152.00	2170	241.00	4460	331.00	120
61.00	4658	153.00	7606	242.00	9260	332.00	2548
62.00	5033	154.00	5987	243.00	7697	333.00	2902
63.00	12655	155.00	13164	244.00	130496	334.00	20672
64.00	2293	156.00	20552	245.00	17016	335.00	5017
65.00	6634	157.00	4063	246.00	26728	336.00	805
66.00	321	158.00	4200	247.00	5970	339.00	583
67.00	837	159.00	3328	248.00	1445	340.00	357
69.00	353664	160.00	7868	249.00	4513	341.00	4349
70.00	2191	161.00	11505	250.00	1058	342.00	774
71.00	253	162.00	3508	251.00	1218	343.00	442
72.00	508	163.00	1036	252.00	1416	346.00	7199
73.00	2898	164.00	1618	253.00	2302	347.00	1351
74.00	36184	165.00	9785	255.00	671104	348.00	112
75.00	55280	166.00	7048	256.00	100144	350.00	572

Date : 09-JUL-2013 13:14

Client ID: DFTPP3Z Instrument: S3.i

Sample Info: DFTPP3Z,DFTPP3Z

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5620.D
Spectrum: Avg. Scans 278-280 (4.38), Background Scan 273
Location of Maximum: 198.00
Number of points: 347

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	18352	167.00	49424	257.00	8004	351.00	706
77.00	408384	168.00	24720	258.00	39424	352.00	9502
78.00	27576	169.00	4354	259.00	7424	353.00	6238
79.00	25592	170.00	1977	260.00	1030	354.00	10313
80.00	19816	171.00	2524	261.00	1399	355.00	2159
81.00	28640	172.00	5251	262.00	263	356.00	567
82.00	7044	173.00	5677	263.00	36	358.00	530
83.00	7319	174.00	12026	264.00	1056	359.00	602
84.00	817	175.00	19808	265.00	16904	360.00	399
85.00	6642	176.00	5797	266.00	3148	361.00	235
86.00	8285	177.00	10200	267.00	292	362.00	111
87.00	3316	178.00	3683	268.00	567	363.00	131
88.00	1501	179.00	35584	269.00	156	365.00	43176
89.00	647	180.00	24376	270.00	1349	366.00	6793
91.00	6364	181.00	11696	271.00	1431	367.00	414
92.00	7059	182.00	2072	272.00	1935	368.00	116
93.00	42704	183.00	1501	273.00	19952	370.00	955
94.00	2754	184.00	2724	274.00	54504	371.00	2419
96.00	2394	185.00	17712	275.00	316864	372.00	15441
97.00	1230	186.00	148992	276.00	44440	373.00	4077
98.00	35944	187.00	43896	277.00	28144	374.00	266
99.00	27624	188.00	4110	278.00	4981	377.00	524
100.00	2446	189.00	9791	279.00	1215	383.00	4933
101.00	16840	190.00	1388	280.00	533	384.00	1420
102.00	549	191.00	4163	281.00	62	385.00	380
103.00	4994	192.00	12673	282.00	756	388.00	109
104.00	10100	193.00	13562	283.00	2679	390.00	2050
105.00	10295	194.00	3393	284.00	2548	391.00	1676
106.00	1934	195.00	920	285.00	6072	392.00	905
107.00	126976	196.00	31632	286.00	1247	393.00	252
108.00	18768	198.00	1070592	287.00	284	397.00	259
109.00	1230	199.00	74832	288.00	348	401.00	968
110.00	230592	200.00	6124	289.00	1042	402.00	6473
111.00	34528	201.00	5638	290.00	1395	403.00	9273
112.00	4563	202.00	255	291.00	903	404.00	3126

Date : 09-JUL-2013 13:14

Client ID: DFTPP3Z Instrument: S3.i

Sample Info: DFTPP3Z,DFTPP3Z

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5620.D
Spectrum: Avg. Scans 278-280 (4.38), Background Scan 273
Location of Maximum: 198.00
Number of points: 347

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	2027	203.00	8086	292.00	1467	405.00	251
114.00	597	204.00	39544	293.00	6449	410.00	258
115.00	588	205.00	67136	294.00	1755	415.00	379
116.00	7120	206.00	280384	295.00	1638	421.00	7872
117.00	95080	207.00	37520	296.00	94352	422.00	7270
118.00	6829	208.00	10959	297.00	12001	423.00	55376
119.00	1195	209.00	2932	298.00	1135	424.00	11559
120.00	1608	210.00	4294	299.00	180	425.00	1283
122.00	9014	211.00	11900	300.00	262	426.00	150
123.00	13382	212.00	212	301.00	1381	428.00	118
124.00	6196	213.00	808	302.00	2195	439.00	328
125.00	5131	214.00	769	303.00	10784	441.00	139712
127.00	447488	215.00	3737	304.00	3074	442.00	976576
128.00	34976	216.00	6726	305.00	524	443.00	190016
129.00	176384	217.00	77120	307.00	121	444.00	19064
130.00	15771	218.00	10419	308.00	1605	445.00	1023
131.00	3211	219.00	1226	309.00	1080		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130710B.B\S3I5650D.D
Lab Smp Id: DFTPP3C Client Smp ID: DFTPP3C
Inj Date : 10-JUL-2013 16:55
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : DFTPP3C,DFTPP3C
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\130710B.B\S3_dftppSOM.m
Meth Date : 25-Apr-2013 13:45 pkaczorows Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
4.020	4.427	-0.407	198	243136			0.00- 100.00	100.00
4.020	4.427	-0.407	51	77000			10.00- 80.00	31.67
4.020	4.427	-0.407	68	0	0.0	0.0	0.00- 2.00	0.00
4.020	4.427	-0.407	69	83176			0.00- 0.00	34.21
4.020	4.427	-0.407	70	532			0.00- 2.00	0.64
4.020	4.427	-0.407	127	104912			10.00- 80.00	43.15
4.020	4.427	-0.407	197	96			0.00- 2.00	0.04
4.020	4.427	-0.407	199	17504			5.00- 9.00	7.20
4.020	4.427	-0.407	275	69744			10.00- 60.00	28.69
4.020	4.427	-0.407	365	9220			1.00- 0.00	3.79
4.020	4.427	-0.407	441	27856			0.01- 99.99	75.14
4.020	4.427	-0.407	442	193152			50.00- 100.00	79.44
4.020	4.427	-0.407	443	37072			15.00- 24.00	19.19

Data File: \\avogadro\organics\S3.I\130710B.B\S3I5650D.D

Date : 10-JUL-2013 16:55

Client ID: DFTPP3C

Instrument: S3.i

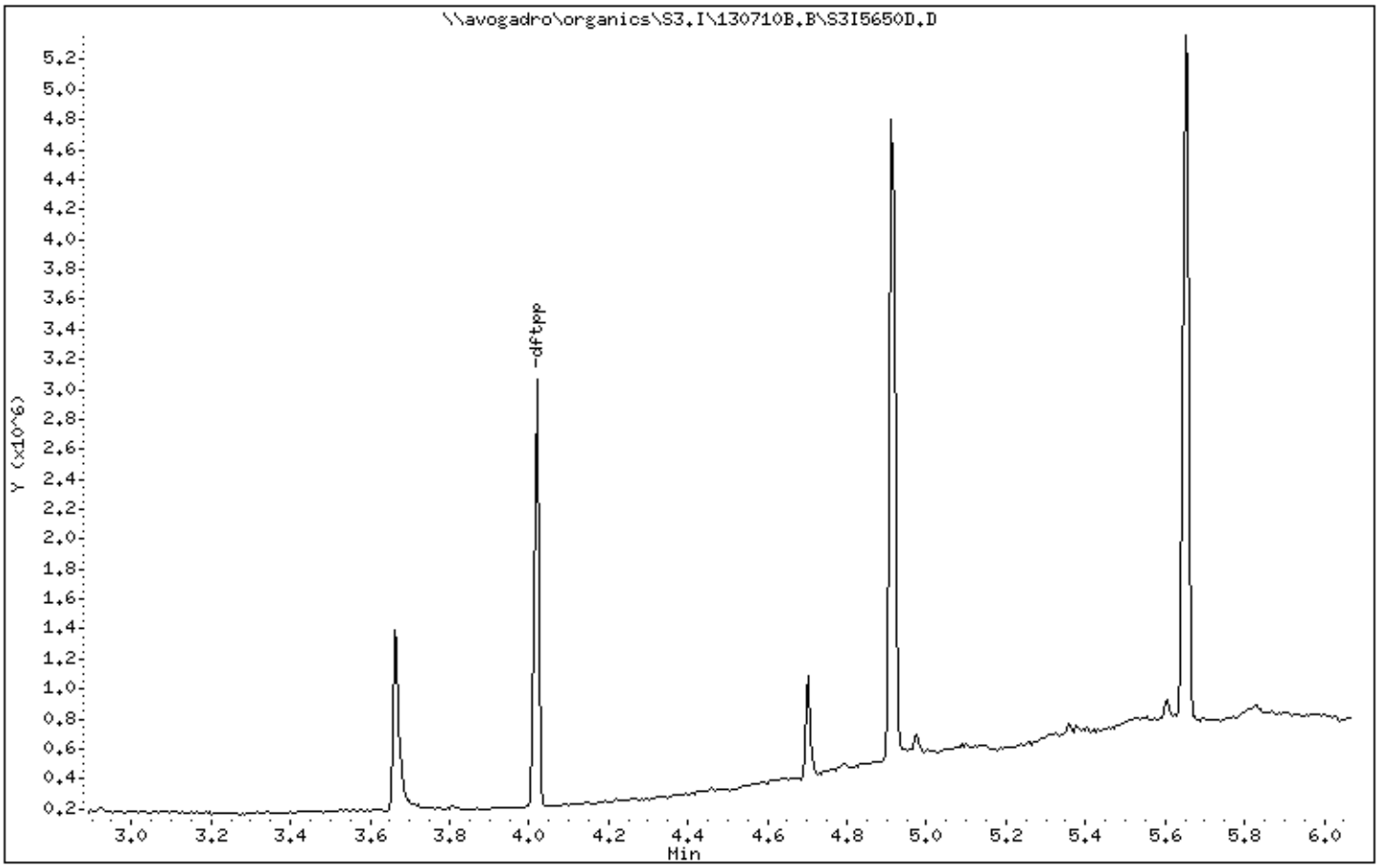
Sample Info: DFTPP3C,DFTPP3C

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130710B.B\S3I5650D.D

Date : 10-JUL-2013 16:55

Client ID: DFTPP3C

Instrument: S3.i

Sample Info: DFTPP3C,DFTPP3C

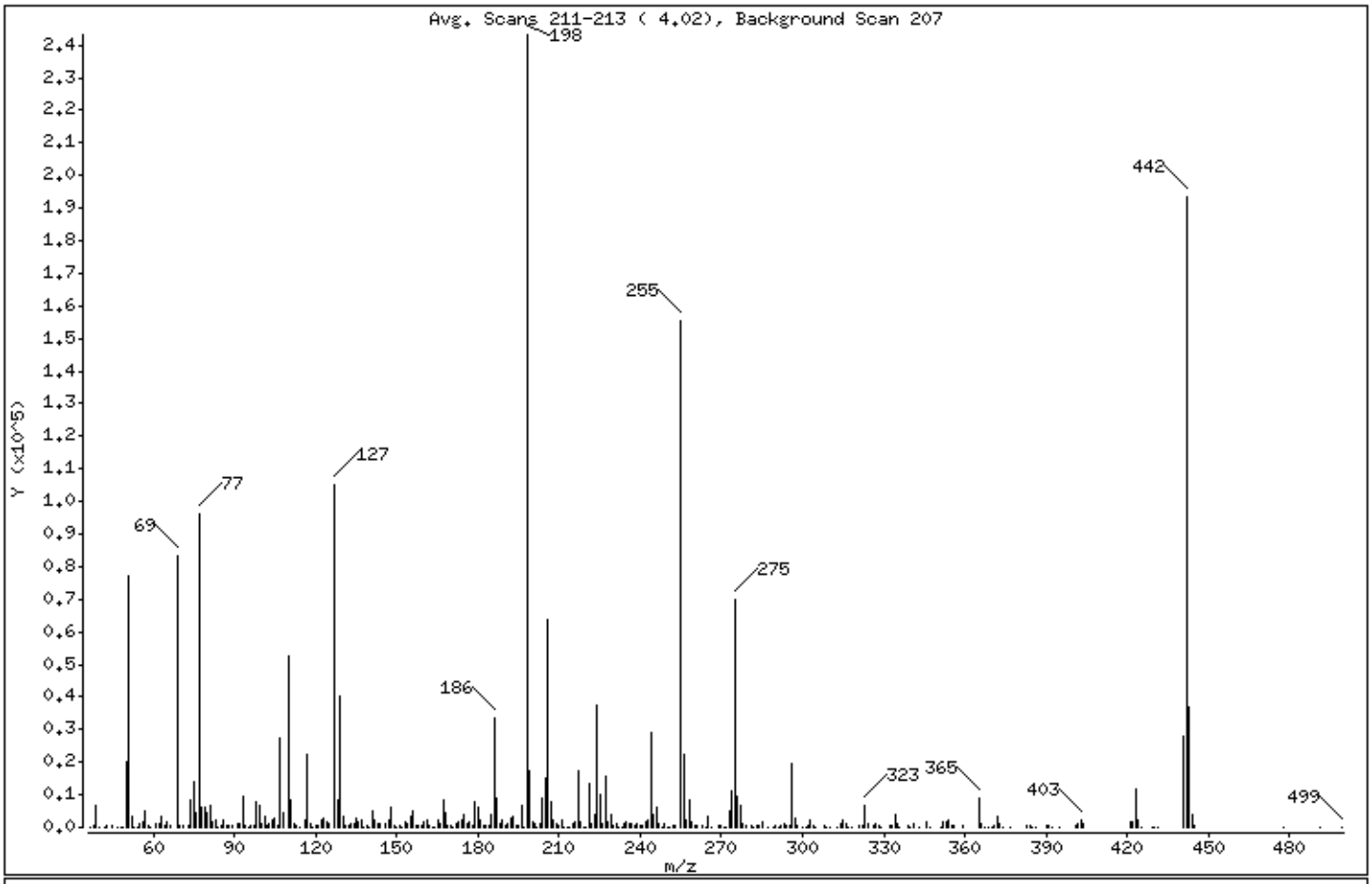
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	31.67
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	34.21
70	Less than 2.00% of mass 69	0.22 (0.64)
127	10.00 - 80.00% of mass 198	43.15
197	Less than 2.00% of mass 198	0.04
199	5.00 - 9.00% of mass 198	7.20
275	10.00 - 60.00% of mass 198	28.69
365	Greater than 1.00% of mass 198	3.79
441	Present, but less than mass 443	11.46
442	50.00 - 100.00% of mass 198	79.44
443	15.00 - 24.00% of mass 442	15.25 (19.19)

Date : 10-JUL-2013 16:55

Client ID: DFTPP3C Instrument: S3.i

Sample Info: DFTPP3C,DFTPP3C

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5650D.D
Spectrum: Avg. Scans 211-213 (4.02), Background Scan 207
Location of Maximum: 198.00
Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	199	129.00	40344	211.00	2266	300.00	199
38.00	606	130.00	3349	212.00	186	301.00	188
39.00	6666	131.00	305	213.00	247	302.00	742
40.00	249	132.00	653	214.00	117	303.00	2420
42.00	88	133.00	876	215.00	902	304.00	638
43.00	799	134.00	1295	216.00	1617	305.00	139
45.00	605	135.00	2762	217.00	17472	308.00	370
47.00	41	136.00	1709	218.00	1905	309.00	101
48.00	143	137.00	2083	219.00	168	310.00	185
49.00	194	138.00	206	220.00	149	313.00	244
50.00	19848	139.00	280	221.00	13623	314.00	1042
51.00	77000	140.00	11	222.00	1135	315.00	2513
52.00	3593	141.00	5297	223.00	3648	316.00	1054
53.00	107	142.00	1991	224.00	37544	317.00	237
54.00	40	143.00	879	225.00	10273	318.00	120
55.00	889	144.00	1013	226.00	1111	321.00	753
56.00	1642	146.00	940	227.00	15847	322.00	631
57.00	5208	147.00	2458	228.00	1838	323.00	6461
58.00	595	148.00	6031	229.00	3908	324.00	1372
59.00	140	149.00	484	230.00	820	326.00	454
61.00	1038	150.00	174	231.00	1180	327.00	915
62.00	1096	151.00	637	232.00	214	328.00	790
63.00	3121	152.00	228	233.00	143	329.00	111
64.00	601	153.00	1754	234.00	1188	332.00	428
65.00	1654	154.00	1317	235.00	1693	333.00	579
66.00	747	155.00	3220	236.00	1139	334.00	4163
69.00	83176	156.00	5100	237.00	1272	335.00	1220
70.00	532	157.00	609	238.00	322	336.00	109
71.00	448	158.00	750	239.00	1060	339.00	303
73.00	621	159.00	716	240.00	789	340.00	139
74.00	8136	160.00	1612	241.00	367	341.00	1215
75.00	13984	161.00	2070	242.00	1484	343.00	218
76.00	4656	162.00	633	243.00	2090	346.00	1517
77.00	96120	163.00	49	244.00	29096	347.00	248
78.00	6409	164.00	193	245.00	4083	351.00	244

Date : 10-JUL-2013 16:55

Client ID: DFTPP3C Instrument: S3.i

Sample Info: DFTPP3C,DFTPP3C

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5650D.D
Spectrum: Avg. Scans 211-213 (4.02), Background Scan 207
Location of Maximum: 198.00
Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	6332	165.00	2236	246.00	6320	352.00	1817
80.00	4669	166.00	1250	247.00	1397	353.00	1627
81.00	6549	167.00	8310	248.00	199	354.00	2323
82.00	1835	168.00	4742	249.00	1299	355.00	650
83.00	2274	169.00	776	250.00	6	356.00	426
84.00	49	170.00	674	251.00	174	359.00	331
85.00	425	171.00	180	252.00	461	365.00	9220
86.00	2100	172.00	1134	253.00	384	366.00	1303
87.00	457	173.00	1403	255.00	155648	367.00	101
88.00	610	174.00	2132	256.00	22088	369.00	118
89.00	296	175.00	3957	257.00	2032	370.00	110
91.00	1196	176.00	855	258.00	8366	371.00	596
92.00	1271	177.00	1943	259.00	1597	372.00	3350
93.00	9515	178.00	380	260.00	473	373.00	991
94.00	720	179.00	7749	261.00	543	374.00	163
95.00	27	180.00	5976	263.00	501	377.00	121
96.00	519	181.00	2166	264.00	22	383.00	763
97.00	588	182.00	325	265.00	3531	384.00	316
98.00	7894	183.00	290	266.00	83	385.00	132
99.00	6680	184.00	778	269.00	740	386.00	110
100.00	1004	185.00	3698	270.00	514	390.00	444
101.00	3535	186.00	33304	271.00	245	391.00	421
102.00	684	187.00	9216	272.00	226	392.00	182
103.00	997	188.00	1268	273.00	5094	395.00	169
104.00	2456	189.00	2235	274.00	11312	401.00	682
105.00	2815	190.00	371	275.00	69744	402.00	1358
106.00	337	191.00	858	276.00	9423	403.00	2211
107.00	27336	192.00	2610	277.00	6920	404.00	1003
108.00	4260	193.00	3178	278.00	1025	421.00	1575
110.00	52352	194.00	612	279.00	572	422.00	1516
111.00	8351	195.00	772	281.00	539	423.00	11553
112.00	1086	196.00	6713	282.00	11	424.00	2078
113.00	792	197.00	96	283.00	396	425.00	216
114.00	2	198.00	243136	284.00	747	429.00	185
116.00	2032	199.00	17504	285.00	1722	430.00	100

Date : 10-JUL-2013 16:55

Client ID: DFTPP3C Instrument: S3.i

Sample Info: DFTPP3C,DFTPP3C

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5650D.D
Spectrum: Avg. Scans 211-213 (4.02), Background Scan 207
Location of Maximum: 198.00
Number of points: 322

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	22632	200.00	1641	287.00	1	431.00	234
118.00	1312	201.00	1324	289.00	70	441.00	27856
119.00	162	202.00	156	290.00	684	442.00	193152
120.00	467	203.00	1335	291.00	210	443.00	37072
121.00	367	204.00	8762	292.00	326	444.00	4088
122.00	2034	205.00	15173	293.00	1233	445.00	387
123.00	2840	206.00	63720	294.00	580	478.00	102
124.00	1690	207.00	7927	295.00	754	491.00	100
125.00	1269	208.00	2303	296.00	19696	499.00	131
127.00	104912	209.00	945	297.00	2918		
128.00	8143	210.00	403	298.00	699		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130711.B\S3I5680.D
Lab Smp Id: DFTPP3D Client Smp ID: DFTPP3D
Inj Date : 11-JUL-2013 10:51
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : DFTPP3D,DFTPP3D
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\130711.B\S3_dftppSOM.m
Meth Date : 25-Apr-2013 13:45 pkaczorows Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
3.983	4.427	-0.444	198	1268224			0.00- 100.00	100.00
3.983	4.427	-0.444	51	438848			10.00- 80.00	34.60
3.983	4.427	-0.444	68	0	0.0	0.0	0.00- 2.00	0.00
3.983	4.427	-0.444	69	478400			0.00- 0.00	37.72
3.983	4.427	-0.444	70	2723			0.00- 2.00	0.57
3.983	4.427	-0.444	127	559552			10.00- 80.00	44.12
3.983	4.427	-0.444	197	1362			0.00- 2.00	0.11
3.983	4.427	-0.444	199	90296			5.00- 9.00	7.12
3.983	4.427	-0.444	275	357056			10.00- 60.00	28.15
3.983	4.427	-0.444	365	44360			1.00- 0.00	3.50
3.983	4.427	-0.444	441	146560			0.01- 99.99	71.41
3.983	4.427	-0.444	442	1015936			50.00- 100.00	80.11
3.983	4.427	-0.444	443	205248			15.00- 24.00	20.20

Data File: \\avogadro\organics\S3.I\130711.B\S3I5680.D

Date : 11-JUL-2013 10:51

Client ID: DFTPP3D

Instrument: S3.i

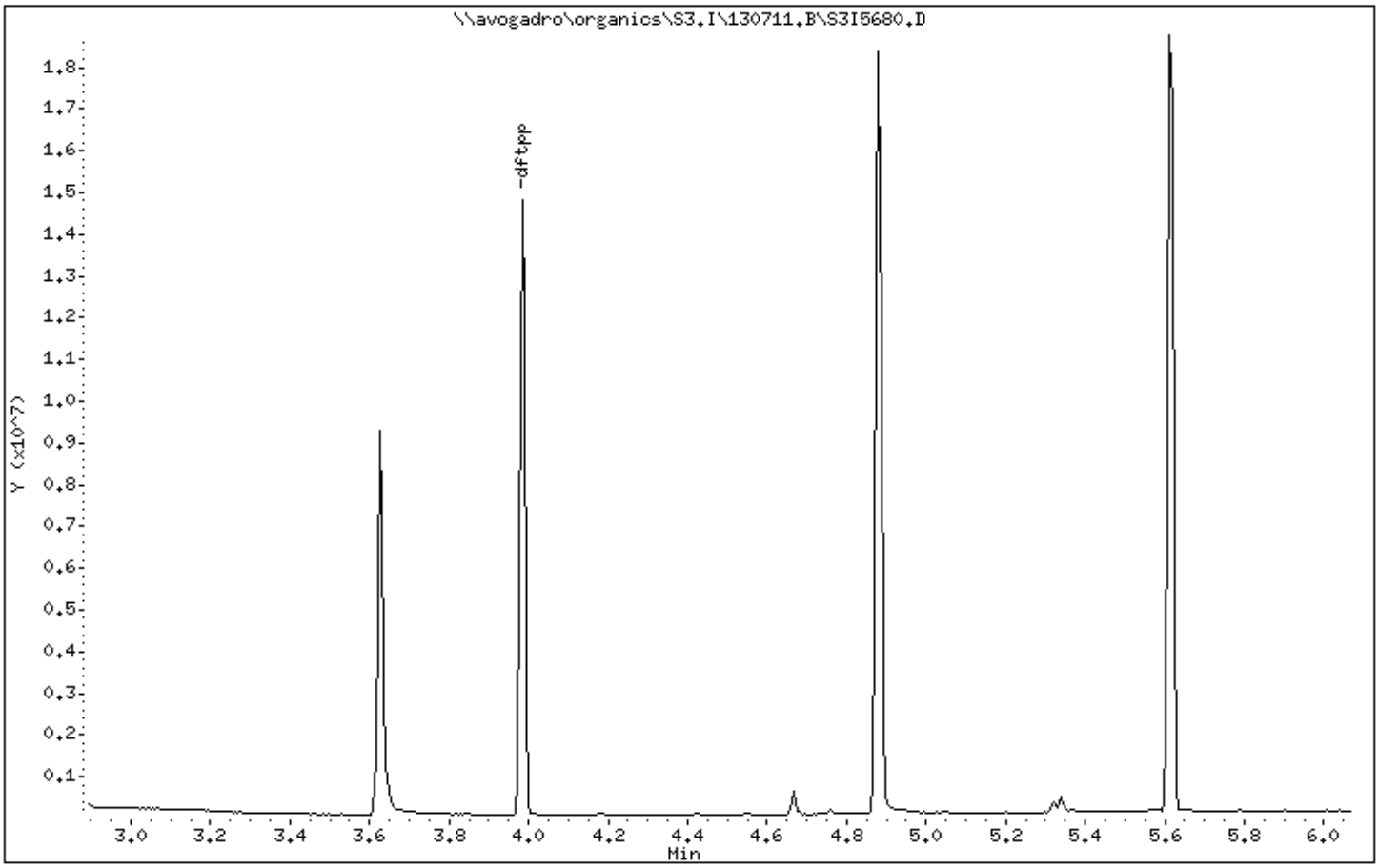
Sample Info: DFTPP3D,DFTPP3D

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\130711.B\S3I5680.D

Date : 11-JUL-2013 10:51

Client ID: DFTPP3D

Instrument: S3.i

Sample Info: DFTPP3D,DFTPP3D

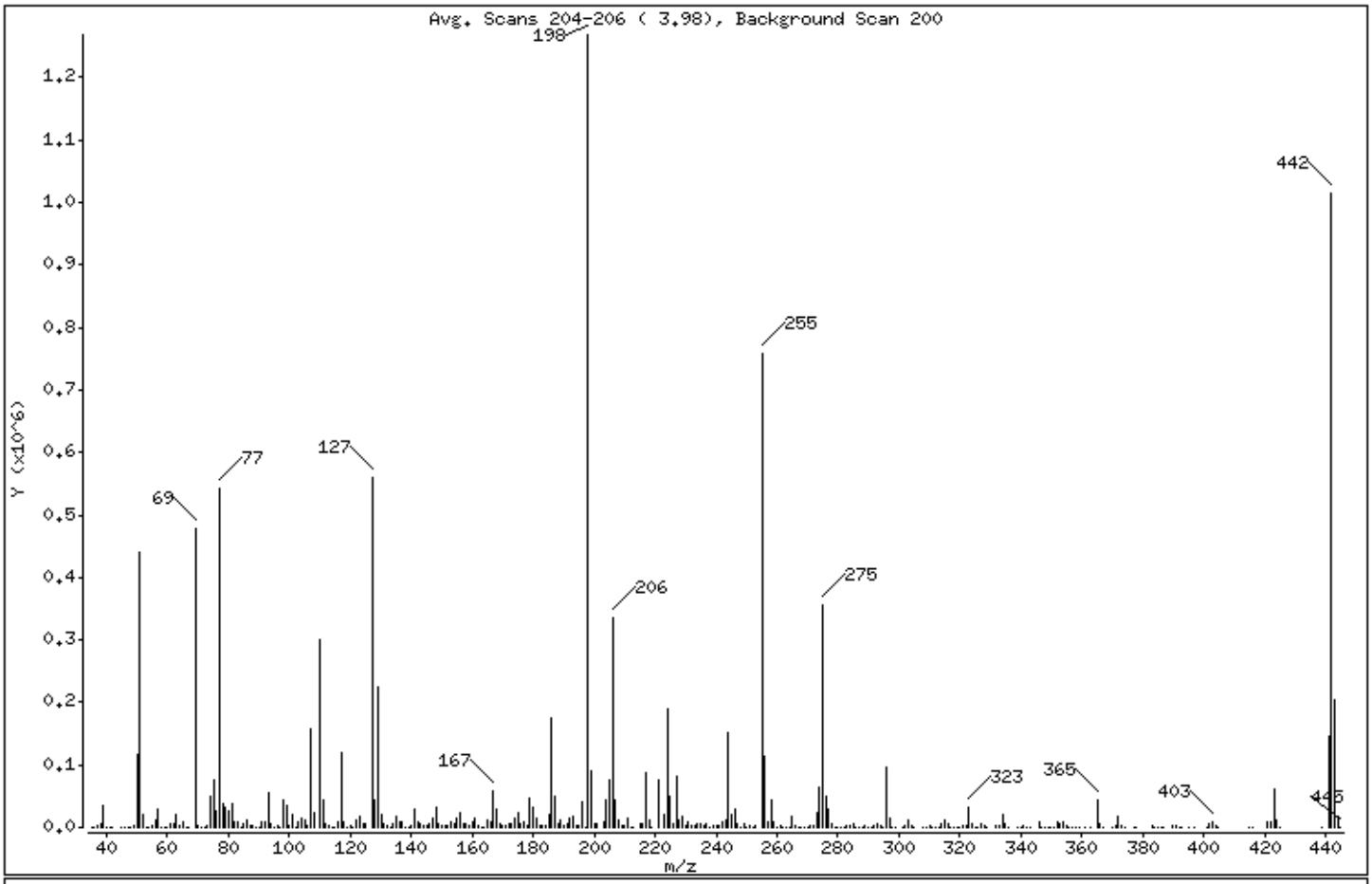
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	34.60
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	37.72
70	Less than 2.00% of mass 69	0.21 (0.57)
127	10.00 - 80.00% of mass 198	44.12
197	Less than 2.00% of mass 198	0.11
199	5.00 - 9.00% of mass 198	7.12
275	10.00 - 60.00% of mass 198	28.15
365	Greater than 1.00% of mass 198	3.50
441	Present, but less than mass 443	11.56
442	50.00 - 100.00% of mass 198	80.11
443	15.00 - 24.00% of mass 442	16.18 (20.20)

Date : 11-JUL-2013 10:51

Client ID: DFTPP3D Instrument: S3.i

Sample Info: DFTPP3D,DFTPP3D

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5680.D
Spectrum: Avg. Scans 204-206 (3.98), Background Scan 200
Location of Maximum: 198.00
Number of points: 347

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	143	127.00	559552	216.00	6621	309.00	969
36.00	360	128.00	44816	217.00	87432	310.00	1602
37.00	1770	129.00	224704	218.00	11695	311.00	188
38.00	6289	130.00	19848	219.00	1043	312.00	273
39.00	34936	131.00	4868	221.00	76336	313.00	1250
40.00	1139	132.00	2286	223.00	20192	314.00	5400
41.00	925	133.00	703	224.00	190144	315.00	11092
42.00	162	134.00	6812	225.00	49592	316.00	6432
45.00	675	135.00	18200	226.00	5620	317.00	1110
46.00	137	136.00	7325	227.00	81176	318.00	278
47.00	115	137.00	9365	228.00	10857	319.00	289
48.00	259	138.00	703	229.00	16608	320.00	382
49.00	2491	139.00	881	230.00	2314	321.00	2756
50.00	116344	140.00	3075	231.00	7335	322.00	1719
51.00	438848	141.00	29416	232.00	1724	323.00	32200
52.00	20904	142.00	8985	233.00	1828	324.00	5764
53.00	1166	143.00	5822	234.00	5114	325.00	391
54.00	66	144.00	1953	235.00	6101	326.00	718
55.00	2626	145.00	1622	236.00	3339	327.00	6510
56.00	12669	146.00	5551	237.00	6771	328.00	3241
57.00	29536	147.00	15932	238.00	884	329.00	560
58.00	1257	148.00	32288	239.00	2123	332.00	2382
59.00	769	149.00	6355	240.00	2890	333.00	3327
60.00	9	150.00	2204	241.00	4091	334.00	20992
61.00	6237	151.00	4073	242.00	9709	335.00	5201
62.00	6759	152.00	2635	243.00	10363	336.00	702
63.00	19328	153.00	8796	244.00	151040	339.00	553
64.00	2962	154.00	7046	245.00	20608	340.00	472
65.00	9935	155.00	15387	246.00	29376	341.00	3616
66.00	578	156.00	24624	247.00	6304	342.00	1172
67.00	851	157.00	5379	248.00	1222	343.00	126
69.00	478400	158.00	5816	249.00	4816	346.00	7293
70.00	2723	159.00	4239	250.00	1191	347.00	1366
71.00	508	160.00	9949	251.00	1479	348.00	158
72.00	561	161.00	13406	252.00	1451	349.00	120

Date : 11-JUL-2013 10:51

Client ID: DFTPP3D Instrument: S3.i

Sample Info: DFTPP3D,DFTPP3D

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5680.D
Spectrum: Avg. Scans 204-206 (3.98), Background Scan 200
Location of Maximum: 198.00
Number of points: 347

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	4005	162.00	3955	253.00	3022	350.00	342
74.00	48272	163.00	721	255.00	759168	351.00	618
75.00	76160	164.00	1328	256.00	113704	352.00	9345
76.00	26760	165.00	12177	257.00	9284	353.00	6765
77.00	540992	166.00	9374	258.00	44504	354.00	10087
78.00	36952	167.00	57840	259.00	7587	355.00	2482
79.00	33192	168.00	27816	260.00	1241	356.00	290
80.00	27360	169.00	5472	261.00	1646	357.00	121
81.00	38208	170.00	2274	262.00	293	358.00	327
82.00	9470	171.00	2282	263.00	569	359.00	647
83.00	7693	172.00	5579	264.00	1335	361.00	108
84.00	1045	173.00	7089	265.00	17792	363.00	133
85.00	6607	174.00	14338	266.00	2654	365.00	44360
86.00	11003	175.00	22312	267.00	541	366.00	6127
87.00	4042	176.00	6468	268.00	240	367.00	179
88.00	2046	177.00	10161	269.00	23	370.00	1016
89.00	870	178.00	4228	270.00	766	371.00	2855
90.00	246	179.00	45696	271.00	2192	372.00	16432
91.00	8643	180.00	30728	272.00	2100	373.00	4336
92.00	9344	181.00	14673	273.00	22848	374.00	696
93.00	55920	182.00	2223	274.00	63312	377.00	183
94.00	4434	183.00	1639	275.00	357056	378.00	100
95.00	384	184.00	3867	276.00	50368	383.00	4281
96.00	2871	185.00	21696	277.00	30544	384.00	1360
97.00	660	186.00	174784	278.00	4943	385.00	602
98.00	43856	187.00	49072	279.00	1135	386.00	121
99.00	34520	188.00	5993	280.00	493	387.00	119
100.00	3729	189.00	11462	281.00	405	390.00	1969
101.00	21688	190.00	2041	282.00	1140	391.00	1900
102.00	1221	191.00	5281	283.00	3385	392.00	1083
103.00	7330	192.00	14935	284.00	2671	393.00	117
104.00	13374	193.00	16319	285.00	5760	395.00	106
105.00	11404	194.00	3443	286.00	1154	397.00	102
106.00	2299	195.00	2105	287.00	162	401.00	969
107.00	157568	196.00	40216	288.00	544	402.00	6066

Date : 11-JUL-2013 10:51

Client ID: DFTPP3D Instrument: S3.i

Sample Info: DFTPP3D,DFTPP3D

Volume Injected (uL): 2.0 Operator: PK SRC: PK

Column phase: RXi-5SILMS Column diameter: 0.25

Data File: S3I5680.D
Spectrum: Avg. Scans 204-206 (3.98), Background Scan 200
Location of Maximum: 198.00
Number of points: 347

m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	24600	197.00	1362	289.00	1615	403.00	9486
110.00	299392	198.00	1268224	290.00	1271	404.00	4010
111.00	44344	199.00	90296	291.00	824	405.00	362
112.00	6303	200.00	5917	292.00	1571	415.00	534
113.00	1965	201.00	6422	293.00	6534	416.00	151
114.00	489	203.00	8328	294.00	1686	421.00	7679
115.00	798	204.00	44448	295.00	1134	422.00	7368
116.00	9327	205.00	76600	296.00	97312	423.00	60832
117.00	118520	206.00	334848	297.00	13972	424.00	11620
118.00	9460	207.00	44184	298.00	1068	425.00	1159
119.00	1187	208.00	10308	299.00	356	439.00	101
120.00	1877	209.00	3216	301.00	1457	441.00	146560
121.00	742	210.00	4113	302.00	1724	442.00	1015936
122.00	11579	211.00	13249	303.00	11841	443.00	205248
123.00	16664	212.00	858	304.00	3387	444.00	17816
124.00	7146	213.00	1223	305.00	554	445.00	603
125.00	7011	215.00	4492	308.00	1072		

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72594

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3I5682A.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/11/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2´-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	Bis(2-chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-72594

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3I5682A.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/11/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3´-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

Data File: \\avogadro\organics\S3.I\130711.B\S3I5682A.D
Report Date: 11-Jul-2013 15:01

Spectrum Analytical, Inc. RI Division

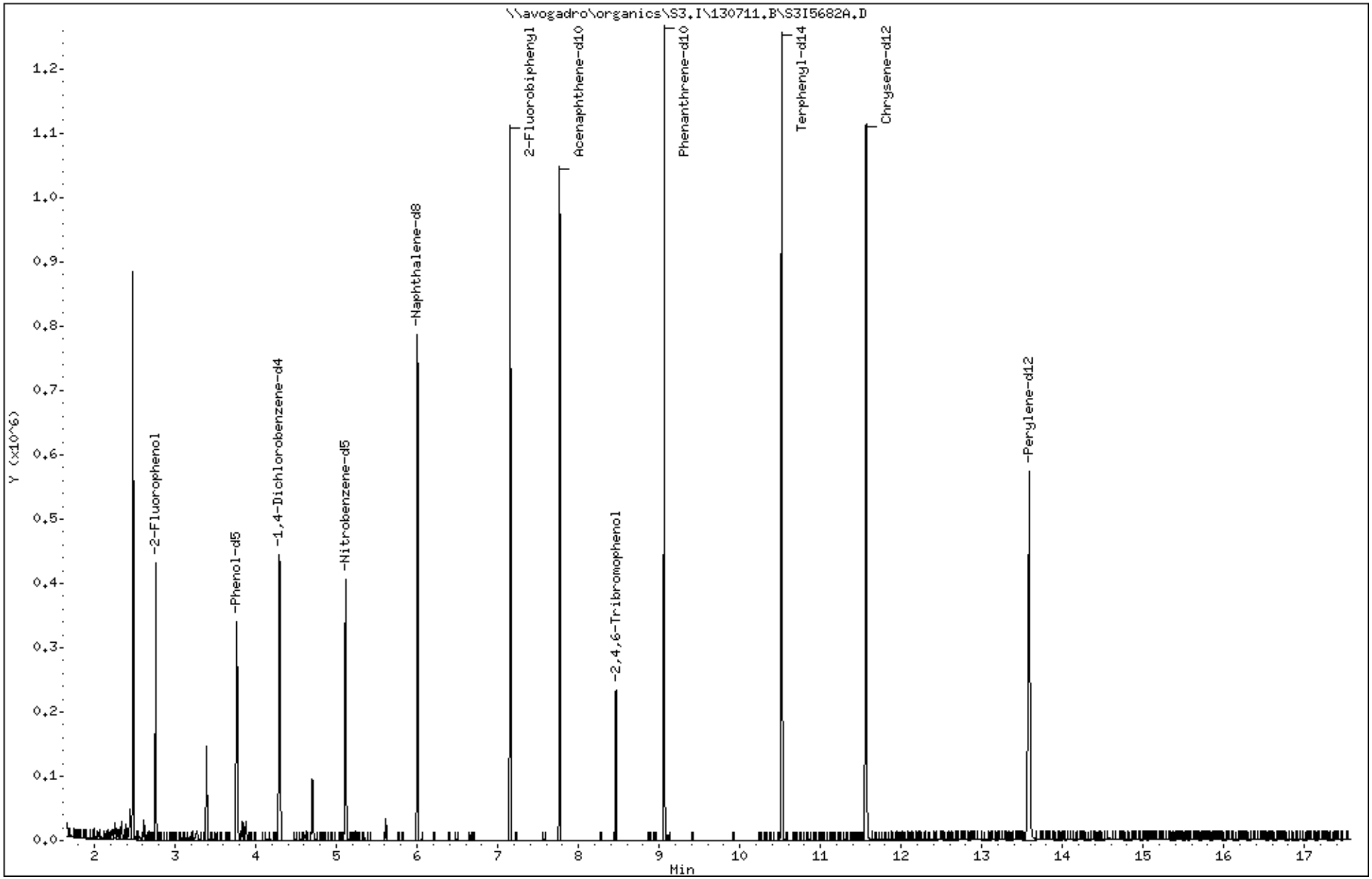
Data file : \\avogadro\organics\S3.I\130711.B\S3I5682A.D
Lab Smp Id: MB-72594 Client Smp ID: MB-72594
Inj Date : 11-JUL-2013 13:16
Operator : PK   SRC: LIMS Inst ID: S3.i
Smp Info : MB-72594,MB-72594,72594
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130711.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 15:01 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
$	3 2-Fluorophenol	112	2.759	2.750	(0.643)	101405	36.2296	2400
$	5 Phenol-d5	99	3.768	3.765	(0.878)	147931	40.1088	2700
*	12 1,4-Dichlorobenzene-d4	152	4.292	4.294	(1.000)	92650	40.0000	
$	22 Nitrobenzene-d5	82	5.109	5.111	(0.851)	137172	43.1798	2900
*	31 Naphthalene-d8	136	6.001	6.004	(1.000)	329831	40.0000	
$	41 2-Fluorobiphenyl	172	7.155	7.152	(0.922)	305188	45.2965	3000
*	48 Acenaphthene-d10	164	7.764	7.766	(1.000)	209826	40.0000	
$	60 2,4,6-Tribromophenol	330	8.464	8.466	(0.934)	26810	25.1977	1700
*	64 Phenanthrene-d10	188	9.062	9.075	(1.000)	410203	40.0000	
$	72 Terphenyl-d14	244	10.521	10.555	(0.909)	434936	56.1721	3700
*	76 Chrysene-d12	240	11.568	11.623	(1.000)	474921	40.0000	
*	83 Perylene-d12	264	13.587	13.653	(1.000)	432461	40.0000	

Data File: \\avogadro\organics\S3.I\130711.B\S3I5682A.D
Date : 11-JUL-2013 13:16
Client ID: MB-72594
Instrument: S3.i
Sample Info: MB-72594,MB-72594,72594
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72594

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3I5683B.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/11/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2600	
111-44-4	Bis(2-chloroethyl)ether	2800	
95-57-8	2-Chlorophenol	2700	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2700	
95-50-1	1,2-Dichlorobenzene	2700	
95-48-7	2-Methylphenol	2200	
108-60-1	2,2´-oxybis(1-Chloropropane)	2800	
106-44-5	4-Methylphenol	2100	
621-64-7	N-Nitroso-di-n-propylamine	2500	
67-72-1	Hexachloroethane	2700	
98-95-3	Nitrobenzene	2800	
78-59-1	Isophorone	2600	
88-75-5	2-Nitrophenol	2800	
105-67-9	2,4-Dimethylphenol	660	
120-83-2	2,4-Dichlorophenol	2700	
120-82-1	1,2,4-Trichlorobenzene	2700	
91-20-3	Naphthalene	2700	
106-47-8	4-Chloroaniline	870	
111-91-1	Bis(2-chloroethoxy)methane	2700	
87-68-3	Hexachlorobutadiene	2800	
59-50-7	4-Chloro-3-methylphenol	2500	
91-57-6	2-Methylnaphthalene	2600	
77-47-4	Hexachlorocyclopentadiene	2900	
88-06-2	2,4,6-Trichlorophenol	2800	
95-95-4	2,4,5-Trichlorophenol	2900	
91-58-7	2-Chloronaphthalene	2800	
88-74-4	2-Nitroaniline	2800	
131-11-3	Dimethylphthalate	2700	
208-96-8	Acenaphthylene	2700	
606-20-2	2,6-Dinitrotoluene	2800	
99-09-2	3-Nitroaniline	1800	
83-32-9	Acenaphthene	2700	
51-28-5	2,4-Dinitrophenol	3300	
100-02-7	4-Nitrophenol	2700	
132-64-9	Dibenzofuran	2800	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-72594

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3I5683B.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/11/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2800	
84-66-2	Diethylphthalate	2700	
7005-72-3	4-Chlorophenyl-phenylether	2700	
86-73-7	Fluorene	2700	
100-01-6	4-Nitroaniline	1800	
534-52-1	4,6-Dinitro-2-methylphenol	3100	
86-30-6	N-Nitrosodiphenylamine	2600	
101-55-3	4-Bromophenyl-phenylether	2900	
118-74-1	Hexachlorobenzene	2900	
87-86-5	Pentachlorophenol	2900	
85-01-8	Phenanthrene	2800	
120-12-7	Anthracene	2600	
86-74-8	Carbazole	2700	
84-74-2	Di-n-butylphthalate	2800	
206-44-0	Fluoranthene	2700	
129-00-0	Pyrene	3000	
85-68-7	Butylbenzylphthalate	3000	
91-94-1	3,3´-Dichlorobenzidine	910	
56-55-3	Benzo(a)anthracene	2900	
218-01-9	Chrysene	3000	
117-81-7	Bis(2-ethylhexyl)phthalate	3000	
117-84-0	Di-n-octylphthalate	3200	
205-99-2	Benzo(b)fluoranthene	3000	
207-08-9	Benzo(k)fluoranthene	3000	
50-32-8	Benzo(a)pyrene	2700	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2800	
191-24-2	Benzo(g,h,i)perylene	2700	

Data File: \\avogadro\organics\S3.I\130711.B\S3I5683B.D
Report Date: 11-Jul-2013 15:01

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130711.B\S3I5683B.D
Lab Smp Id: LCS-72594 Client Smp ID: LCS-72594
Inj Date : 11-JUL-2013 13:42
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-72594,LCS-72594,72594
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130711.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 15:01 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	3 2-Fluorophenol	112	2.758	2.750	(0.642)	109101	42.1167	2800
$	5 Phenol-d5	99	3.773	3.765	(0.878)	141087	41.3322	2800
	6 Phenol	94	3.795	3.781	(0.883)	144034	38.2682	2600(Q)
	8 bis(2-Chloroethyl)Ether	63	3.880	3.877	(0.903)	73216	41.5710	2800
	10 2-Chlorophenol	128	3.971	3.968	(0.924)	112726	41.0772	2700
	11 1,3-Dichlorobenzene	146	4.206	4.203	(0.979)	119754	40.0856	2700
*	12 1,4-Dichlorobenzene-d4	152	4.297	4.294	(1.000)	85748	40.0000	
	13 1,4-Dichlorobenzene	146	4.323	4.321	(1.006)	124298	40.6992	2700
	16 1,2-Dichlorobenzene	146	4.559	4.556	(1.061)	117014	40.9072	2700
	17 2-Methylphenol	108	4.735	4.732	(1.102)	84564	33.3467	2200
	18 2,2'-oxybis(1-Chloropropane)	45	4.740	4.737	(1.103)	136764	41.7526	2800
	20 4-Methylphenol	108	4.735	4.732	(1.102)	84564	30.8462	2000
	19 N-Nitroso-di-n-propylamine	70	4.932	4.924	(1.148)	76634	36.8412	2400
	21 Hexachloroethane	117	5.039	5.037	(1.173)	43296	40.2108	2700
$	22 Nitrobenzene-d5	82	5.114	5.111	(0.851)	124369	41.6909	2800
	23 Nitrobenzene	77	5.141	5.133	(0.856)	120020	41.9498	2800
	24 Isophorone	82	5.461	5.459	(0.909)	208566	39.1388	2600
	25 2-Nitrophenol	139	5.557	5.555	(0.925)	64008	41.9564	2800
	26 2,4-Dimethylphenol	107	5.659	5.662	(0.942)	25801	9.94625	660(R)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
	27 bis(2-Chloroethoxy)methane	93	5.760	5.758	(0.959)	126340	40.9017	2700
	29 2,4-Dichlorophenol	162	5.867	5.865	(0.977)	97840	40.4951	2700
	30 1,2,4-Trichlorobenzene	180	5.947	5.950	(0.990)	109290	40.8061	2700
*	31 Naphthalene-d8	136	6.006	6.004	(1.000)	309726	40.0000	
	32 Naphthalene	128	6.028	6.025	(1.004)	325688	40.8800	2700
	33 4-Chloroaniline	127	6.113	6.110	(1.018)	43220	13.0893	870
	34 Hexachlorobutadiene	225	6.199	6.196	(1.032)	71045	41.9996	2800
	35 4-Chloro-3-Methylphenol	107	6.690	6.682	(1.114)	100330	38.1322	2500
	36 2-Methylnaphthalene	142	6.781	6.778	(1.129)	220262	38.6155	2600
	38 Hexachlorocyclopentadiene	237	6.952	6.954	(0.895)	65768	43.5058	2900
	39 2,4,6-Trichlorophenol	196	7.080	7.083	(0.911)	75107	41.8360	2800
	40 2,4,5-Trichlorophenol	196	7.123	7.120	(0.917)	82852	43.0056	2900
$	41 2-Fluorobiphenyl	172	7.155	7.152	(0.921)	272970	43.0166	2900
	42 2-Chloronaphthalene	162	7.256	7.254	(0.934)	213847	42.7074	2800
	43 2-Nitroaniline	65	7.363	7.360	(0.948)	64092	41.6557	2800
	44 Dimethylphthalate	163	7.550	7.542	(0.972)	252612	40.8669	2700
	45 2,6-Dinitrotoluene	165	7.593	7.590	(0.977)	62332	41.6563	2800
	46 Acenaphthylene	152	7.641	7.638	(0.983)	339205	40.2097	2700
	47 3-Nitroaniline	138	7.742	7.740	(0.997)	44859	27.1324	1800
*	48 Acenaphthene-d10	164	7.769	7.766	(1.000)	197622	40.0000	
	49 Acenaphthene	153	7.796	7.798	(1.003)	219710	41.2447	2700
	50 2,4-Dinitrophenol	184	7.833	7.831	(1.008)	36708	48.8800	3200
	51 4-Nitrophenol	109	7.929	7.927	(1.021)	34516	40.5545	2700
	53 2,4-Dinitrotoluene	165	7.951	7.948	(1.023)	85598	42.0359	2800
	52 Dibenzofuran	168	7.951	7.953	(1.023)	321492	41.8418	2800
	54 Diethylphthalate	149	8.170	8.167	(1.052)	250759	41.0227	2700
	56 4-Chlorophenyl-phenylether	204	8.255	8.258	(1.063)	140522	41.2310	2700
	55 Fluorene	166	8.255	8.253	(1.063)	268198	40.8696	2700
	57 4-Nitroaniline	138	8.282	8.279	(1.066)	45296	27.5002	1800
	58 4,6-Dinitro-2-methylphenol	198	8.309	8.306	(0.917)	54148	47.0705	3100
	59 N-Nitrosodiphenylamine	169	8.362	8.365	(0.923)	206685	38.2527	2600
$	60 2,4,6-Tribromophenol	330	8.464	8.466	(0.934)	43331	43.3506	2900
	61 4-Bromophenyl-phenylether	248	8.677	8.680	(0.958)	89676	43.0780	2900
	62 Hexachlorobenzene	284	8.736	8.744	(0.964)	92902	43.0908	2900
	63 Pentachlorophenol	266	8.907	8.920	(0.983)	52205	44.0620	2900
*	64 Phenanthrene-d10	188	9.062	9.075	(1.000)	385359	40.0000	
	65 Phenanthrene	178	9.078	9.097	(1.002)	386592	41.8856	2800
	66 Anthracene	178	9.126	9.139	(1.007)	375673	39.4659	2600
	67 Carbazole	167	9.270	9.289	(1.023)	356617	40.2867	2700
	68 Di-n-butylphthalate	149	9.575	9.609	(1.057)	419368	41.7066	2800
	69 Fluoranthene	202	10.136	10.186	(1.118)	449804	40.7946	2700
	71 Pyrene	202	10.344	10.400	(0.890)	454983	45.5348	3000
$	72 Terphenyl-d14	244	10.494	10.555	(0.903)	380082	50.9334	3400(H)
	73 Butylbenzylphthalate	149	10.964	11.052	(0.943)	190677	45.3782	3000(H)
	74 3,3'-Dichlorobenzidine	252	11.493	11.591	(0.989)	58601	13.6186	910(H)
	75 Benzo(a)anthracene	228	11.551	11.613	(0.994)	451145	40.1848	2700(H)
*	76 Chrysene-d12	240	11.525	11.623	(1.000)	457711	40.0000	(H)
	78 bis(2-Ethylhexyl)phthalate	149	11.557	11.661	(0.994)	267715	44.3395	3000
	77 Chrysene	228	11.551	11.650	(0.994)	451145	44.7831	3000(H)
	79 Di-n-octylphthalate	149	12.358	12.473	(0.913)	453586	47.4297	3200
	80 Benzo(b)fluoranthene	252	12.898	13.007	(0.953)	472763	45.4423	3000(H)
	81 Benzo(k)fluoranthene	252	12.946	13.050	(0.956)	483853	45.3391	3000
	82 Benzo(a)pyrene	252	13.432	13.547	(0.992)	412336	40.4741	2700
*	83 Perylene-d12	264	13.539	13.653	(1.000)	413774	40.0000	

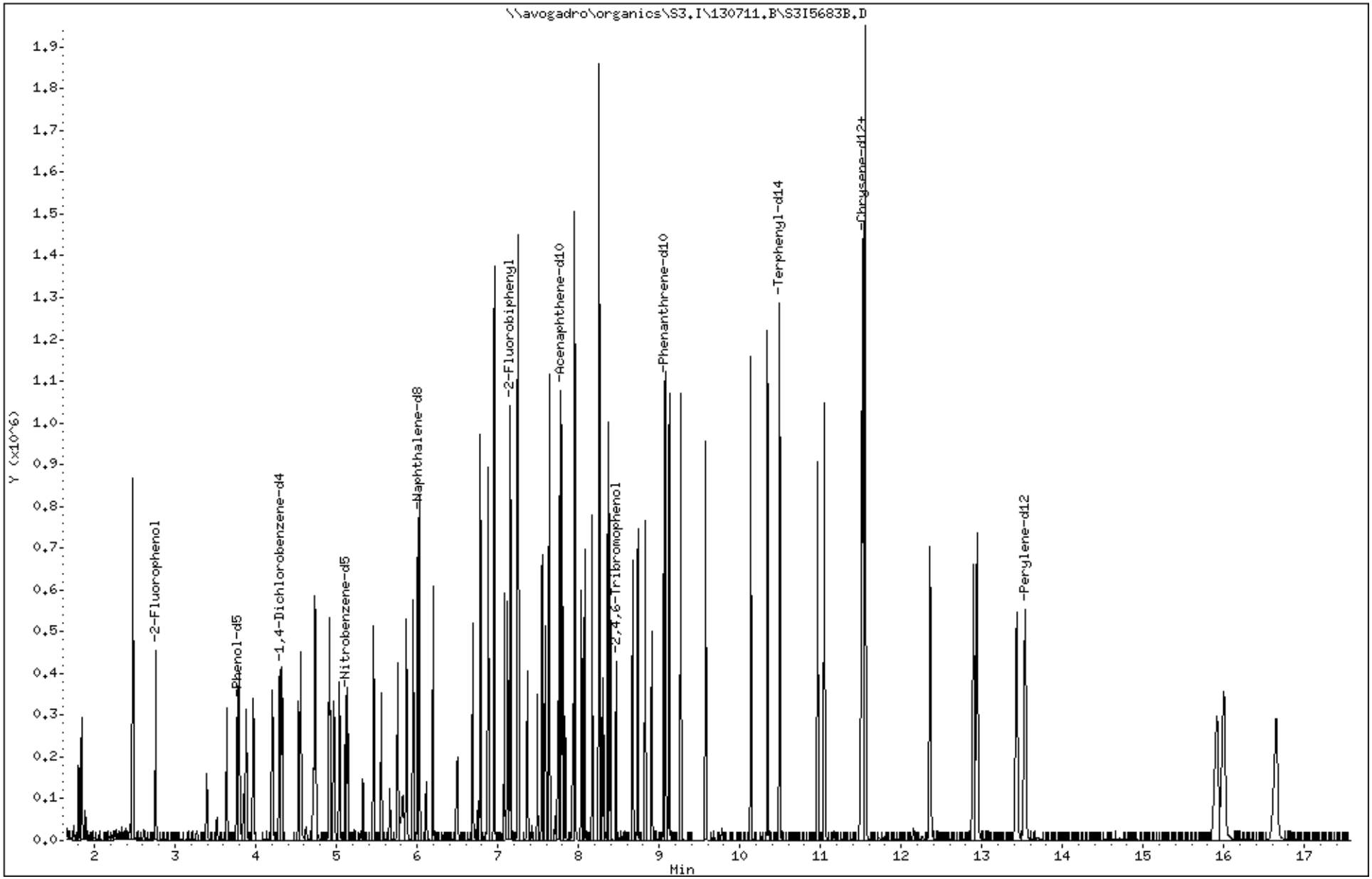
Data File: \\avogadro\organics\S3.I\130711.B\S3I5683B.D
Report Date: 11-Jul-2013 15:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
84 Indeno(1,2,3-cd)pyrene	276	15.916	16.025	(1.176)	404936	41.4697	2800(H)
85 Dibenzo(a,h)anthracene	278	16.001	16.116	(1.182)	417343	42.2548	2800
86 Benzo(g,h,i)perylene	276	16.653	16.763	(1.230)	413278	41.1806	2700

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\S3.I\130711.B\S3I5683B.D
Date : 11-JUL-2013 13:42
Client ID: LCS-72594
Instrument: S3.i
Sample Info: LCS-72594,LCS-72594,72594
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-72594

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3I5684.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/11/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2700	
111-44-4	Bis(2-chloroethyl)ether	2800	
95-57-8	2-Chlorophenol	2800	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2700	
95-50-1	1,2-Dichlorobenzene	2700	
95-48-7	2-Methylphenol	2700	
108-60-1	2,2´-oxybis(1-Chloropropane)	2700	
106-44-5	4-Methylphenol	2500	
621-64-7	N-Nitroso-di-n-propylamine	2700	
67-72-1	Hexachloroethane	2700	
98-95-3	Nitrobenzene	2800	
78-59-1	Isophorone	2600	
88-75-5	2-Nitrophenol	2800	
105-67-9	2,4-Dimethylphenol	2300	
120-83-2	2,4-Dichlorophenol	2800	
120-82-1	1,2,4-Trichlorobenzene	2700	
91-20-3	Naphthalene	2800	
106-47-8	4-Chloroaniline	1500	
111-91-1	Bis(2-chloroethoxy)methane	2800	
87-68-3	Hexachlorobutadiene	2800	
59-50-7	4-Chloro-3-methylphenol	2700	
91-57-6	2-Methylnaphthalene	2600	
77-47-4	Hexachlorocyclopentadiene	3500	
88-06-2	2,4,6-Trichlorophenol	3000	
95-95-4	2,4,5-Trichlorophenol	3000	
91-58-7	2-Chloronaphthalene	2900	
88-74-4	2-Nitroaniline	2900	
131-11-3	Dimethylphthalate	2800	
208-96-8	Acenaphthylene	2800	
606-20-2	2,6-Dinitrotoluene	2900	
99-09-2	3-Nitroaniline	2000	
83-32-9	Acenaphthene	2900	
51-28-5	2,4-Dinitrophenol	3400	
100-02-7	4-Nitrophenol	2700	
132-64-9	Dibenzofuran	2900	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-72594

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1032 Mod. Ref No.: SDG No.: SM1032

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-72594

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3I5684.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/11/2013

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2900	
84-66-2	Diethylphthalate	2800	
7005-72-3	4-Chlorophenyl-phenylether	2900	
86-73-7	Fluorene	2800	
100-01-6	4-Nitroaniline	2200	
534-52-1	4,6-Dinitro-2-methylphenol	3300	
86-30-6	N-Nitrosodiphenylamine	2900	
101-55-3	4-Bromophenyl-phenylether	3000	
118-74-1	Hexachlorobenzene	3000	
87-86-5	Pentachlorophenol	3000	
85-01-8	Phenanthrene	2900	
120-12-7	Anthracene	2800	
86-74-8	Carbazole	2800	
84-74-2	Di-n-butylphthalate	2800	
206-44-0	Fluoranthene	2800	
129-00-0	Pyrene	3100	
85-68-7	Butylbenzylphthalate	3100	
91-94-1	3,3´-Dichlorobenzidine	2100	
56-55-3	Benzo(a)anthracene	3000	
218-01-9	Chrysene	3100	
117-81-7	Bis(2-ethylhexyl)phthalate	3000	
117-84-0	Di-n-octylphthalate	3100	
205-99-2	Benzo(b)fluoranthene	3000	
207-08-9	Benzo(k)fluoranthene	3000	
50-32-8	Benzo(a)pyrene	2900	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2800	
191-24-2	Benzo(g,h,i)perylene	2800	

Data File: \\avogadro\organics\S3.I\130711.B\S3I5684.D
Report Date: 11-Jul-2013 15:01

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\130711.B\S3I5684.D
Lab Smp Id: LCSD-72594 Client Smp ID: LCSD-72594
Inj Date : 11-JUL-2013 14:09
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCSD-72594,LCSD-72594,72594
Misc Info :
Comment   :
Method   : \\avogadro\organics\S3.I\130711.B\s3_8270C_N.m
Meth Date : 11-Jul-2013 15:01 S3.i Quant Type: ISTD
Cal Date : 09-JUL-2013 14:36 Cal File: S3I5621B.D
Als bottle: 4 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Ws)*(100/(100-M)) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
$	3 2-Fluorophenol	112	2.759	2.750	(0.642)	124246	43.4572	2900
$	5 Phenol-d5	99	3.774	3.765	(0.878)	157213	41.7296	2800
	6 Phenol	94	3.790	3.781	(0.882)	169172	40.7244	2700
	8 bis(2-Chloroethyl)Ether	63	3.881	3.877	(0.903)	81213	41.7796	2800
	10 2-Chlorophenol	128	3.972	3.968	(0.924)	128898	42.5576	2800
	11 1,3-Dichlorobenzene	146	4.202	4.203	(0.978)	131498	39.8815	2600
*	12 1,4-Dichlorobenzene-d4	152	4.298	4.294	(1.000)	94639	40.0000	
	13 1,4-Dichlorobenzene	146	4.319	4.321	(1.005)	136001	40.3476	2700
	16 1,2-Dichlorobenzene	146	4.560	4.556	(1.061)	129652	41.0672	2700
	17 2-Methylphenol	108	4.736	4.732	(1.102)	112862	40.3244	2700
	18 2,2'-oxybis(1-Chloropropane)	45	4.747	4.737	(1.104)	145715	40.3060	2700
	20 4-Methylphenol	108	4.736	4.732	(1.102)	112862	37.3007	2500
	19 N-Nitroso-di-n-propylamine	70	4.934	4.924	(1.148)	93594	40.7676	2700
	21 Hexachloroethane	117	5.041	5.037	(1.173)	47446	39.9253	2700
$	22 Nitrobenzene-d5	82	5.115	5.111	(0.852)	137634	41.7315	2800
	23 Nitrobenzene	77	5.142	5.133	(0.856)	132453	41.8743	2800
	24 Isophorone	82	5.463	5.459	(0.909)	232938	39.5380	2600
	25 2-Nitrophenol	139	5.559	5.555	(0.925)	70883	42.0257	2800
	26 2,4-Dimethylphenol	107	5.666	5.662	(0.943)	97191	33.8890	2200

Data File: \\avogadro\organics\S3.I\130711.B\S3I5684.D
Report Date: 11-Jul-2013 15:01

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/Kg)
	27 bis(2-Chloroethoxy)methane	93	5.762	5.758	(0.959)	141352	41.3916	2800
	29 2,4-Dichlorophenol	162	5.869	5.865	(0.977)	112758	42.2127	2800
	30 1,2,4-Trichlorobenzene	180	5.949	5.950	(0.990)	121046	40.8794	2700
*	31 Naphthalene-d8	136	6.007	6.004	(1.000)	342427	40.0000	
	32 Naphthalene	128	6.029	6.025	(1.004)	363439	41.2620	2800
	33 4-Chloroaniline	127	6.114	6.110	(1.018)	79607	21.8068	1400
	34 Hexachlorobutadiene	225	6.194	6.196	(1.031)	79252	42.3771	2800
	35 4-Chloro-3-Methylphenol	107	6.691	6.682	(1.114)	116214	39.9512	2700
	36 2-Methylnaphthalene	142	6.782	6.778	(1.129)	245997	39.0087	2600
	38 Hexachlorocyclopentadiene	237	6.953	6.954	(0.895)	86720	52.5771	3500
	39 2,4,6-Trichlorophenol	196	7.081	7.083	(0.911)	89407	45.6442	3000
	40 2,4,5-Trichlorophenol	196	7.124	7.120	(0.917)	93658	44.5565	3000
$	41 2-Fluorobiphenyl	172	7.156	7.152	(0.921)	298717	43.1445	2900
	42 2-Chloronaphthalene	162	7.258	7.254	(0.934)	240130	43.9533	2900
	43 2-Nitroaniline	65	7.364	7.360	(0.948)	71994	42.8856	2800
	44 Dimethylphthalate	163	7.551	7.542	(0.972)	286512	42.4820	2800
	45 2,6-Dinitrotoluene	165	7.594	7.590	(0.977)	69969	42.8568	2800
	46 Acenaphthylene	152	7.637	7.638	(0.983)	388926	42.2551	2800
	47 3-Nitroaniline	138	7.744	7.740	(0.997)	54851	30.4065	2000
*	48 Acenaphthene-d10	164	7.770	7.766	(1.000)	215621	40.0000	
	49 Acenaphthene	153	7.797	7.798	(1.003)	248879	42.8204	2800
	50 2,4-Dinitrophenol	184	7.834	7.831	(1.008)	41844	51.0679	3400
	51 4-Nitrophenol	109	7.931	7.927	(1.021)	37812	40.7185	2700
	53 2,4-Dinitrotoluene	165	7.952	7.948	(1.023)	95644	43.0486	2900
	52 Dibenzofuran	168	7.952	7.953	(1.023)	359551	42.8889	2800
	54 Diethylphthalate	149	8.171	8.167	(1.052)	278572	41.7686	2800
	56 4-Chlorophenyl-phenylether	204	8.256	8.258	(1.063)	159389	42.8629	2800
	55 Fluorene	166	8.256	8.253	(1.063)	301708	42.1382	2800
	57 4-Nitroaniline	138	8.289	8.279	(1.067)	60037	33.4071	2200
	58 4,6-Dinitro-2-methylphenol	198	8.310	8.306	(0.916)	60981	49.0376	3300
	59 N-Nitrosodiphenylamine	169	8.363	8.365	(0.922)	253942	43.4766	2900
$	60 2,4,6-Tribromophenol	330	8.470	8.466	(0.934)	52057	48.1775	3200
	61 4-Bromophenyl-phenylether	248	8.679	8.680	(0.957)	100269	44.5568	3000
	62 Hexachlorobenzene	284	8.743	8.744	(0.964)	104198	44.7082	3000
	63 Pentachlorophenol	266	8.914	8.920	(0.983)	58017	45.2976	3000
*	64 Phenanthrene-d10	188	9.068	9.075	(1.000)	416579	40.0000	
	65 Phenanthrene	178	9.090	9.097	(1.002)	426880	42.7844	2800
	66 Anthracene	178	9.133	9.139	(1.007)	436362	42.4060	2800
	67 Carbazole	167	9.282	9.289	(1.024)	402593	42.0721	2800
	68 Di-n-butylphthalate	149	9.597	9.609	(1.058)	462486	42.5477	2800
	69 Fluoranthene	202	10.164	10.186	(1.121)	494723	41.5058	2800
	71 Pyrene	202	10.377	10.400	(0.895)	503758	47.0354	3100
$	72 Terphenyl-d14	244	10.532	10.555	(0.909)	413936	51.7503	3400
	73 Butylbenzylphthalate	149	11.018	11.052	(0.951)	206510	45.8505	3000
	74 3,3'-Dichlorobenzidine	252	11.553	11.591	(0.997)	141885	30.7622	2000
	75 Benzo(a)anthracene	228	11.574	11.613	(0.999)	534872	44.4477	3000(H)
*	76 Chrysene-d12	240	11.590	11.623	(1.000)	490611	40.0000	
	78 bis(2-Ethylhexyl)phthalate	149	11.622	11.661	(1.003)	293640	45.3719	3000
	77 Chrysene	228	11.617	11.650	(1.002)	496747	46.0031	3100
	79 Di-n-octylphthalate	149	12.429	12.473	(0.913)	497231	46.2429	3100
	80 Benzo(b)fluoranthene	252	12.968	13.007	(0.953)	528964	45.2208	3000(H)
	81 Benzo(k)fluoranthene	252	13.011	13.050	(0.956)	541738	45.1486	3000
	82 Benzo(a)pyrene	252	13.508	13.547	(0.993)	490597	42.8298	2800
*	83 Perylene-d12	264	13.609	13.653	(1.000)	465230	40.0000	

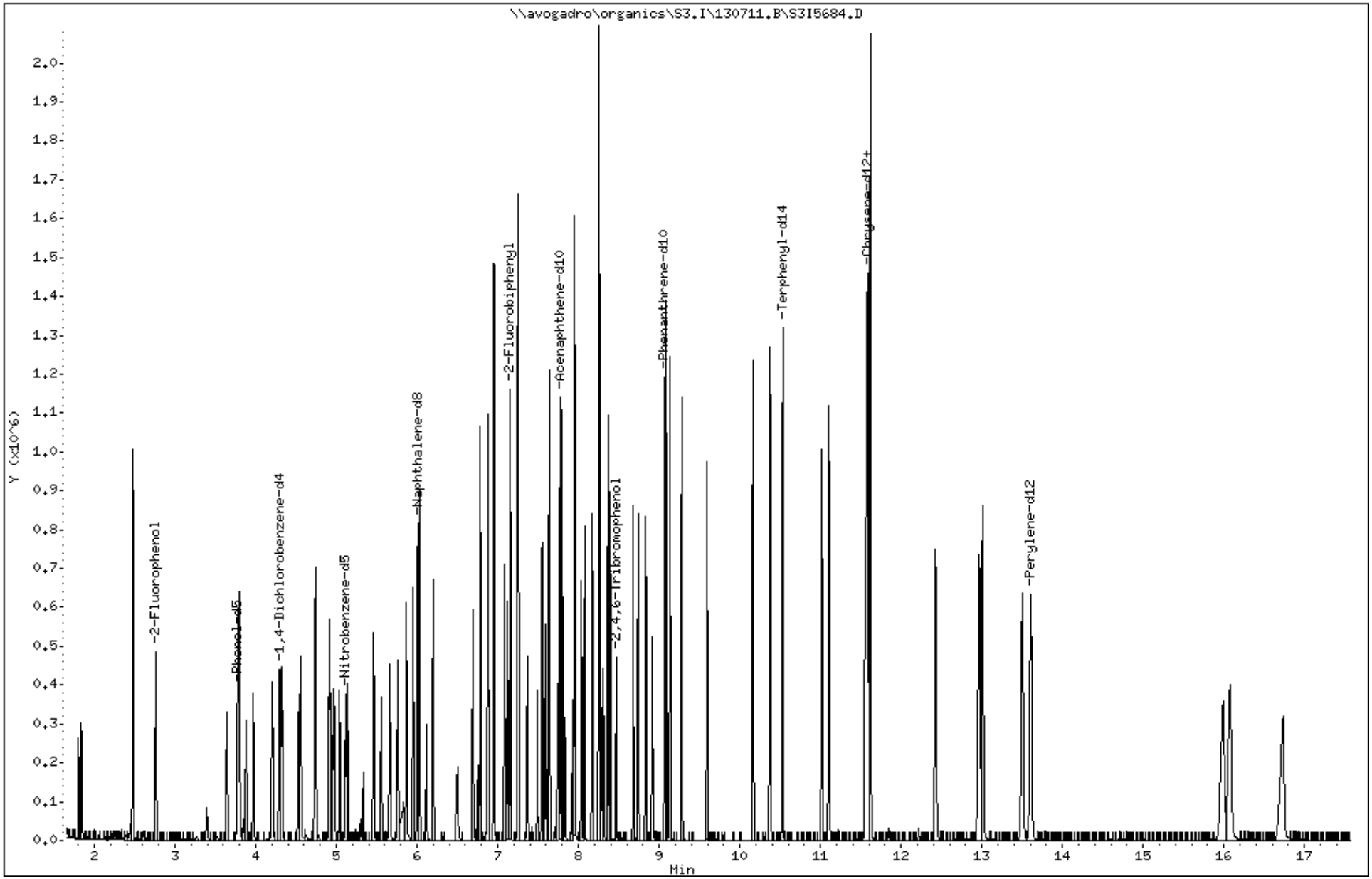
Data File: \\avogadro\organics\S3.I\130711.B\S3I5684.D
Report Date: 11-Jul-2013 15:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
84 Indeno(1,2,3-cd)pyrene	276	15.992	16.025	(1.175)	455851	41.5205	2800
85 Dibenzo(a,h)anthracene	278	16.077	16.116	(1.181)	472296	42.5297	2800
86 Benzo(g,h,i)perylene	276	16.734	16.763	(1.230)	466114	41.3084	2800

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\130711.B\S3I5684.D
Date : 11-JUL-2013 14:09
Client ID: LCSD-72594
Instrument: S3.i
Sample Info: LCSD-72594,LCSD-72594,72594
Volume Injected (uL): 1.0
Operator: PK SRC: LIMS
Column phase: Rxi-5Sil MS
Column diameter: 0.25



M1032

Friday, July 05, 2013 12:47

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

PREP BATCH REPORT

Prep Start Date: **07/05/2013 07:58**
Prep End Date: **07/05/2013 12:00**
Prep Batch ID: **72594**
Prep Code: **BNA_S_PR**
Technician: **Jodie B Warner**
Prep Type: **SONC/SW3550B**
Prep Factor Units: **mL / g**

QC Matrix: NA2SO4	Solvent (1): MECL2	Solvent (3): N/A	Solvent (5): N/A	Clean Up (1): N/A	Clean Up (3): N/A
QC Matrix Lot: 121756	Solvent (1) Lot: DI 556	Solvent (3) Lot: N/A	Solvent (5) Lot: N/A	Clean Up (1) Lot: N/A	Clean Up (1) Lot: N/A
Filter?: FILTER	Solvent (2): ACE	Solvent (4): N/A	Solvent (6): N/A	Clean Up (2): N/A	Clean Up (4): N/A
Filter Lot: FC003203	Solvent (2) Lot: 125597	Solvent (4) Lot: N/A	Solvent (6) Lot: N/A	Clean Up (2) Lot: N/A	Clean Up (4) Lot: N/A
	Start Time: N/A End Time: N/A	Cycles/Hour 0	Sonicator Tuned?Yes	Bath Temp1 (C): 87	Therm ID1: MT-88

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	CNCNTR Unit
MB-72594	BatchQC		15	1	OSW130521A	1			JBW	TM			07/05/13	JKD	R7		☐	☐	KD 1
LCS-72594	BatchQC		15	1	OSW130521A	1	OSW130531A	1	JBW	TM			07/05/13	JKD	R7		☐	☐	KD 1
LCSD-72594	BatchQC		15	1	OSW130521A	1	OSW130531A	1	JBW	TM			07/05/13	JKD	R7		☐	☐	KD 1
M1032-01A	PC-01	S	15.4	1	OSW130521A	1			JBW	TM	07/11/13	01	07/05/13	JKD	R7		☐	☐	KD 1
M1032-02A	PC-02	S	15.3	1	OSW130521A	1			JBW	TM	07/11/13	01	07/05/13	JKD	R7		☐	☐	KD 1
M1048-01A	EP-201	S	15.1	1	OSW130521A	1			JBW	TM	07/12/13	01	07/05/13	JKD	R7		☐	☐	KD 1
M1048-02A	EP-203	S	15.3	1	OSW130521A	1			JBW	TM	07/12/13	01	07/05/13	JKD	R7		☐	☐	KD 1
M1089-01A	WC-2-061313	S	15.2	1	OSW130521A	1			JBW	TM	07/12/13	01	07/05/13	JKD	R7		☐	☐	KD 1
The prep HoldTime was exceeded by 7.71 days.																			
M1089-02A	WC-3-061313	S	15.3	1	OSW130521A	1			JBW	TM	07/12/13	01	07/05/13	JKD	R7		☐	☐	KD 1
The prep HoldTime was exceeded by 7.71 days.																			

James Kyle Dorsey — 07/05/2013
Analyst Reviewed — Date

Jodie B Warner — 07/05/2013
Manager Reviewed — Date

Comments:

JW 7/5/13

Logbook ID: 50.0147-06/13

Percent Moisture and Percent Solids Report

Lab Sample ID	Client Sample ID	Analyzed	Percent Moisture	Percent Solids	Validated
M1032-01A	PC-01	07/01/2013	4.496	95.504	Yes
M1032-02A	PC-02	07/01/2013	5.263	94.737	Yes

Logbook ID: 70.0192-06/13

Instrument S3
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S3 Injection Log
Semivolatiles Laboratory

L1-SCI304084
L2 B
L3 C
L4 D
L5 E
LG V F

METHOD: 8270
ICAL DATE: 7/9/13

ANALYST: MK
EMV: 1531

BATCH: 130709A.B

Start: 09-JUL-13 13:14
End: 09-JUL-13 17:28

Internal Standard: SCI304174
Comments:

#10473 Tune-SCI20820.A

Inlet Maintenance By: MK
Liner : clean
Column : clipped
Inlet Seal: Cleaned
Septum : New

Reviewed By: MMS 7/10/13

Manual Integration: NA

MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES BN NBZ	BN FBP	BN TPH	ACID PHL	ACID 2FP	ACID TBP	OLM DCB	OLM 2CP	DILN	FLG	COMMENTS
S3I5620	13:14	DFTPP3Z	DFTPP3Z		AQ																	
S3I5621B	14:36	SSTD0253Z	SSTD0253Z		AQ	100	100	100	100	100	100									1		ae
S3I5622	15:05	SSTD0803Z	SSTD0803Z		AQ	169	167	172	170	176	177									1		
S3I5623	15:34	SSTD0053Z	SSTD0053Z		AQ	173	165	169	169	170	170									1		
S3I5624	16:03	SSTD0603Z	SSTD0603Z		AQ	171	171	173	170	176	174									1		
S3I5625	16:31	SSTD0103Z	SSTD0103Z		AQ	177	171	172	168	169	167									1		
S3I5626	17:00	SSTD0403Z	SSTD0403Z		AQ	190	187	193	189	193	191									1		
S3I5627	17:28	SICV0253Z	SICV0253Z		AQ	100	100	101	100	100	99	54	57	57	55	54	54			1		ae

* - 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

MK 7/10/13

M1032

Logbook ID: 70.0192-06/13

Instrument S3
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S3 Injection Log
Semivolatiles Laboratory

METHOD: 8270
ICAL DATE: 7/9/13

ANALYST: MC
EMV: 1531

BATCH: 130710B.B

Start: 10-JUL-13 16:55
End: 11-JUL-13 04:46

Internal Standard: SV1304178
Comments:

#10473

Tune-SV08204
23-SV1304080

Inlet Maintenance By: MC
Liner : clean
Column : clipped
Inlet Seal: clean
Septum : MC

Reviewed By: MS 7/11/13

Manual Integration: NA

MI Review: MA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES BN NBZ	BN FBP	BN TPH	ACID PHL	ACID 2FP	ACID TBP	OLM DCB	OLM 2CP	DILN	FLG	COMMENTS
S3I5650D	16:55	DFTPP3C	DFTPP3C		AQ															1		ok
S3I5651	17:09	SSTD0253C	SSTD0253C		AQ	100	100	100	100	100	100									1		ok
S3I5652	17:43	MB-72594	MB-72594	72594	SL	231*	223*	210*	202*	186	174	86	90	109	84	78	60			1		RR
S3I5653	18:09	LCS-72594	LCS-72594	72594	SL	238*	230*	213*	199	183	171	83	85	102	84	87	91			1	R	RR
S3I5654	18:35	LCSD-72594	LCSD-72594	72594	SL	251*	242*	228*	212*	190	181	82	85	103	84	87	98			1		RR
S3I5655	19:01	MB-72503	MB-72503	72503	AQ	180	172	164	160	165	170	88	90	105	83	83	92			1		ok
S3I5656	19:28	LCS-72503	LCS-72503	72503	AQ	166	164	158	155	157	157	83	87	101	83	81	96			1		ok
S3I5657	19:54	LCSD-72503	LCSD-72503	72503	AQ	168	167	161	157	158	161	86	90	108	85	83	102			1		ok
S3I5658	20:21	MB-72641	MB-72641	72641	SL	206*	196	185	178	163	156	93	96	115	91	94	94			1		RR
S3I5659	20:48	LCS-72641	LCS-72641	72641	SL	183	178	165	155	142	136	86	91	111	87	90	103			1	ER	ok
S3I5660	21:15	M1016-03BDL	BCP-ORC-1-06171	72394	AQ	166	160	156	155	154	157	87	94	113						5		
S3I5661	21:41	M1016-04BDL	MWN-01B-061713D	72394	AQ	185	181	175	174	173	178	81	92	113						40		
S3I5662	22:08	M1016-05BDL	MWN-01-061813DL	72394	AQ	189	184	181	180	177	182	84	90	110						5		
S3I5663	22:34	M1016-08BDL	MWN-02B-061813D	72394	AQ	186	184	177	175	172	175	87	94	113						5		
S3I5664	23:01	M1032-01A	PC-01	72594	SL	197	190	179	174	160	148	76	82	100	76	79	95			1		
S3I5665	23:28	M1032-02A	PC-02	72594	SL	193	185	174	166	150	137	75	78	100	74	77	83			1		ok
S3I5666	23:54	M1048-01A	EP-201	72594	SL	215*	207*	195	188	168	157	79	84	103	76	72	69			1		RR
S3I5667	00:21	M1048-02A	EP-203	72594	SL	221*	214*	200	188	171	157	79	84	102	80	83	90			1		RR
S3I5668	00:48	M1103-01A	CS-SS1_7/8/13	72641	SL	223*	215*	195	186	167	156	61	69	79	61	60	62			1		RR ok per chem
S3I5669	01:15	M1105-01A	S-CAF	72641	SL	0*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*			1		RR Hexyect RT
S3I5670	01:41	M1105-01AMS	S-CAFMS	72641	SL	203*	199	186	174	159	151	48	52	65	50	52	57			1	R	RR
S3I5671	02:08	M1105-01AMSD	S-CAFMSD	72641	SL	216*	211*	198	189	173	160	63	65	82	64	65	73			1	R	RR
S3I5672	02:34	M1105-02A	DUP	72641	SL	209*	202*	187	177	152	140	64	70	91	65	66	76			1		RR
S3I5673	03:00	M1047-01B	EP-208	72503	AQ	175	170	162	161	163	166	78	78	112	18	31	100			1		ok
S3I5674	03:27	M1047-02B	EP-206	72503	AQ	176	171	164	162	164	165	74	71	107	20	32	98			1		
S3I5675	03:53	M1047-03B	EP-202	72503	AQ	173	169	163	161	163	165	76	73	109	18	32	99			1		
S3I5676	04:20	M1047-04B	EP-201	72503	AQ	181	176	169	168	168	170	84	80	117	22	37	108			1		
S3I5677	04:46	M1047-06B	FB-01	72503	AQ	187	181	175	172	175	180	89	84	112	19	34	106			1		ok

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
I - Sample was injected outside of the 12 hour sequence

R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

MC 7/10/13

Spectrum Analytical, Inc. RI Division S3 Injection Log
Semivolatiles Laboratory

METHOD: 8270
ICAL DATE: 7/9/13

ANALYST: MK
EMV: 1531

BATCH: 130711.B

Start: 11-JUL-13 10:51
End: 11-JUL-13 14:09

Internal Standard: SQ1309174
Comments:

#10473

Tune-SQ1208201A
CS-SQ1309408C

Inlet Maintenance By: MK
Liner : clean
Column : clipped clean
Inlet Seal: clean
Septum : New

Reviewed By: MS 7/11/13

Manual Integration: NA

MI Review: NA

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	INTERNAL STANDARDS DCB	NPT	ANT	PHN	CRY	PRY	SURROGATES BN NBZ	BN FBP	BN TPH	ACID PHL	ACID 2FP	ACID TBP	OLM DCB	OLM 2CP	DILN	FLG	COMMENTS
S3I5680	10:51	DFTPP3D	DFTPP3D		AQ															1		ak
S3I5681B	12:50	SSTD0253D	SSTD0253D		AQ	100	100	100	100	100	100									1		
S3I5682A	13:16	MB-72594	MB-72594	72594	SL	158	149	138	133	121	113	86	90	112	80	72	50			1		
S3I5683B	13:42	LCS-72594	LCS-72594	72594	SL	146	140	130	125	117	108	83	86	102	83	84	87			1	R	
S3I5684	14:09	LCSD-72594	LCSD-72594	72594	SL	161	154	142	135	125	121	83	86	104	83	87	96			1		ak

* - 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

MK 7/11/13

Internal Chain of Custody

Client: MALCOLM_LATHAM

Work Order: M1032 **Profile Name:** ARCADIS_PLAZA_CLEANERS

MATRIX **Soil**

Samp #	Bottle	Test	Status	Received	Date
01A	001	PMoist	In	LOGIN: adatta	6/25/2013 10:50:00 AM
01A	001	PMoist	Out	Veronica E Brizard	7/1/2013 3:46:40 PM
01A	001	PMoist	In	Veronica E Brizard	7/1/2013 6:05:25 PM
01A	001	PMoist	In	Jodie B Warner	7/5/2013 11:25:34 AM
01A	001	SW8270_S	In	LOGIN: adatta	6/25/2013 10:50:00 AM
01A	001	SW8270_S	Out	Jodie B Warner	7/5/2013 10:26:54 AM
01A	001	SW8270_S	In	Jodie B Warner	7/5/2013 11:25:34 AM
01B	001	SW8260_LOW_S	In	LOGIN: adatta	6/25/2013 10:50:00 AM
01B	001	SW8260_MED_S	In	LOGIN: adatta	6/25/2013 10:50:00 AM
02A	001	PMoist	In	LOGIN: adatta	6/25/2013 10:50:00 AM
02A	001	PMoist	Out	Veronica E Brizard	7/1/2013 3:46:40 PM
02A	001	PMoist	In	Veronica E Brizard	7/1/2013 6:05:25 PM
02A	001	PMoist	In	Jodie B Warner	7/5/2013 11:25:34 AM
02A	001	SW8270_S	In	LOGIN: adatta	6/25/2013 10:50:00 AM
02A	001	SW8270_S	Out	Jodie B Warner	7/5/2013 10:26:54 AM
02A	001	SW8270_S	In	Jodie B Warner	7/5/2013 11:25:34 AM
02B	001	SW8260_LOW_S	In	LOGIN: adatta	6/25/2013 10:50:00 AM
02B	001	SW8260_MED_S	In	LOGIN: adatta	6/25/2013 10:50:00 AM

Last Page of Data Report