4202 18TH AVENUE

BROOKLYN, NEW YORK 11218

Remedial Investigation Report

NYC VCP Site Number: TBD

OER Site Number: 14EHAZ319K

Prepared for:

AIG Builders

1422 58 Street

Brooklyn NY 11219

Prepared by:

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

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MARCH 2015

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LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CPP	Citizen Participation Plan
CSM	Conceptual Site Model
DER-10	New York State Department of Environmental Conservation Technical Guide 10
FID	Flame Ionization Detector
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IRM	Interim Remedial Measure
NAPL	Non-aqueous Phase Liquid
NYC VCP	New York City Voluntary Cleanup Program
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
NYS DOH ELAP	New York State Department of Health Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PID	Photo-ionization Detector
QEP	Qualified Environmental Professional
RI	Remedial Investigation
RIR	Remedial Investigation Report
SCO	Soil Cleanup Objective
SPEED	Searchable Property Environmental Electronic Database

CERTIFICATION

I, Kimberly Somers, am a Qualified Environmental Professional, as defined in RCNY § 43-1402(ar). I have primary direct responsibility for implementation of the Remedial Investigation for the Redevelopment Project located at 86-90 Walton Street, Brooklyn, NY, (NYC VCP Site No. TBD and OER project Number 15EHAZ331K). I am responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of my knowledge and contains all available environmental information and data regarding the property.

Kimberly Somers	3-10-15	Kimberly Somers
Qualified Environmental Professional	Date	Signature

EXECUTIVE SUMMARY

The Remedial Investigation Report (RIR) provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy pursuant to RCNY§ 43-1407(f). The remedial investigation (RI) described in this document is consistent with applicable guidance.

Site Location and Current Usage

The Site is located at 4202 18th Avenue in the Mapleton section of Brooklyn, New York, and is currently identified as Block 5409, Lot 30 on the New York City Tax Map. Figure 1 shows the Site location. Lot 30 is a rectangular shaped lot consisting of 43.67 feet of street frontage on 18th Avenue and 97.02 feet of street frontage on East 3rd Street for a total of approximately 4,240 ft^2. The Site is located on the west side of 18th Avenue and the north side of East 3rd Street and is bordered by a 1 & 2 family residential building to the north (814 East 3rd Street), 18th Avenue followed by several 1 & 2 family residential buildings to the south (4131-4205 18th Avenue), a 2-story office building to the west (4208 18th Avenue), and East 3rd Street followed by a grocery store to the east (4102 18 Avenue). A map of the site boundary is shown on Figure 2.

The Site currently is developed with an auto sale and repair shop which occupies the northwest corner of the Site. The remainder of the Site is a paved parking area.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site will consist of a new 4-story apartment building with a cellar the full size of the building footprint. The building and cellar footprint will encompass 3,367 sf of the site. The remaining 873 sf of the Site (the first 5ft fronting East 3rd Street) will not be excavated and will feature concrete porches, stairs and landscaped areas. The cellar will contain 10 individual storage spaces for the apartments above as well as two accessory cellars to the apartments above on the 1st floor, two laundry rooms, mechanical rooms, stairwells, and two bathrooms. The first floor will consist of two apartments, and the residential vestibule and staircases. The first floor will be approximately 4 feet above sidewalk grade. The second, third and fourth floors will consist of apartments.

The cellar level will require excavation to a depth of approximately 7 feet below grade across the entire lot. Therefore, an estimated 873 cubic yards (1,309 tons) of soil will require excavation for the new building's cellar. The building will not be equipped with any parking areas. The water table is present at a depth of approximately 42 feet below grade, and therefore will not be encountered during excavation.

Layout of the redevelopment plans for the cellar and first floor is presented in Figure 3. The current zoning designation is R6A. The proposed use is consistent with existing zoning for the property.

Summary of Past Uses of Site and Areas of Concern

A Phase I Screening was completed by EBC in 2015. The following Site history was established based on historic Sanborn maps:

In 1905, the Site consisted of two undeveloped lots. By 1929, the two lots were combined and developed with a one-story building (northwest corner of the Site) and identified as a filling station with three gasoline storage tanks (south end of lot). From 1950 to 1993, the Site remained as a filling station with the three gasoline USTs. The building at the site was enlarged and historically identified as an office, auto repair garage, greasing garage, and an auto laundry garage. In 1994, the Site was identified as an auto repair shop; no USTs identified. The site remained in this configuration until at least 2007.

A Geophysical Report was completed by GeoSeek LLC (Pine Beach, NJ) in November 2012. The investigation concluded that there were at least 8 underground storage tanks present on Site, as well as a possible oil water separator in the existing building.

A Phase II Subsurface Investigation Report was completed by Peak Environmental, Inc. (Woodbridge, NJ) in January 2013. Results of the Phase II Investigation showed elevated concentrations of BTEX VOCs in soils near the former gasoline pump island, indicative of gasoline contamination, resulting in NYS DEC Spill Case No. 1215784.

In August 2014, an Underground Storage Tank Closure Report was prepared for the Site by Peak

Environmental, Inc. (Woodbridge, NJ). Eight previously closed in-place USTs ranging from 275 gallons to 2,000 gallons in capacity as well as the remote fill piping located beneath the sidewalk was removed. Petroleum impacted soils were excavated and backfilled to grade with clean fill. Post excavation samples did not reveal any detectable petroleum contamination with the exception of one sample located in the eastern section (adjacent to the former pump island) and one sample located on the sidewalk near the remote fill piping. A Spill Closure letter was issued by NYSDEC for Spill No. 1215784 on August 22, 2014 (included in Attachment A).

Areas of Concern (AOCs) identified for the Site include:

1. The historic usage of the Site is an auto repair shop, greasing garage, auto laundry garage and filling station.
2. The Site is identified as being assigned an E-designation (E-44) for Hazmat as part of the Ocean Parkway District Rezoning completed by the City in August 1993 (CEQR 93DCP013K).

Summary of the Work Performed under the Remedial Investigation

EBC performed the following scope of work at the Site in December of 2014, and January and February of 2015:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.); and
2. Installed four soil borings across the Site, and collected nine soil samples for chemical analysis from the soil borings, including excavated soil from one monitoring well to evaluate soil quality; and
3. Installed three groundwater monitoring wells throughout the Site to establish groundwater flow and collected six groundwater samples and one duplicate groundwater sample for chemical analysis to evaluate groundwater quality; and
4. Installed four soil gas implants and collected four soil gas samples for chemical analysis.

Summary of Environmental Findings

1. The elevation of the Site is approximately 47 feet.

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2. Depth to groundwater is estimated to be approximately 42 feet below sidewalk grade.
3. Groundwater flow is generally southwest.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site consists of 1 to 3 feet of historic fill, underlain by native brown sand.
6. Soil/fill samples results were compared to New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives and Restricted Residential Use Soil Cleanup Objectives (SCOs) as presented in 6NYCRR Part 375-6.8 and CP51. Soil/fill results showed no PCBs and trace concentrations of several VOCs, but none above Unrestricted Use SOCs. One VOC, methylene chloride was detected above Unrestricted Use SCOs in trip blank. Several SVOCs consisting of Polycyclic Aromatic Hydrocarbons (PAHs) were detected with benz(a)anthracene (max. of 3,200 µg/kg), benzo(a)pyrene (max. of 2,700 µg/kg), benzo(b)fluoranthene (max. of 3,300 µg/kg) and dibenz(a,h)anthracene (max. of 360 µg/kg), exceeding Restricted Residential Use SCOs within one of the three shallow soil samples. Several metals including chromium (max of 41.4 mg/kg) in one of nine samples, lead (max. of 114 mg/kg) in one of nine samples, and nickel (max. of 75.2 mg/kg) in four of nine samples exceeded Unrestricted Use SCOs. No metals exceeded Restricted Residential use SCOs. Overall, the soil results were consistent with data identified at sites with urban fill material in NYC.
7. Groundwater sample results from the 2015 EBC RI were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater results showed no PCBs or pesticides in any sample. Several VOCs exceeded their GQSs in first round of groundwater sampling. During groundwater resampling, trace concentrations of several VOCs were detected, but none exceeded their GQS. Several metals were identified in groundwater, but only iron (max. of 0.88 mg/L), manganese (1.5 mg/L), and sodium (max. of 68.9 mg/L) exceeded their respective GQS.
8. Soil vapor samples collected during the RI were compared to the compounds listed in Table 3.1 Air Guideline Values Derived by the NYSDOH located in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion dated October 2006. Soil vapor samples collected during the RI showed moderate levels

of petroleum-related VOCs and low levels of chlorinated VOCs. The total concentration of petroleum-related VOCs (BTEX) ranged from 49.5 $\mu g/m^3$ to 88.72 $\mu g/m^3$. Highest concentrations were detected for acetone (max. of 337 $\mu g/m^3$). The chlorinated VOCs, trichloroethylene (TCE) and 1,1,1-trichloroethane (TCA) were detected in two of the four soil gas samples at a maximum concentration of 0 1.25 $\mu g/m^3$ and 9.87 $\mu g/m^3$ respectively. Tetrachloroethylene (PCE) was detected in all four soil gas samples with a maximum concentration of 6.35 $\mu g/m^3$ and carbon tetrachloride was detected in all samples with a maximum concentration of 0.69 $\mu g/m^3$. Concentrations of the chlorinated VOCs were below the monitoring level ranges established within the NYSDOH soil vapor guidance matrix.

REMEDIAL INVESTIGATION REPORT

1.0 SITE BACKGROUND

AIG Builders has applied to enroll in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a 0.10-acre Site located at 4202 18th Avenue in the Mapleton section of Brooklyn, New York. The Site will be redeveloped with a new 4-story apartment building. The portion of the RI work conducted on the Site was conducted on December 8, 2014 and January 22, 2015. This RIR summarizes the nature and extent of contamination and provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy that is protective of human health and the environment consistent with the use of the property pursuant to RCNY§ 43-1407(f).

1.1 Site Location and Current Usage

The Site is located at 4202 18th Avenue in the Mapleton section of Brooklyn, New York, and is currently identified as Block 5409, Lot 30 on the New York City Tax Map. Figure 1 shows the Site location. Lot 30 is a rectangular shaped lot consisting of 43.67 feet of street frontage on 18th Avenue and 97.02 feet of street frontage on East 3rd Street for a total of approximately 4,240 ft^2. The Site is located on the west side of 18th Avenue and the north side of East 3rd Street and is bordered by a 1 & 2 family residential building to the north (814 East 3rd Street), 18th Avenue followed by several 1 & 2 family residential buildings to the south (4131-4205 18th Avenue), a 2-story office building to the west (4208 18th Avenue), and East 3rd Street followed by a grocery store to the east (4102 18 Avenue). A map of the site boundary is shown on Figure 2.

The Site is currently developed with an auto sale and repair shop which occupies the northwest corner of the Site. The remainder of the Site is a paved parking area.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will consist of a new 4-story apartment building with a cellar the full size of the building footprint. The building and cellar footprint will encompass 3,367 sf of the site. The remaining 873 sf of the Site (the first 5ft fronting East 3rd Street) will not be excavated and will feature concrete porches, stairs and landscaped areas. The cellar will contain 10 individual storage spaces for the apartments above as well as two accessory cellars to the

apartments above on the 1st floor, two laundry rooms, mechanical rooms, stairwells, and two bathrooms. The first floor will consist of two apartments, and the residential vestibule and staircases. The first floor will be approximately 4 feet above sidewalk grade. The second, third and fourth floors will consist of apartments.

The cellar level will require excavation to a depth of approximately 7 feet below grade across the entire lot. Therefore, an estimated 873 cubic yards (1,309 tons) of soil will require excavation for the new building's cellar. The building will not be equipped with any parking areas. The water table is present at a depth of approximately 42 feet below grade, and therefore will not be encountered during excavation.

Layout of the redevelopment plans for the cellar and first floor is presented in Figure 3. The current zoning designation is R6A. The proposed use is consistent with existing zoning for the property.

1.3 Description of Surrounding Property

The area immediately surrounding Site consists of multi-family walk-ups to the south and north, an office building and restaurant to the west, and a grocery store to the east. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 500 feet away from the Site. P.S. K134 is located approximately 500 feet northeast of the Site. No other hospitals, schools or daycare facilities are located within a 500 ft radius of the Site.

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Surrounding Property Usage

Direction	Property Description
North – Adjacent Property	Block 5409, Lot 27- 814 East 3rd Street A 5,200 ft^2 lot developed with a residential 1 & 2 family building.
South – Across 18th Avenue	Block 5416, Lots 18, 20 and 21 - 4133-4205 18th Avenue A 3,656 ft^2 lot with a mixed use residential and commercial building (4205 18th Avenue), and two 2,531 ft^2 lots, each with a residential 1 & 2 family building (4203 and 4133 18th Avenue).
East – Across East 3rd Street	Block 5410, Lot 1 - 4102 18th Avenue A 25,800 ft^2 commercial lot currently occupied by a grocery store.
West – Adjacent property	Block 5409, Lot 25 - 4208 18th Avenue A 2,370 ft^2 lot developed with a two-story office building.

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2.0 SITE HISTORY

2.1 Past Uses and Ownership

A Phase I Screening was completed by EBC in 2015. The following Site history was established based on historic Sanborn maps: The Site was developed in 1929 with a 1-story building occupied by a filling station with three gasoline storage tanks located in the south end of the lot. From 1950 to 1993, the Site contained three USTs and the 1-story building had expanded towards the northern side of the Site. The building was occupied by an office, auto repair garage, a greasing garage, and an auto laundry garage. In 1994, the USTs were no longer shown on the maps and the building was listed as an auto repair shop. The site remained in this configuration until at least 2007.

2.2 Previous Investigations

A Geophysical Report was completed by GeoSeek LLC (Pine Beach, NJ) in November 2012. The investigation concluded that there were at least 8 underground storage tanks present on Site, seven of which were in the southern paved area of the lot and one in the central area of the lot, as well as a possible oil water separator in the existing building. A former pump island, two vent pipes, and two fill ports were also noted on Site.

A Phase II Subsurface Investigation Report was completed by Peak Environmental, Inc. (Woodbridge, NJ) in January 2013. The investigation included installation of 8 soil borings and collection of one subsurface sample from each. Samples targeting the suspect gasoline USTs and former pump island were analyzed for VOC gasoline constituents and samples targeting the waste oil tank, oil-water separator, and floor drain system were analyzed for VOCs, SVOCs, PCBs, and metals. Results of the Phase II Investigation showed elevated concentrations of BTEX VOCs in soils near the former gasoline pump island, indicative of gasoline contamination. Following a review of the analytical data, a petroleum release was reported by to the NYS DEC Spill Hotline and Spill Case No. 1215784 was opened and NYS DEC Case Manager Mr. Hiralkumar Patel assigned.

An Underground Storage Tank Closure Report was prepared for the Site by Peak Environmental, Inc. (Woodbridge, NJ) in August 2014. The report documents the removal of eight previously

closed in-place USTs ranging from 275 gallons to 2,000 gallons in capacity as well as the remote fill piping located beneath the sidewalk, conducted from March through June 2014. Petroleum impact soils were removed and excavated areas backfilled to grade with clean fill. The closure report indicated collection of 12 post-excavation samples. Post excavation samples did not reveal any detectable petroleum contamination with the exception of one sample located in the eastern section (adjacent to the former pump island) and one sample located on the sidewalk near the remote fill piping. The report concluded that a No Further Action be proposed relating to the Spill Case associated with this Site. A Spill Closure letter was issued by NYSDEC for Spill No. 1215784 on August 22, 2014 (included in Attachment A).

2.3 Site Inspection

A site inspection was not conducted by EBC because of the geophysical report completed by GeoSeek LLC in 2012.

2.4 Areas of Concern

Areas of Concern (AOCs) identified for the Site include:

1. The historic usage of the Site is an auto repair shop, greasing garage, auto laundry garage and filling station.
2. The Site is identified as being assigned an E-designation (E-44) for Hazmat as part of the Ocean Parkway District Rezoning completed by the City in August 1993 (CEQR 93DCP013K).

Sanborn Maps identifying the location of the filling station at the Site are presented in Attachment A.

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3.0 PROJECT MANAGEMENT

3.1 Project Organization

The Qualified Environmental Profession (QEP) responsible for preparation of this RIR is Kimberly Somers.

3.2 Health and Safety

All work described in this RIR was performed in full compliance with applicable laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements.

3.3 Materials Management

All material encountered during the RI was managed in accordance with applicable laws and regulations.

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4.0 REMEDIAL INVESTIGATION ACTIVITIES

EBC performed the following scope of work at the Site in December of 2014 and January of 2015:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed four soil borings across the Site, and collected nine soil samples for chemical analysis from the soil borings to evaluate soil quality;
3. Installed three groundwater monitoring wells throughout the Site to establish groundwater flow and collected six groundwater samples and one duplicate groundwater sample for chemical analysis to evaluate groundwater quality; and
4. Installed four soil gas implants and collected four soil gas samples for chemical analysis.

4.1 Geophysical Investigation

A geophysical investigation was not performed as a part of this assessment because GeoSeek performed one in 2012. Eight possible USTs were detected, seven of which in the former filling station area at the south end of the Site and one in the central area of the garage.

4.2 Borings and Monitoring Wells

Drilling and Soil Logging

On January 22, 2015, four soil borings (SB1 through SB4) were installed in the approximate locations shown on Figure 5. The four soil boring locations were chosen to gain representative soil quality information across the Site. At SB1 soil samples were collected continuously from grade to a final depth of 12 feet below existing grade using a four-foot steel macro core sampler, and at SB2-SB4, soil samples were collected continuously from grade to a final depth of 10 feet below existing grade using a five-foot steel macro-core sampler, all with acetate liners and Geoprobe direct-push equipment. An additional soil sample was collected from the soil removed during the installation of MW3. This sample was also collected using a steel macro-core sampler with acetate liners and Geoprobe direct-push equipment. Soil recovered from each of the soil borings was field screened for the presence of VOCs with a photoionization detector (PID) and visually inspected for evidence of contamination. No PID readings above background concentrations were detected. Two soil samples were retained from soil borings SB1-SB4, representing the interval 0 to 2 feet below grade in each boring, the interval 8 to 10 feet below

grade in SB1 and SB4, and the interval 4 to 6 feet in SB2 and SB3. One sample was retained from the soil collected during the installation of MW3, representing the interval 0 to 2.

Soil boring details are provided in Table 1. Boring logs were prepared by a Qualified Environmental Professional and are attached in Attachment B.

Groundwater Monitoring Well Construction

Three temporary 1-inch diameter PVC monitoring wells (MW1 through MW3) with were installed at the approximate locations shown on Figure 5, with 20 feet of 0.010 slot screen set to intersect the water table. Since groundwater was encountered at approximately 43 feet below grade, monitoring wells were installed to a depth of 50 feet. Monitoring well sampling details are provided in Table 1. Monitoring well locations are shown in Figure 5.

Survey

Soil borings, monitoring wells and soil gas sampling locations were located to the nearest 0.10 foot with respect to two or more permanent site features.

Water Level Measurement

Approximate groundwater level measurements were collected using a Solinst oil/water interface meter to ensure the surface of the water table was within the screened section of the monitoring well. No free product was observed within the three monitoring wells. Water level data is included in Table 1.

4.3 Sample Collection and Chemical Analysis

Sampling performed as part of the field investigation was conducted for all Areas of Concern and also considered other means for bias of sampling based on professional judgment, area history, discolored soil, stressed vegetation, drainage patterns, field instrument measurements, odor, or other field indicators. All media including soil and soil vapor have been sampled and evaluated in the RIR. Discrete (grab) samples have been used for final delineation of the nature and extent of contamination and to determine the impact of contaminants on public health and the environment. The sampling performed and presented in this RIR provides sufficient basis for evaluation of remedial action alternatives, establishment of a qualitative human health exposure assessment, and selection of a final remedy.

Soil Sampling

Nine soil samples were collected for chemical analysis during this RI. Data on soil sample collection for chemical analyses, including dates of collection and sample depths, is reported in Tables 2, 3, 4 and 5. Figure 5 shows the location of samples collected during this RI. Laboratories and analytical methods for soil samples collected during the RI are shown below.

The nine soil samples were collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted for analysis with proper chain of custody to Phoenix Environmental Laboratories (Phoenix) of 587 East Middle Turnpike, Manchester, CT 06040, a New York State ELAP certified environmental laboratory (ELAP Certification No. 11301). All soil samples retained from borings SB1-SB4 were analyzed for the presence of volatile organic compounds (VOCs) by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, pesticides/PCBs by EPA Methods 8081/8082, and target analyte list (TAL) metals. The sample collected from the installation of MW3 was analyzed for PCBs by EPA Methods 8081/8082, and target analyte list (TAL) metals.

Groundwater Sampling

Six groundwater samples and one duplicate sample were collected for chemical analysis during this RI. Groundwater samples were collected from the monitoring wells utilizing dedicated polyethylene tubing and a peristaltic pump. Three groundwater samples collected in February 2015 were collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix for analysis of VOCs by EPA Method 8260, SVOCs by EPA Method 8270, pesticides/PCBs by EPA Methods 8081/8082 and TAL metals. Three groundwater samples collected in December 2014 were collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix for analysis of VOCs by EPA Method 8260. Groundwater sample collection data is reported in Table 6. Sampling logs with information on purging and sampling of groundwater monitoring wells are included in Appendix C. Figure 5 shows the location of groundwater sampling. Laboratories and analytical methods are shown below.

Soil Vapor Sampling

Four soil vapor probes, two of which were sub-slab, were installed and four soil vapor samples were collected for chemical analysis during this RI. The four soil vapor sampling locations are shown in Figure 5. Soil vapor sample collection data is reported in Table 10, and the soil vapor sampling logs are included in Attachment D. Methodologies used for soil vapor assessment conform to the *NYS DOH Final Guidance on Soil Vapor Intrusion, October 2006.*

The soil vapor probes were installed using Geoprobe™ equipment and tooling. The approximate location of each of the soil vapor probes is shown on Figure 5. The vapor probes that were installed were the Geoprobe™ Model AT86 series, which are constructed of a 6-inch length of double woven stainless steel wire. The three soil vapor probes installed on January 22, 2015 were installed to a depth of 12 feet below grade. Each probe was attached to ¼ inch polyethylene tubing which extended approximately 18 inches beyond that needed to reach the surface. The tubing was capped with a ¼ inch plastic end to prevent the infiltration of foreign particles into the tube. Coarse sand was placed around the probe to a height of approximately 1 foot above the bottom of the probe. The remainder of the borehole was sealed with a bentonite slurry to the surface.

Soil vapor sampling for the three soil vapor probes installed on January 22, 2015, was conducted on February 18, 2015. Prior to sampling, each sampling location was tested to ensure a proper surface seal had been obtained. In accordance with NYSDOH guidance (NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005), a tracer gas (helium) was used as a quality assurance/quality control device to verify the integrity of the sampling point seal prior to collecting the samples. Prior to testing and collecting samples, the surface immediately surrounding the polyethylene tubing of the vapor implant was sealed using a 1 foot ft by 1 ft square sheet of 2 mil HDPE plastic firmly adhered to a wetted layer of granular bentonite. The seal was then tested by enriching the air space above the seal with a tracer gas (helium) while continuously monitoring air drawn from the implant with a helium detector (Dielectric Model MGD-2002, Multi-Gas Detector) for a minimum of 15 minutes. The tracer gas test procedure was employed at all three soil vapor sampling locations. No surface seal leaks were observed at any of the locations.

Following verification that the surface seal was tight, one to three volumes (i.e., the volume of the sample probe and tube) of air was purged from the implant using a calibrated vacuum pump. After purging, a 6-liter Summa® canister, fitted with a 2-hour flow regulator, was attached to the surface tube of each of the three vapor implants. Prior to initiating sample collection, sample identification, canister number, date and start time were recorded on tags attached to each canister and in a bound field note book. Sampling then proceeded by fully opening the flow control valve on each canister in turn. Immediately after opening the flow control valve on a canister, the initial vacuum (inches of mercury) was recorded in the field book and on the sample tag. When the vacuum level in the canister was between 5 and 8 inches of mercury (approx 2 hours), the flow controller valve was closed, and the final vacuum recorded in the field notebook and on the sample tag.

The soil gas sample identification, date, start time, start vacuum, end time and end vacuum were recorded on tags attached to each canister and on a sample log sheet (Attachment D). Samples were submitted to Phoenix for laboratory analysis of VOCs EPA Method TO-15.

Chemical Analysis

Chemical analytical work presented in this RIR has been performed in the following manner:

Factor	Description
Quality Assurance Officer	The chemical analytical quality assurance is directed by Phoenix Environmental Laboratories
Chemical Analytical Laboratory	Chemical analytical laboratory(s) used in the RI is NYS ELAP certified and was Phoenix Environmental Laboratories
Chemical Analytical Methods	Soil and groundwater analytical methods: • TAL Metals by EPA Method 6010C (rev. 2007); • VOCs by EPA Method 8260C (rev. 2006); • SVOCs by EPA Method 8270D (rev. 2007); • Pesticides by EPA Method 8081B (rev. 2000); • PCBs by EPA Method 8082A (rev. 2000); Soil vapor analytical methods: • VOCs by TO-15 VOC parameters.

Results of Chemical Analyses

Laboratory data for soil, groundwater and soil vapor are summarized in Tables 2 through 10. Laboratory data deliverables for all samples evaluated in this RIR are provided in digital form in Attachment E.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

Stratigraphy

The stratigraphy of the Site surrounding the existing foundation slab from the surface down consists of 1 to 3 feet of historic fill, underlain by native brown silty sand.

Hydrogeology

A table of water level data for the monitoring wells is included in Table 1. The average depth to groundwater is 43 feet. Groundwater flow is generally southwest.

5.2 Soil Chemistry

Soil/fill samples results were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs) as presented in 6NYCRR Part 375-6.8 and CP51. No VOCs or PCBs were found exceeding Unrestricted Use or Restricted Residential SCOs. Data collected during the RI showed concentrations of VOCs 1,2,4-Trimethylbenzene, (maximum 2.3 µg/Kg), 1,3,5-Trimethylbenzene (maximum 5.2 µg/Kg), acetone (maximum 41 µg/Kg) ethylbenzene (4.3 µg/Kg), m&p xylenes (maximum 20 µg/Kg), methyl ethyl ketone (7.2 µg/Kg), methylene chloride (maximum 3.2 µg/Kg), naphthalene (4.4 µg/Kg), o-xylene (7.7 µg/Kg), tetrachloroethene (PCE) (maximum 79 µg/Kg), and toluene (7 µg/Kg) were detected at trace amounts. Seven SVOCs exceeded Unrestricted Use SCOs one of four shallow samples including benz(a)anthracene (maximum 3,200 µg/kg), benzo(a)pyrene (maximum 2,700 µg/kg), benzo(b)fluoranthene (maximum 3,300 µg/kg), benzo(k)fluoranthene (maximum 1,100 µg/kg), chrysene (maximum 3,200 µg/kg), dibenz(a,h)anthracene (maximum 360 µg/kg), and indeno(1,2,3-cd)pyrene (1,700 µg/kg); all of which, with the exception of benzo(k)fluoranthene and chrysene, also exceeded Restricted Residential SCOs. Three metals, chromium (maximum of 41.4 mg/kg), lead (maximum of 114 mg/kg), and nickel (maximum of

75.2 mg/kg), exceeded Unrestricted Use SCOs in deeper samples. Overall, the soil results were consistent with data identified at sites with historic fill material in NYC.

5.3 Groundwater Chemistry

Groundwater samples results were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater samples collected during the investigation showed no pesticides or PCBs exceeding GQS. Several VOCs exceeded GQS including 1,2,4-trimethylbenzene (maximum 380 µg/L), 1,3,5-trimethylbenzene (maximum 140 µg/L), 2-isopropyltoluene (maximum 1.6), acetone (maximum 9.2 µg/L), carbon disulfide (maximum 0.68 µg/L), chloroform (maximum 1 µg/L), chloromethane (maximum 0.54), ethylbenzene (maximum 15 µg/L), isopropylbenzene (maximum 15 µg/L), m&p-xylenes (maximum 90 µg/L), methyl ethyl ketone (2.6 µg/L), naphthalene (maximum µg/L), n-butylbenzene (maximum 1.5 µg/L), n-propylbenzene (maximum 52 µg/L), o-xylene (maximum 11 µg/L), p-isopropyltoluene (maximum 5.1 µg/L), sec-butylbenzene (maximum 5.7 µg/L), tetrachloroethene (maximum 0.92 µg/L), toluene (maximum 3.6 µg/L), and trichloroethene (0.25 µg/L). Six of the nine VOC exceedances were only detected in MW-1. Six SVOCs were detected exceeding GQS, including polycyclic aromatic hydrocarbons (PAHs) benz(a)anthracene (maximum 0.14 µg/L), benzo(b)fluoranthene (maximum 0.18 µg/L), benzo(k)fluoranthene (0.07 µg/L), bis(2-ethylhexyl)phthalate (5.2 µg/L), chrysene (maximum 0.13 µg/L), and indeno(1,2,3-cd)pyrene (0.07 µg/L). Three metals were detected exceeding GQS, including iron (maximum 0.88 mg/L), manganese (maximum 0.961 mg/L), and sodium (maximum 68.9 mg/L). Based on the lack of elevated concentrations of VOCs and SVOCs in on-Site soils, an on-Site source of groundwater contamination is not suspected.

5.4 Soil Vapor Chemistry

Soil vapor results collected during the RI were compared to the compounds listed in Table 3.1 Air Guidance Values derived by the New York State Department of Health (NYSDOH) located in the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Soil vapor samples collected during the RI showed petroleum related VOCs were present at low concentrations. Total concentrations of petroleum-related VOCs (BTEX) ranged from 49.5 $\mu g/m^3$ to 88.72 $\mu g/m^3$. Chlorinated VOCs, including carbon tetrachloride (ranging from 0.52

μg/m^3 to 0.69 μg/m^3), trichloroethene (TCE) (ranging from 0.26 μg/m^3 to 1.25 μg/m^3), and tetrachloroethene (PCE) (ranging from 1.840 μg/m^3 and 6.35 μg/m^3), were all at concentrations below guidance matrix established by NYSDOH.

5.4 Prior Activity

Based on an evaluation of the data and information from the RIR, disposal of significant amounts of hazardous waste is not suspected for the Site.

5.5 Impediments to Remedial Action

There are no known impediments to remedial action at this property.

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TABLES

Table 1
4202 18th Avenue
Brooklyn, NY
Soil Boring / Well Information

SAMPLE ID	Date	Total Depth (ft)	Diameter (in)	Construction Materials	Screen Length (ft)	DTW (ft)
B1	1/22/2015	12	2	Geoprobe	-	-
B2	1/22/2015	10	2	Geoprobe	-	-
B3	1/22/2015	10	2	Geoprobe	-	-
B4	1/22/2015	10	2	Geoprobe	-	-
MW3	12/8/2014	50	2	Geoprobe	-	-
MW1	12/8/2014	50	1	PVC	20.00	-
MW2	12/8/2014	50	1	PVC	20.00	43.15
MW3	12/8/2014	50	1	PVC	20.00	42.50

TABLE 2
4202 18th Avenue,
Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B1				B2				B3				B4				Trip Blank Low		Trip Blank High	
			1/22/2015				1/22/2015				1/22/2015				1/22/2015				1/22/2015		1/22/2015	
			(0-2') µg/Kg		(8-10') µg/Kg		(0-2') µg/Kg		(4-6') µg/Kg		(0-2') µg/Kg		(4-6') µg/Kg		(0-2') µg/Kg		(8-10') µg/Kg		µg/Kg		µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachlorothane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,1,1-Trichloroethane	680	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,1,2,2-Tetrachloroethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,1,2-Trichloroethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,1-Dichloroethane	270	26,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,1-Dichloroethene	330	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,1-Dichloropropene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2,3-Trichlorobenzene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2,3-Trichloropropane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2,4-Trichlorobenzene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2,4-Trimethylbenzene	3,600	52,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**1.8**	5.1	**2.3**	4.5	< 5.0	5	< 250	250
1,2-Dibromo-3-chloropropane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2-Dibromomethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2-Dichlorobenzene	1,100	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2-Dichloroethane	20	3,100	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,2-Dichloropropane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,3,5-Trimethylbenzene	8,400	52,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**5.2**	5.1	**1.1**	4.5	< 5.0	5	< 250	250
1,3-Dichlorobenzene	2,400	4,900	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,3-Dichloropropane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
1,4-Dichlorobenzene	1,800	13,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
2,2-Dichloropropane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
2-Chlorotoluene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
2-Hexanone (Methyl Butyl Ketone)			< 31	31	< 29	29	< 26	26	< 24	24	< 30	30	< 27	27	< 26	26	< 23	23	< 25	25	< 1300	1,300
2-Isopropyltoluene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
4-Chlorotoluene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
4-Methyl-2-Pentanone			< 31	31	< 29	29	< 26	26	< 24	24	< 30	30	< 27	27	< 26	26	< 23	23	< 25	25	< 1300	1,300
Acetone	50	100,000	**10**	50	< 50	50	**41**	50	**5.2**	47	**6.6**	50	< 50	50	**6.3**	50	< 45	45	< 50	50	< 2500	2,500
Acrylonitrile			< 12	12	< 12	12	< 10	10	< 9.5	9.5	< 12	12	< 11	11	< 10	10	< 9.0	9	< 10	10	< 500	500
Benzene	60	4,800	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Bromobenzene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Bromochloromethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Bromodichloromethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Bromoform			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Bromomethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Carbon Disulfide			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Carbon tetrachloride	760	2,400	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Chlorobenzene	1,100	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Chloroethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Chloroform	370	49,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Chloromethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
cis-1,2-Dichloroethene	250	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
cis-1,3-Dichloropropene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Dibromochloromethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Dibromomethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Dichlorodifluoromethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Ethylbenzene	1,000	41,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**4.3**	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Hexachlorobutadiene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Isopropylbenzene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
m&p-Xylenes	260	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**20**	5.1	**1.8**	4.5	< 5.0	5	< 250	250
Methyl Ethyl Ketone (2-Butanone)	120	100,000	< 37	37	< 35	35	**7.2**	31	< 28	28	< 36	36	< 32	32	< 31	31	< 27	27	< 30	30	< 1500	1,500
Methyl t-butyl ether (MTBE)	930	100,000	< 12	12	< 12	12	< 10	10	< 9.5	9.5	< 12	12	< 11	11	< 10	10	< 9.0	9	< 10	10	< 500	500
Methylene chloride	50	100,000	**3.2**	6.2	**2.4**	5.8	**2.2**	5.2	**1.9**	4.7	**2.8**	6.1	**2.7**	5.3	**2.2**	5.1	**2**	4.5	**2**	5	**180**	250
Naphthalene	12,000	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**4.4**	5.1	< 4.5	4.5	< 5.0	5	< 250	250
n-Butylbenzene	12,000	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
n-Propylbenzene	3,900	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
o-Xylene	260	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**7.7**	5.1	< 4.5	4.5	< 5.0	5	< 250	250
p-Isopropyltoluene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
sec-Butylbenzene	11,000	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Styrene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
tert-Butylbenzene	5,900	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Tetrachloroethene	1,300	19,000	**79**	280	< 5.8	5.8	**5.3**	5.2	**1.4**	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Tetrahydrofuran (THF)			< 12	12	< 12	12	< 10	10	< 9.5	9.5	< 12	12	< 11	11	< 10	10	< 9.0	9	< 10	10	< 500	500
Toluene	700	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	**7**	5.1	< 4.5	4.5	< 5.0	5	< 250	250
trans-1,2-Dichloroethene	190	100,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
trans-1,3-Dichloropropene			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
trabs-1,4-dichloro-2-butene			< 12	12	< 12	12	< 10	10	< 9.5	9.5	< 12	12	< 11	11	< 10	10	< 9.0	9	< 10	10	< 500	500
Trichloroethene	470	21,000	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Trichlorofluoromethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Trichlorotrifluoroethane			< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Vinyl Chloride	20	900	< 6.2	6.2	< 5.8	5.8	< 5.2	5.2	< 4.7	4.7	< 6.1	6.1	< 5.3	5.3	< 5.1	5.1	< 4.5	4.5	< 5.0	5	< 250	250
Total BTEX Concentration			0		0		0		0		0		0		39		1.8		0		0	
Total VOCs Concentration			92.2		2.4		55.7		8.5		9.4		2.7		58.9		7.2		2		180	

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 3
4202 18th Avenue,
Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B1				B2				B3				B4			
			1/22/2015				1/22/2015				1/22/2015				1/22/2015			
			(0-2') µg/Kg		(8-10') µg/Kg		(0-2') µg/Kg		(4-6') µg/Kg		(0-2') µg/Kg		(4-6') µg/Kg		(0-2') µg/Kg		(8-10') µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
1,2,4-Trichlorobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
1,2-Dichlorobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
1,2-Diphenylhydrazine			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
1,3-Dichlorobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
1,4-Dichlorobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2,4,5-Trichlorophenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2,4,6-Trichlorophenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2,4-Dichlorophenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2,4-Dimethylphenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2,4-Dinitrophenol			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
2,4-Dinitrotoluene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2,6-Dinitrotoluene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2-Chloronaphthalene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2-Chlorophenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2-Methylnaphthalene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2-Methylphenol (o-cresol)	330	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
2-Nitroaniline			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
2-Nitrophenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
3&4-Methylphenol (m&p-cresol)	330	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
3,3'-Dichlorobenzidine			< 800	800	< 690	690	< 750	750	< 680	680	< 730	730	< 700	700	< 740	740	< 710	710
3-Nitroaniline			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
4,6-Dinitro-2-methylphenol			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
4-Bromophenyl phenyl ether			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
4-Chloro-3-methylphenol			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
4-Chloroaniline			< 800	800	< 690	690	< 750	750	< 680	680	< 730	730	< 700	700	< 740	740	< 710	710
4-Chlorophenyl phenyl ether			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
4-Nitroaniline			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
4-Nitrophenol			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
Acenaphthene	20,000	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**170**	260	< 250	250
Acenaphthylene	100,000	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Acetophenone			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Aniline			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
Anthracene	100,000	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**720**	260	< 250	250
Benz(a)anthracene	1,000	1,000	**200**	280	< 240	240	< 260	260	< 240	240	**140**	260	< 250	250	**3,200**	260	< 250	250
Benzidine			< 800	800	< 690	690	< 750	750	< 680	680	< 730	730	< 700	700	< 740	740	< 710	710
Benzo(a)pyrene	1,000	1,000	**190**	280	< 240	240	< 260	260	< 240	240	**130**	260	< 250	250	**2,700**	260	< 250	250
Benzo(b)fluoranthene	1,000	1,000	**260**	280	< 240	240	< 260	260	< 240	240	**160**	260	< 250	250	**3,300**	260	< 250	250
Benzo(ghi)perylene	100,000	100,000	**170**	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**1,500**	260	< 250	250
Benzo(k)fluoranthene	800	3,900	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**1,100**	260	< 250	250
Benzoic acid			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	< 1900	1,900	< 1800	1,800
Benzyl butyl phthalate			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Bis(2-chloroethoxy)methane			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Bis(2-chloroethyl)ether			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Bis(2-chloroisopropyl)ether			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Bis(2-ethylhexyl)phthalate			**240**	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Carbazole			< 2000	2,000	< 1700	1,700	< 1900	1,900	< 1700	1,700	< 1800	1,800	< 1800	1,800	**640**	1,900	< 1800	1,800
Chrysene	1,000	3,900	**190**	280	< 240	240	< 260	260	< 240	240	**160**	260	< 250	250	**3,200**	260	< 250	250
Dibenz(a,h)anthracene	330	330	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**360**	260	< 250	250
Dibenzofuran	7,000	59,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**130**	260	< 250	250
Diethyl phthalate			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Dimethylphthalate			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Di-n-butylphthalate			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Di-n-octylphthalate			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Fluoranthene	100,000	100,000	**350**	280	< 240	240	< 260	260	< 240	240	**170**	260	< 250	250	**4,400**	260	< 250	250
Fluorene	30,000	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**170**	260	< 250	250
Hexachlorobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Hexachlorobutadiene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Hexachlorocyclopentadiene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Hexachloroethane			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Indeno(1,2,3-cd)pyrene	500	500	**170**	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**1,700**	260	< 250	250
Isophorone			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Naphthalene	12,000	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	**120**	260	< 250	250
Nitrobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
N-Nitrosodimethylamine			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
N-Nitrosodi-n-propylamine			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
N-Nitrosodiphenylamine			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Pentachloronitrobenzene			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Pentachlorophenol	800	6,700	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Phenanthrene	100,000	100,000	**190**	280	< 240	240	< 260	260	< 240	240	**120**	260	< 250	250	**2,800**	260	< 250	250
Phenol	330	100,000	< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250
Pyrene	100,000	100,000	**310**	280	< 240	240	< 260	260	< 240	240	**170**	260	< 250	250	**4,200**	260	< 250	250
Pyridine			< 280	280	< 240	240	< 260	260	< 240	240	< 260	260	< 250	250	< 260	260	< 250	250

Notes:
* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives
RL - Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value
Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 4
4202 18th Avenue,
Brooklyn, New York
Soil Analytical Results
PCBs

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B1				B2				B3				B4				MW3	
			1/22/2015				1/22/2015				1/22/2015				1/22/2015				12/8/2014	
			(0-2') µg/Kg		(8-10') µg/Kg		(0-2') µg/Kg		(4-6') µg/Kg		(0-2') µg/Kg		(4-6') µg/Kg		(0-2') µg/Kg		(8-10') µg/Kg		(fill) µg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
PCB-1016	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1221	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1232	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1242	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1248	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1254	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1260	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	**57**	36
PCB-1262	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36
PCB-1268	100	1,000	< 39	39	< 34	34	< 37	37	< 34	34	< 37	37	< 35	35	< 37	37	< 35	35	< 36	36

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

TABLE 5
4202 18th Avenue,
Brooklyn, New York
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B1				B2				B3				B4				MW3	
			1/22/2015				1/22/2015				1/22/2015				1/22/2015				12/8/2014	
			(0-2') mg/Kg		(8-10') mg/Kg		(0-2') mg/Kg		(4-6') mg/Kg		(0-2') mg/Kg		(4-6') mg/Kg		(0-2') mg/Kg		(8-10') mg/Kg		(fill) mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			**16,700**	38	**7,130**	35	**16,000**	35	**8,520**	30	**11,700**	33	**7,750**	33	**7,410**	33	**6,960**	34	**6,680**	38
Antimony			< 1.9	1.9	< 1.8	1.8	< 1.8	1.8	< 1.5	1.5	< 1.7	1.7	< 1.6	1.6	< 1.7	1.7	< 1.7	1.7	< 1.9	1.9
Arsenic	13	16	**6**	0.8	**2.2**	0.7	**5.8**	0.7	**3.1**	0.6	**4.7**	0.7	**2.8**	0.7	**3.2**	0.7	**3**	0.7	**3.8**	0.8
Barium	350	350	**82.4**	0.8	**60**	0.7	**44.5**	0.7	**45.9**	0.6	**57.9**	0.7	**58.1**	0.7	**68.6**	0.7	**60**	0.7	**51.8**	0.8
Beryllium	7.2	14	**0.6**	0.3	**0.49**	0.28	**0.52**	0.28	**0.62**	0.24	**0.5**	0.27	**0.42**	0.26	**0.35**	0.27	**0.59**	0.27	**0.4**	0.3
Cadmium	2.5	2.5	< 0.38	0.38	< 0.35	0.35	< 0.35	0.35	< 0.30	0.3	< 0.33	0.33	< 0.33	0.33	**0.18**	0.33	**0.2**	0.34	**0.19**	0.38
Calcium			**11,000**	3.8	**1,380**	3.5	**7,920**	3.5	**1,110**	3	**8,490**	3.3	**1,960**	3.3	**26,500**	33	**1,920**	3.4	**11,300**	38
Chromium	30	180	**19.5**	0.38	**26.5**	0.35	**21.9**	0.35	**22.8**	0.3	**21.2**	0.33	**27.3**	0.33	**17.5**	0.33	**41.4**	0.34	**18.4**	0.38
Cobalt			**7**	0.38	**9.19**	0.35	**7.88**	0.35	**8.75**	0.3	**8.04**	0.33	**11.1**	0.33	**6.79**	0.33	**14.9**	0.34	**6.85**	0.38
Copper	50	270	**18**	0.38	**23.6**	0.35	**14.6**	0.35	**23.2**	0.3	**22.9**	0.33	**38.3**	0.33	**26.6**	0.33	**23.5**	0.34	**25.3**	0.38
Iron			**18,700**	38	**16,200**	35	**21,400**	35	**15,700**	30	**18,300**	33	**14,600**	33	**14,400**	33	**17,800**	34	**12,800**	38
Lead	63	400	**42.2**	0.8	**8.2**	0.7	**18.3**	0.7	**12.8**	0.6	**62.7**	0.7	**9**	0.7	**57.3**	0.7	**47.5**	0.7	**114**	0.8
Magnesium			**3,110**	3.8	**4,020**	3.5	**3,980**	3.5	**4,830**	30	**3,720**	3.3	**4,570**	3.3	**4,360**	3.3	**4,080**	3.4	**3,970**	3.8
Manganese	1,600	2,000	**305**	3.8	**396**	3.5	**231**	3.5	**433**	3	**318**	3.3	**309**	3.3	**307**	3.3	**516**	3.4	**233**	3.8
Mercury	0.18	0.81	**0.14**	0.03	< 0.03	0.03	**0.05**	0.03	< 0.03	0.03	**0.06**	0.03	< 0.03	0.03	**0.18**	0.03	< 0.03	0.03	< 0.08	0.08
Nickel	30	140	**14.6**	0.38	**50.8**	0.35	**17.8**	0.35	**38.1**	0.3	**24**	0.33	**51**	0.33	**24.7**	0.33	**75.2**	0.34	**22.2**	0.38
Potassium			**1,080**	8	**1,740**	7	**1,130**	7	**2,470**	6	**1,220**	7	**2,470**	7	**1,900**	7	**1,510**	7	**1,010**	75
Selenium	3.9	36	< 1.5	1.5	< 1.4	1.4	< 1.4	1.4	< 1.2	1.2	< 1.3	1.3	< 1.3	1.3	< 1.3	1.3	< 1.4	1.4	< 1.5	1.5
Silver	2	36	< 0.38	0.38	< 0.35	0.35	< 0.35	0.35	< 0.30	0.3	< 0.33	0.33	< 0.33	0.33	< 0.33	0.33	< 0.34	0.34	< 0.38	0.38
Sodium			**748**	8	**179**	7	**411**	7	**261**	6	**191**	7	**415**	7	**273**	7	**211**	7	**536**	8
Thallium			< 1.5	1.5	< 1.4	1.4	< 1.4	1.4	< 1.2	1.2	< 1.3	1.3	< 1.3	1.3	< 1.3	1.3	< 1.4	1.4	< 1.5	1.5
Vanadium			**29.5**	0.4	**27.8**	0.4	**36.3**	0.4	**30.7**	0.3	**28.8**	0.3	**26.9**	0.3	**24.3**	0.3	**29.9**	0.3	**26.5**	0.4
Zinc	109	2,200	**43**	0.8	**48.8**	0.7	**37.9**	0.7	**61**	0.6	**67.6**	0.7	**40.6**	0.7	**66.6**	0.7	**45.2**	0.7	**63.4**	0.8

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Table 6
4202 18th Avenue,
Brooklyn, New York
Ground Water Analytical Results
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	MW1 12/8/2014 µg/L		MW2 12/8/2014 µg/L		MW3 12/8/2014 µg/L		MW1 2/18/2014 µg/L		MW2 2/18/2014 µg/L		MW3 2/18/2014 µg/L		Trip Blank 2/18/2014 µg/L		Duplicate 2/18/2014 µg/L	
	µg/L	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachlorothane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,1-Trichloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1,2,2-Tetrachloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,2-Trichloroethane	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloropropene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trimethylbenzene	5	**380**	20	**30**	1	**8.1**	1	**8.8**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dibromo-3-chloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dibromoethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dichloroethane	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60
1,2-Dichloropropane	0.94	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3,5-Trimethylbenzene	5	**140**	5	**8.4**	1	**2**	1	**1.3**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,4-Dichlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,2-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Hexanone (Methyl Butyl Ketone)		< 1.0	1	< 1.0	1	< 1.0	1	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
2-Isopropyltoluene	5	**1.6**	1	**0.39**	1	**0.44**	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Methyl-2-Pentanone		< 1.0	1	< 1.0	1	< 1.0	1	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Acetone	50	< 5.0	5	**9.2**	5	**6.6**	5	**4.3**	5.0	**4.4**	5.0	**4.5**	5.0	< 5.0	5.0	**4.4**	5.0
Acrolein		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Acrylonitrile	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Benzene	1	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70
Bromobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromochloromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromodichloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromoform		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bromomethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Carbon Disulfide	60	**0.27**	1	**0.66**	1	**0.68**	1	< 1.0	1.0	**0.29**	1.0	**0.4**	1.0	< 1.0	1.0	**0.47**	1.0
Carbon tetrachloride	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chlorobenzene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroethane	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroform	7	**1**	5	**0.23**	5	**0.71**	5	**1.9**	5.0	< 5.0	5.0	**0.5**	5.0	< 5.0	5.0	**0.5**	5.0
Chloromethane	60	< 5.0	5	**0.36**	5	**0.54**	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
cis-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
cis-1,3-Dichloropropene		< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Dibromochloromethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dibromomethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dichlorodifluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Ethylbenzene	5	**15**	1	**1.6**	1	**0.52**	1	**0.44**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Hexachlorobutadiene	0.5	< 1.0	1	< 1.0	1	< 1.0	1	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5	< 0.5	0.5
Isopropylbenzene	5	**15**	1	**1.4**	1	**0.6**	1	**0.3**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
m&p-Xylenes	5	**90**	2	**9.5**	1	**2.8**	1	**2.7**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methyl Ethyl Ketone (2-Butanone)	50	< 1.0	1	< 1.0	1	**2.6**	1	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Methyl t-butyl ether (MTBE)	10	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methylene chloride	5	< 3.0	3	< 3.0	3	< 3.0	3	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0
Naphthalene	10	**52**	2	**6.2**	1	**3.3**	1	**1.2**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Butylbenzene	5	< 1.0	1	**1.5**	1	**0.73**	1	< 1.0	1.0	**0.51**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Propylbenzene	5	**46**	2	**3.7**	1	**1.7**	1	**0.66**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
o-Xylene	5	**11**	1	**1.2**	1	< 1.0	1	**0.52**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
p-Isopropyltoluene		**5.1**	1	**0.87**	1	**0.95**	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
sec-Butylbenzene	5	**5.7**	1	**0.93**	1	**0.48**	1	< 1.0	1.0	**0.34**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Styrene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
tert-Butylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Tetrachloroethene	5	**0.26**	1	**0.92**	1	**0.54**	1	< 1.0	1.0	**0.69**	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Tetrahydrofuran (THF)		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Toluene	5	**2.1**	1	**3.6**	1	**0.35**	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
trans-1,2-Dichloroethene	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
trans-1,3-Dichloropropene	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
trans-1,4-dichloro-2-butene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Trichloroethene	5	< 1.0	1	**0.25**	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorofluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorotrifluoroethane		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Vinyl Chloride	2	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0

Notes:
RL- Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 7
4202 18th Avenue,
Brooklyn, New York
Ground Water Analytical Results
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW1 µg/L		MW2 µg/L		MW3 µg/L		Duplicate µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL
1,2,4-Trichlorobenzene		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
1,2-Dichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.1	1.1	< 1.1	1.1
1,2-Diphenylhydrazine		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
1,3-Dichlorobenzene	3	< 1.0	1.0	< 1.0	1.0	< 1.1	1.1	< 1.1	1.1
1,4-Dichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.1	1.1	< 1.1	1.1
2,4,5-Trichlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2,4,6-Trichlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2,4-Dichlorophenol		< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2,4-Dimethylphenol		< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2,4-Dinitrophenol	5	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2,4-Dinitrotoluene	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
2,6-Dinitrotoluene	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
2-Chloronaphthalene	10	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
2-Chlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2-Methylnaphthalene		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
2-Methylphenol (o-cresol)	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
2-Nitroaniline	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
2-Nitrophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
3&4-Methylphenol (m&p-cresol)		< 1.0	1.0	< 1.0	1.0	< 1.1	1.1	< 1.1	1.1
3,3'-Dichlorobenzidine	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
3-Nitroaniline	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
4,6-Dinitro-2-methylphenol	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
4-Bromophenyl phenyl ether		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
4-Chloro-3-methylphenol	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
4-Chloroaniline	5	< 3.5	3.5	< 3.5	3.5	< 3.9	3.9	< 3.9	3.9
4-Chlorophenyl phenyl ether		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
4-Nitroaniline	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
4-Nitrophenol		< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
Acetophenone		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Aniline	5	< 3.5	3.5	< 3.5	3.5	< 3.9	3.9	< 3.9	3.9
Anthracene	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Benzidine	5	< 4.5	4.5	< 4.5	4.5	< 5.0	5.0	< 5.0	5.0
Benzoic acid		< 25	25	< 25	25	< 28	28	< 28	28
Benzyl butyl phthalate	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Bis(2-chloroethoxy)methane	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
Bis(2-chloroethyl)ether	1	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
Bis(2-chloroisopropyl)ether		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Carbazole		< 25	25	< 25	25	< 28	28	< 28	28
Dibenzofuran		< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
Diethyl phthalate	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Dimethylphthalate	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Di-n-butylphthalate	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Di-n-octylphthalate	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Fluoranthene	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Fluorene	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Hexachlorobutadiene	0.5	< 0.40	0.40	< 0.40	0.40	< 0.44	0.44	< 0.44	0.44
Hexachlorocyclopentadiene	5	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
Isophorone	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Naphthalene	10	< 5.0	5.0	< 5.0	5.0	< 5.	5.	< 5.	5.
Nitrobenzene	0.4	< 0.10	0.10	< 0.10	0.10	< 0.11	0.11	< 0.11	0.11
N-Nitrosodimethylamine		< 1.0	1.0	< 1.0	1.0	< 1.1	1.1	< 1.1	1.1
N-Nitrosodi-n-propylamine		< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
N-Nitrosodiphenylamine	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Phenol	50	< 1.0	1.0	< 1.0	1.0	< 1.	1.	< 1.	1.
Pyrene	50	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
1,2,4,5-Tetrachlorobenzene		< 0.50	0.50	< 0.50	0.50	< 0.56	0.56	< 0.56	0.56
Acenaphthene	20	< 5.0	5.0	< 5.0	5.0	< 5.6	5.6	< 5.6	5.6
Acenaphthylene		< 0.10	0.10	< 0.10	0.10	< 0.11	0.11	< 0.11	0.11
Benz(a)anthracene	0.002	**0.02**	0.02	**0.05**	0.02	**0.02**	0.02	**0.14**	0.02
Benzo(a)pyrene		< 0.02	0.02	**0.03**	0.02	< 0.02	0.02	**0.13**	0.02
Benzo(b)fluoranthene	0.002	< 0.02	0.02	**0.04**	0.02	< 0.02	0.02	**0.18**	0.02
Benzo(ghi)perylene		< 0.02	0.02	**0.02**	0.02	< 0.02	0.02	**0.09**	0.02
Benzo(k)fluoranthene	0.002	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.07**	0.02
Bis(2-ethylhexyl)phthalate	5	**5.2**	1.0	< 1.0	1.0	< 1.1	1.1	< 1.1	1.1
Chrysene	0.002	< 0.02	0.02	**0.04**	0.02	< 0.02	0.02	**0.13**	0.02
Dibenz(a,h)anthracene		< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachlorobenzene	0.04	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Hexachloroethane	5	< 0.50	0.50	< 0.50	0.50	< 0.56	0.56	< 0.56	0.56
Indeno(1,2,3-cd)pyrene	0.002	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	**0.07**	0.02
Pentachloronitrobenzene		< 0.10	0.10	< 0.10	0.10	< 0.11	0.11	< 0.11	0.11
Pentachlorophenol	1	< 0.80	0.80	< 0.80	0.80	< 0.89	0.89	< 0.89	0.89
Phenanthrene	50	< 0.10	0.10	**0.32**	0.10	< 0.11	0.11	**0.31**	0.11
Pyridine	50	< 10	10	< 10	10	< 11	11	< 11	11

Notes:
RL- Reporting Limit
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 8
4202 18th Avenue,
Brooklyn, New York
Ground Water Analytical Results
Pesticides/PCBs

Compound	NYSDEC Groundwater Quality Standards µg/L	MW1 µg/L		MW2 µg/L		MW3 µg/L		Duplicate µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL
PCB-1016	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1221	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1232	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1242	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1248	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1254	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1260	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1262	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
PCB-1268	**0.09**	< 0.053	0.053	< 0.050	0.050	< 0.054	0.054	< 0.054	0.054
4,4-DDD	**0.3**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
4,4-DDE	**0.2**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
4,4-DDT	**0.11**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
a-BHC	**0.94**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
a-Chlordane		< 0.011	0.011	< 0.10	0.10	< 0.020	0.020	< 0.054	0.054
Alachlor		< 0.080	0.080	< 0.050	0.050	< 0.082	0.082	< 0.41	0.41
Aldrin		< 0.002	0.002	< 0.015	0.015	< 0.010	0.010	< 0.008	0.008
b-BHC	**0.04**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
Chlordane	**0.05**	< 0.050	0.050	< 0.50	0.50	< 0.050	0.050	< 0.27	0.27
d-BHC	**0.04**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
Dieldrin	**0.004**	< 0.004	0.004	< 0.015	0.015	< 0.004	0.004	< 0.008	0.008
Endosulfan I		< 0.011	0.011	< 0.10	0.10	< 0.020	0.020	< 0.054	0.054
Endosulfan II		< 0.011	0.011	< 0.10	0.10	< 0.011	0.011	< 0.027	0.027
Endosulfan Sulfate		< 0.011	0.011	< 0.10	0.10	< 0.011	0.011	< 0.054	0.054
Endrin		< 0.005	0.005	< 0.050	0.050	< 0.008	0.008	< 0.027	0.027
Endrin aldehyde	**5**	< 0.011	0.011	< 0.10	0.10	< 0.011	0.011	< 0.054	0.054
Endrin ketone		< 0.011	0.011	< 0.10	0.10	< 0.011	0.011	< 0.054	0.054
gamma-BHC	**0.05**	< 0.005	0.005	< 0.050	0.050	< 0.010	0.010	< 0.027	0.027
g-Chlordane		< 0.011	0.011	< 0.10	0.10	< 0.020	0.020	< 0.054	0.054
Heptachlor	**0.04**	< 0.005	0.005	< 0.050	0.050	< 0.005	0.005	< 0.027	0.027
Heptachlor epoxide	**0.03**	< 0.005	0.005	< 0.050	0.050	< 0.020	0.020	< 0.027	0.027
Methoxychlor	**35**	< 0.11	0.11	< 1.0	1.0	< 0.11	0.11	< 0.54	0.54
Toxaphene		< 0.27	0.27	< 2.5	2.5	< 0.27	0.27	< 1.4	1.4

Notes:
RL- Reporting limit
ND - Non-detect
ND* - Due to matrix interference from non target compounds in the sample an elevated RL was reported.
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 9
4202 18th Avenue,
Brooklyn, New York
Ground Water Analytical Results
TAL Filtered Metals

Compound	NYSDEC Groundwater Quality Standards mg/L	MW1 mg/L		MW2 mg/L		MW3 mg/L		Duplicate mg/L	
		Results	RL	Results	RL	Results	RL	Results	RL
Aluminum	**NS**	**0.102**	0.011	**0.273**	0.011	**0.351**	0.011	**0.151**	0.011
Antimony	**0.003**	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Arsenic	**0.025**	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Barium	**1**	**0.058**	0.011	**0.076**	0.011	**0.07**	0.011	**0.059**	0.011
Beryllium	**0.003**	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cadmium	**0.005**	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Calcium	**NS**	**29.2**	0.01	**27.5**	0.01	**21.8**	0.01	**20.1**	0.01
Chromium	**0.05**	**0.002**	0.001	**0.002**	0.001	**0.003**	0.001	**0.001**	0.001
Cobalt	**NS**	< 0.005	0.005	**0.002**	0.005	**0.003**	0.005	**0.002**	0.005
Copper	**0.2**	**0.002**	0.005	**0.004**	0.005	**0.005**	0.005	**0.003**	0.005
Iron	**0.5**	**0.16**	0.01	**0.53**	0.01	**0.88**	0.01	**0.29**	0.01
Lead	**0.025**	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Magnesium	**35**	**32.7**	0.01	**24.3**	0.01	**26.5**	0.01	**24.8**	0.01
Manganese	**0.3**	**0.15**	0.005	**0.202**	0.005	**1.5**	0.005	**0.961**	0.005
Mercury	**0.0007**	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	**0.1**	**0.004**	0.004	**0.008**	0.004	**0.017**	0.004	**0.02**	0.004
Potassium	**NS**	**3.9**	0.1	**3.8**	0.1	**4.4**	0.1	**4**	0.1
Selenium	**0.01**	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Silver	**0.05**	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Sodium	**2**	**68.9**	1.1	**26**	0.11	**46.7**	0.11	**45.5**	0.11
Thallium	**0.0005**	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005
Vanadium	**NS**	< 0.011	0.011	**0.002**	0.011	< 0.011	0.011	< 0.011	0.011
Zinc	**2**	**0.008**	0.011	**0.005**	0.011	**0.006**	0.011	**0.006**	0.011

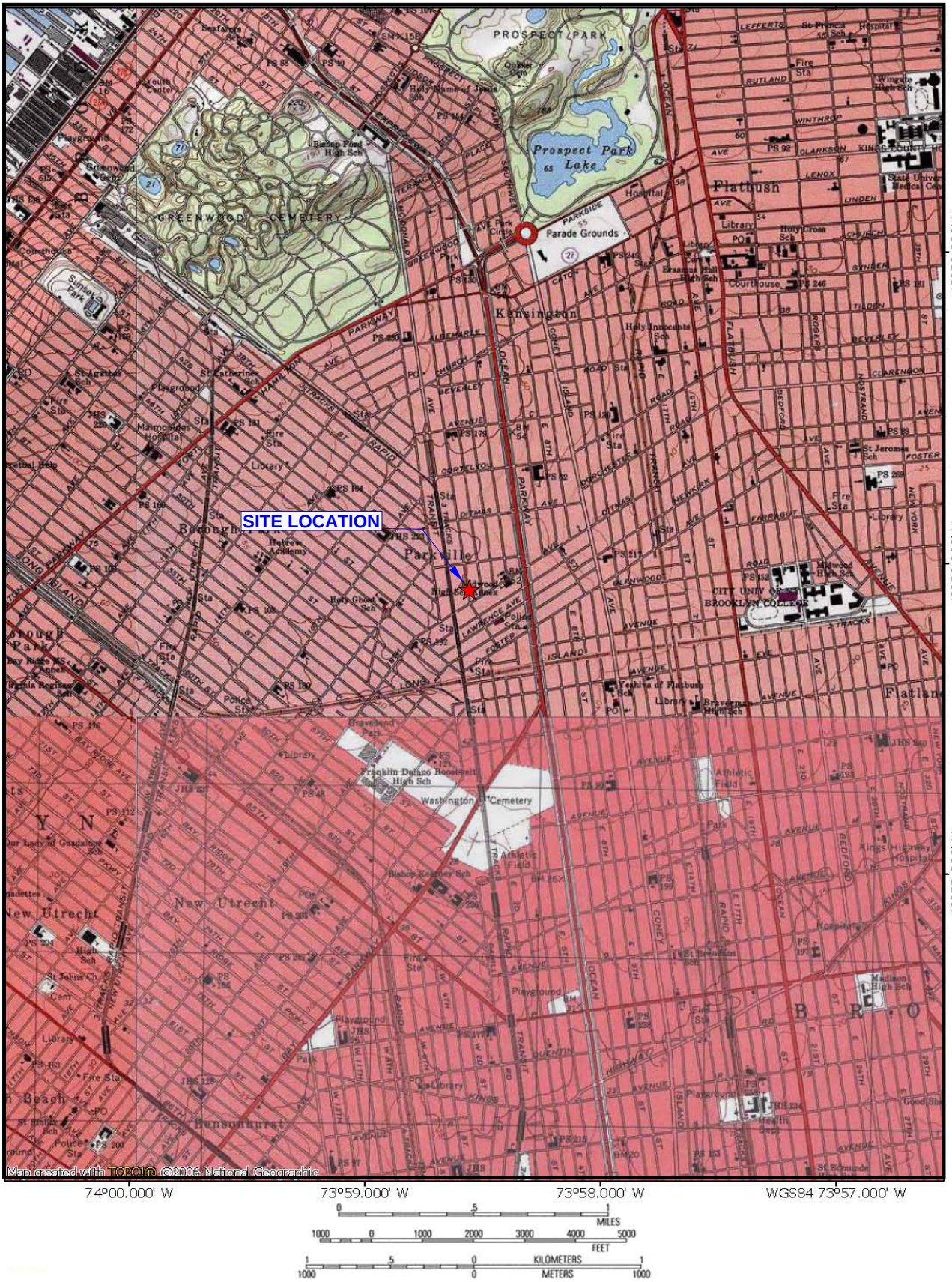
Notes:
RL- Reporting limit
NS - No Standard
Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 10
4202 18th Avenue,
Brooklyn, New York
Soil Gas - Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value ($\mu g/m^3$) [a]	NYSDOH Soil Outdoor Background Levels ($\mu g/m^3$) [b]	SG-1 (µg/m3)		SG-2 (µg/m3)		SS-1 (µg/m3)		SS-2 (µg/m3)	
			Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,1-Trichloroethane	100	<2.0 - 2.8	**2.61**	1.00	**9.87**	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2,2-Tetrachloroethane		<1.5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2-Trichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethene		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2,4-Trichlorobenzene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2,4-Trimethylbenzene		<1.0	**5.26**	1.00	**3.17**	1.00	**2.58**	1.00	**2.33**	1.00
1,2-Dibromoethane		<1.5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorobenzene		<2.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloroethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloropropane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorotetrafluoroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3,5-Trimethylbenzene		<1.0	**1.52**	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3-Butadiene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3-Dichlorobenzene		<2.0	**5.49**	1.00	**9.07**	1.00	**6.13**	1.00	**6.25**	1.00
1,4-Dichlorobenzene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,4-Dioxane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
2-Hexanone			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Ethyltoluene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Isopropyltoluene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Methyl-2-pentanone			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Acetone		NA	**337**	5.01	**172**	5.01	**50.6**	1.00	**147**	5.01
Acrylonitrile			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Benzene		<1.6 - 4.7	**3.08**	1.00	**2.47**	1.00	**1.56**	1.00	**1.84**	1.00
Benzyl Chloride		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromodichloromethane		<5.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromoform		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromomethane		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Disulfide		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Tetrachloride	5	<3.1	**0.55**	0.25	**0.69**	0.25	**0.52**	0.25	**0.64**	0.25
Chlorobenzene		<2.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroethane		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroform		<2.4	**1.12**	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloromethane		<1.0 - 1.4	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
cis-1,2-Dichloroethene		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
cis-1,3-Dichloropropene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Cyclohexane		NA	< 1.00	1.00	**3.02**	1.00	< 1.00	1.00	< 1.00	1.00
Dibromochloromethane		<5.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Dichlorodiflurometh ane		NA	**2.93**	1.00	**8.4**	1.00	**2.04**	1.00	**2.32**	1.00
Ethanol			**196**	5.01	**159**	5.01	**172**	1.00	**153**	5.01
Ethyl Acetate		NA	**17**	1.00	**44.3**	1.00	**22.9**	1.00	**27.6**	1.00
Ethylbenzene		<4.3	**9.94**	1.00	**4.64**	1.00	**5.64**	1.00	**4.15**	1.00
Heptane		NA	**2.95**	1.00	**3.01**	1.00	**2.05**	1.00	**1.9**	1.00
Hexachlorobutadiene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Hexane		<1.5	**3.73**	1.00	**9.12**	1.00	**1.04**	1.00	**1.76**	1.00
Isopropylalcohol		NA	**150**	5.01	**290**	5.01	**166**	1.00	**275**	5.01
Isopropylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Xylene (m&p)		<4.3	**43.8**	1.00	**17.7**	1.00	**25.6**	1.00	**15.8**	1.00
Methyl Ethyl Ketone			**4.24**	1.00	**3.54**	1.00	**1.98**	1.00	**2.11**	1.00
MTBE		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Methylene Chloride		<3.4	< 1.00	1.00	**1.29**	1.00	< 1.00	1.00	< 1.00	1.00
n-Butylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Xylene (o)		<4.3	**11.6**	1.00	**4.99**	1.00	**6.6**	1.00	**4.34**	1.00
Propylene		NA	**4.01**	1.00	**17.5**	1.00	**1.36**	1.00	**4.68**	1.00
sec-Butylbenzene			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Styrene		<1.0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Tetrachloroethene	100		**6.35**	0.25	**2.85**	0.25	**2.87**	0.25	**1.84**	0.25
Tetrahydrofuran		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Toluene		1.0 - 6.1	**20.3**	1.00	**19.7**	1.00	**14.5**	1.00	**24.9**	1.00
trans-1,2-Dichloroethene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
trans-1,3-Dichloropropene		NA	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Trichloroethene	5	<1.7	**0.26**	0.25	**1.25**	0.25	< 0.25	0.25	< 0.25	0.25
Trichlorofluoromethane		NA	**33.4**	1.00	**150**	1.00	**1.25**	1.00	**1.19**	1.00
Trichlorotrifluoroethane			< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Vinyl Chloride		<1.0	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
BTEX			**88.72**		**49.5**		**53.9**		**51.03**	
Total VOCs			**863.14**		**937.58**		**487.22**		**678.65**	

Notes:
NA No guidance value or standard available
(a) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006. New York State Department of Health.
(b) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, February 2005, Summary of Background Levels for Selected Compounds (NYSDOH

FIGURES



USGS Central Park, NY Quadrangle 1995, Contour Interval = 10 feet

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4202 18TH AVENUE, BROOKLYN, NY

FIGURE 1 SITE LOCATION MAP

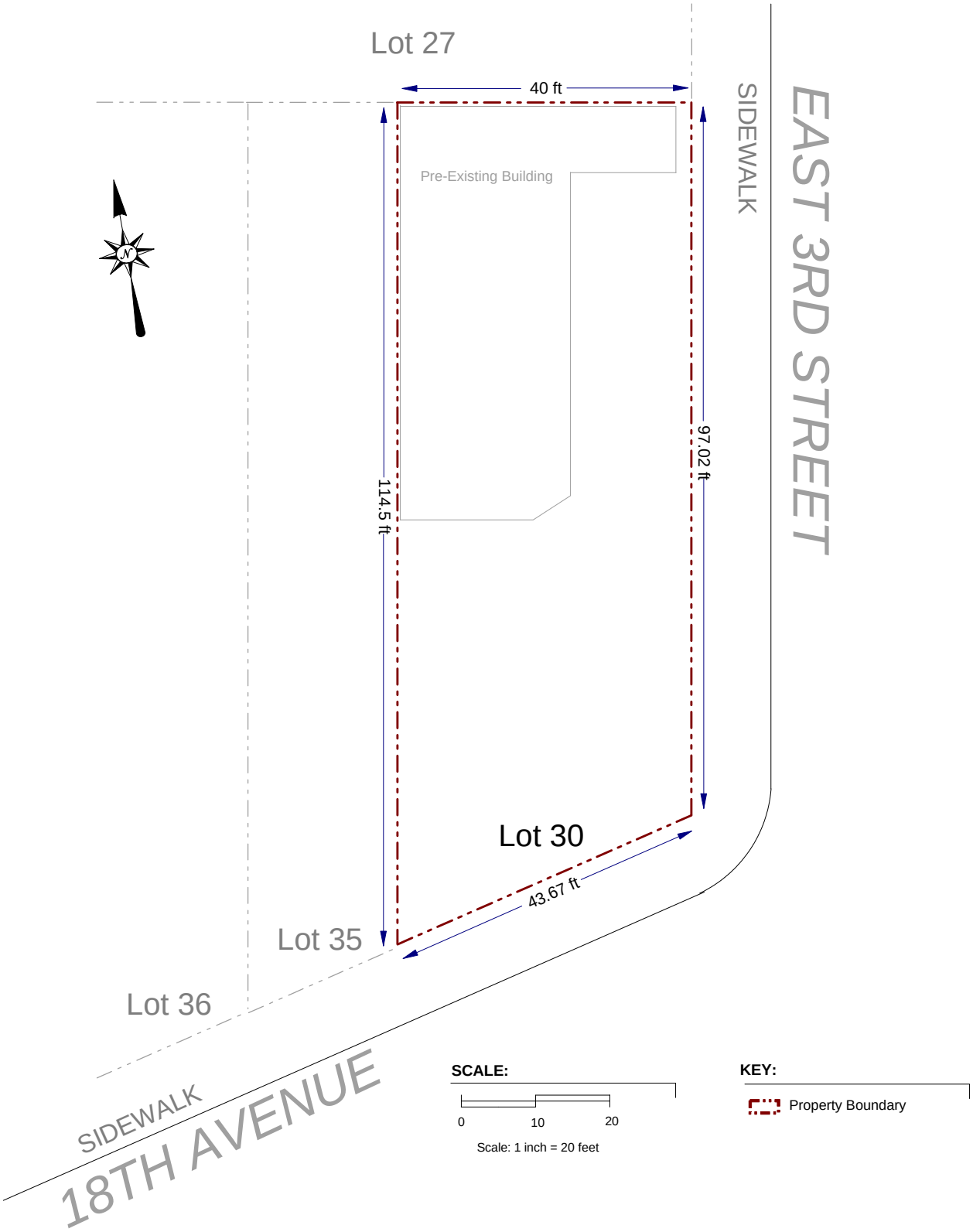

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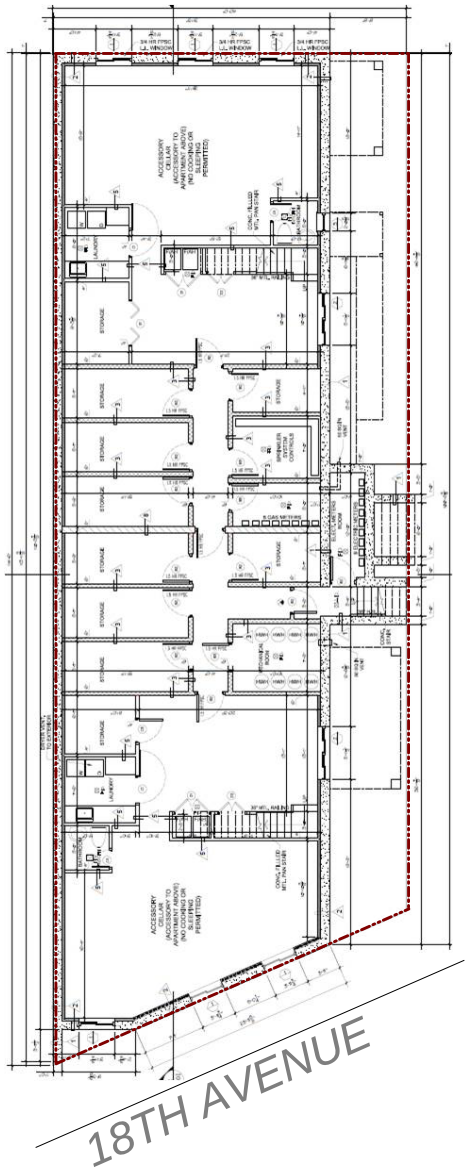
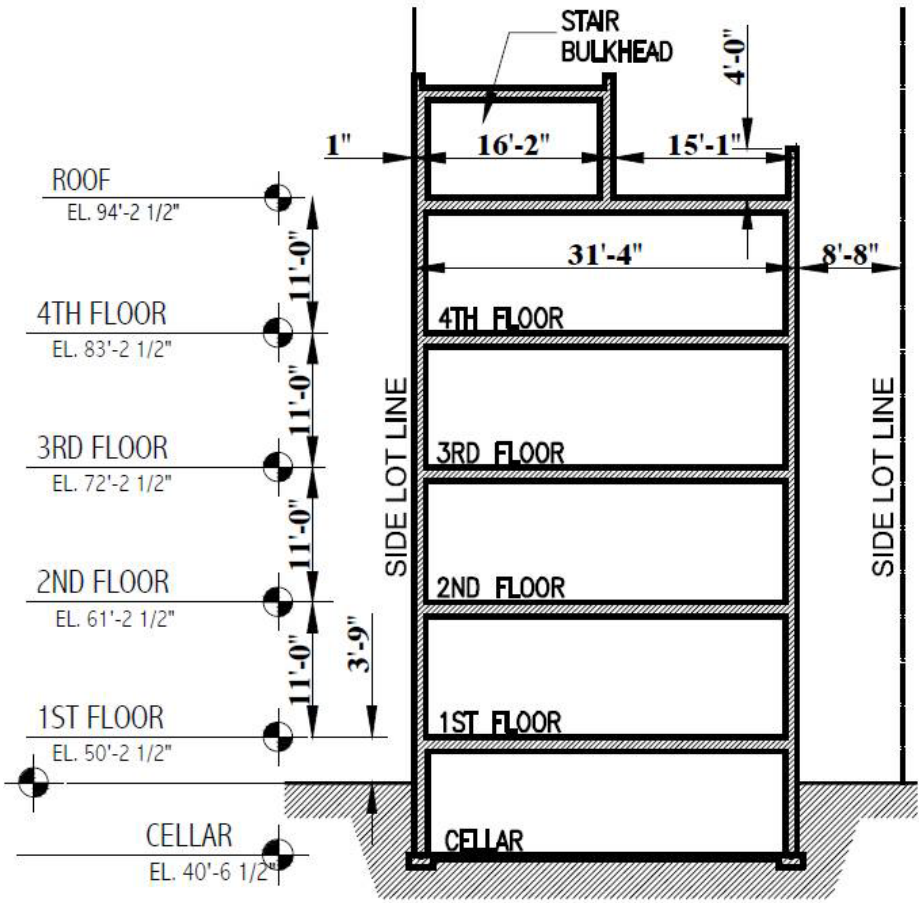
Figure No. 2

Site Name: Redevelopment Project
Site Address: 4202 18th Avenue, Brooklyn, NY
Drawing Title: Site Boundary Map

CELLAR PLANS



FRONT ELEVATION



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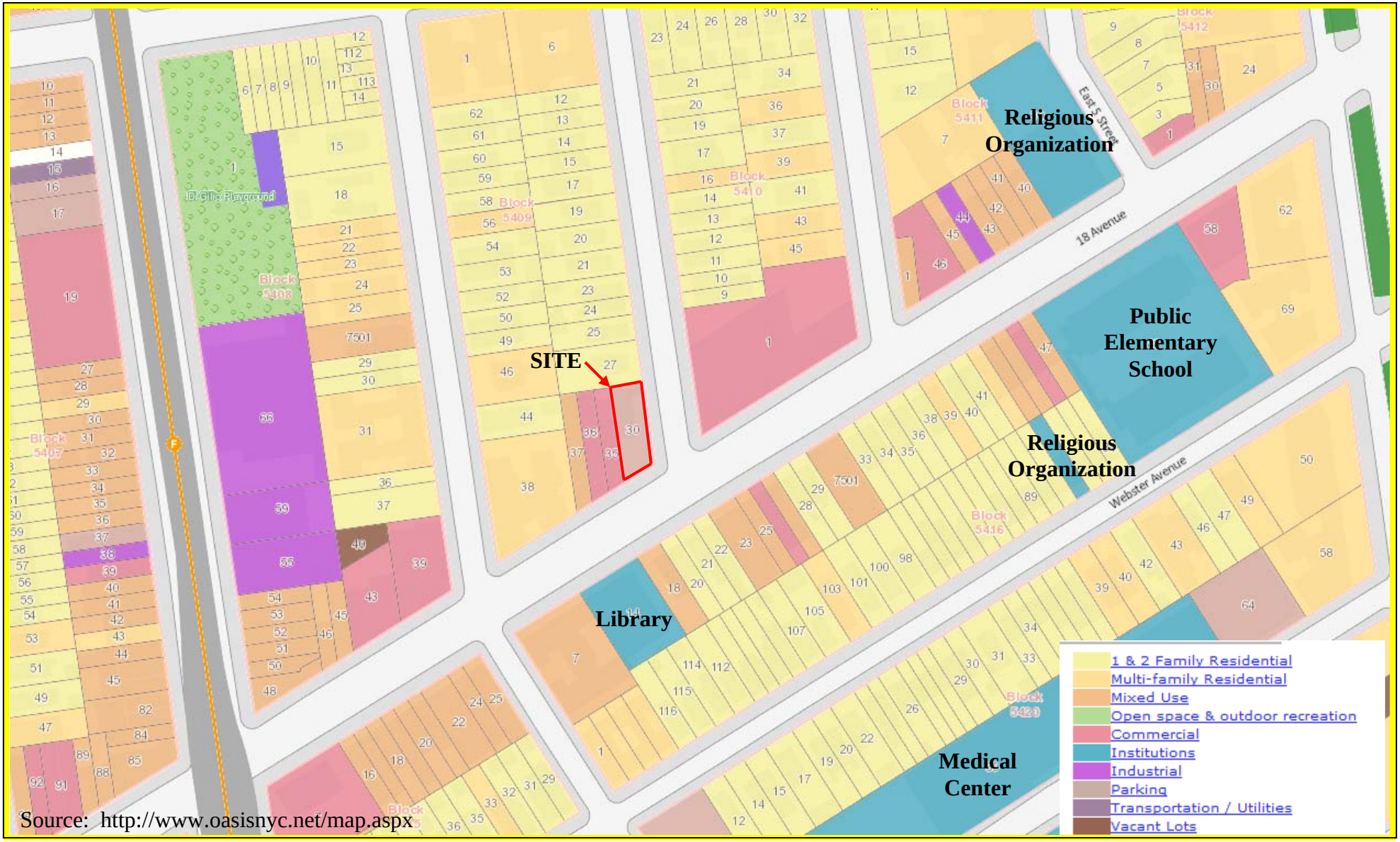
4202 18TH AVENUE
BROOKLYN, NY 11218

FIGURE 3 REDEVELOPMENT PLANS



Source: http://www.oasisnyc.net/map.aspx

FIGURE 4
SURROUNDING LAND USE MAP

4202 18th AVENUE, BROOKLYN NY 11218

HAZARDOUS MATERIALS REMEDIAL INVESTIGATION REPORT

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NEW YORK 11961
PHONE: (631) 504-6000 FAX: (631) 924-2870

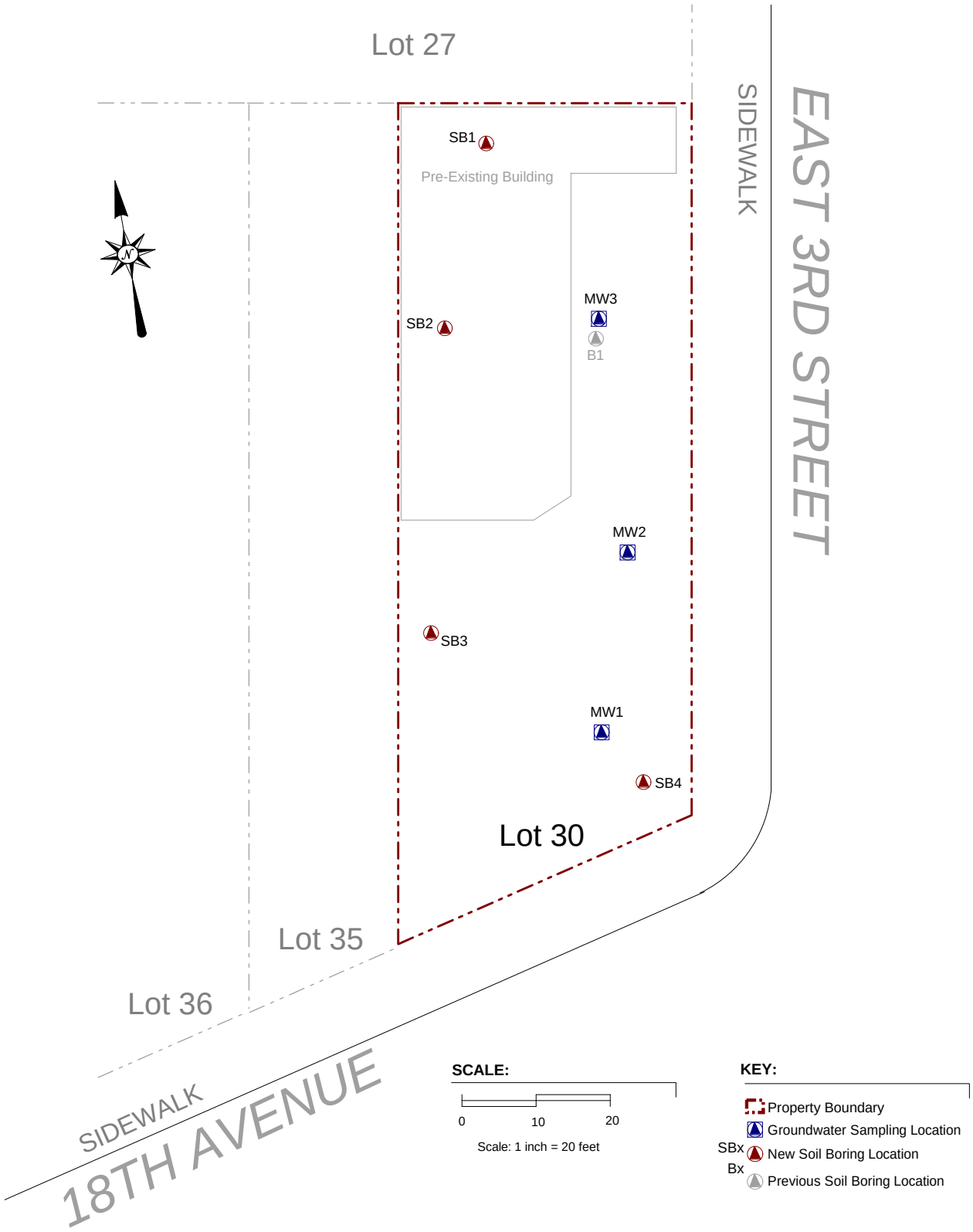


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Figure No. 5

Site Name: Redevelopment Project
Site Address: 4202 18th Avenue, Brooklyn, NY
Drawing Title: Site Sampling Locations

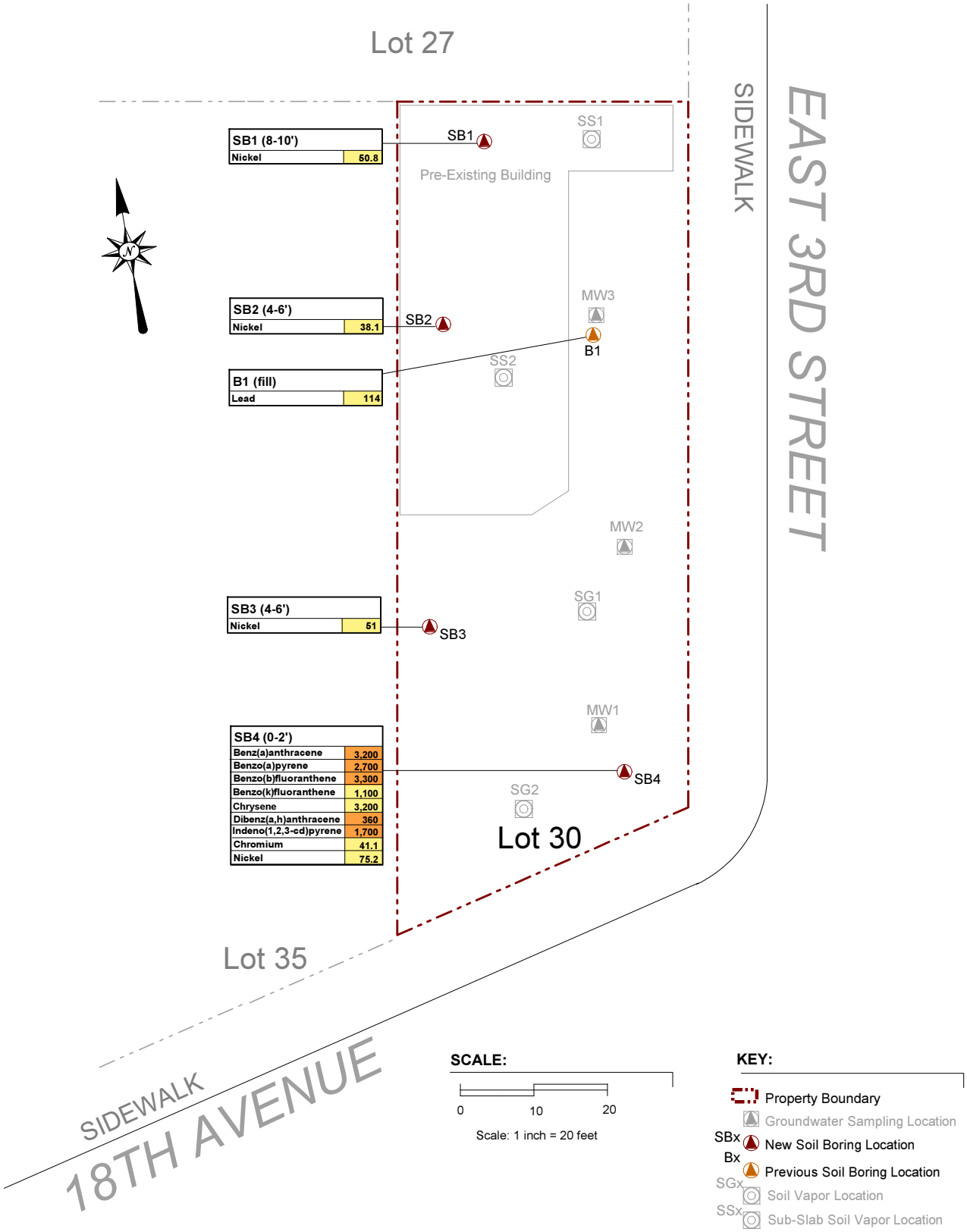

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Figure No. 6

Site Name: Redevelopment Project
Site Address: 4202 18th Avenue, Brooklyn, NY
Drawing Title: Soil Exceedences

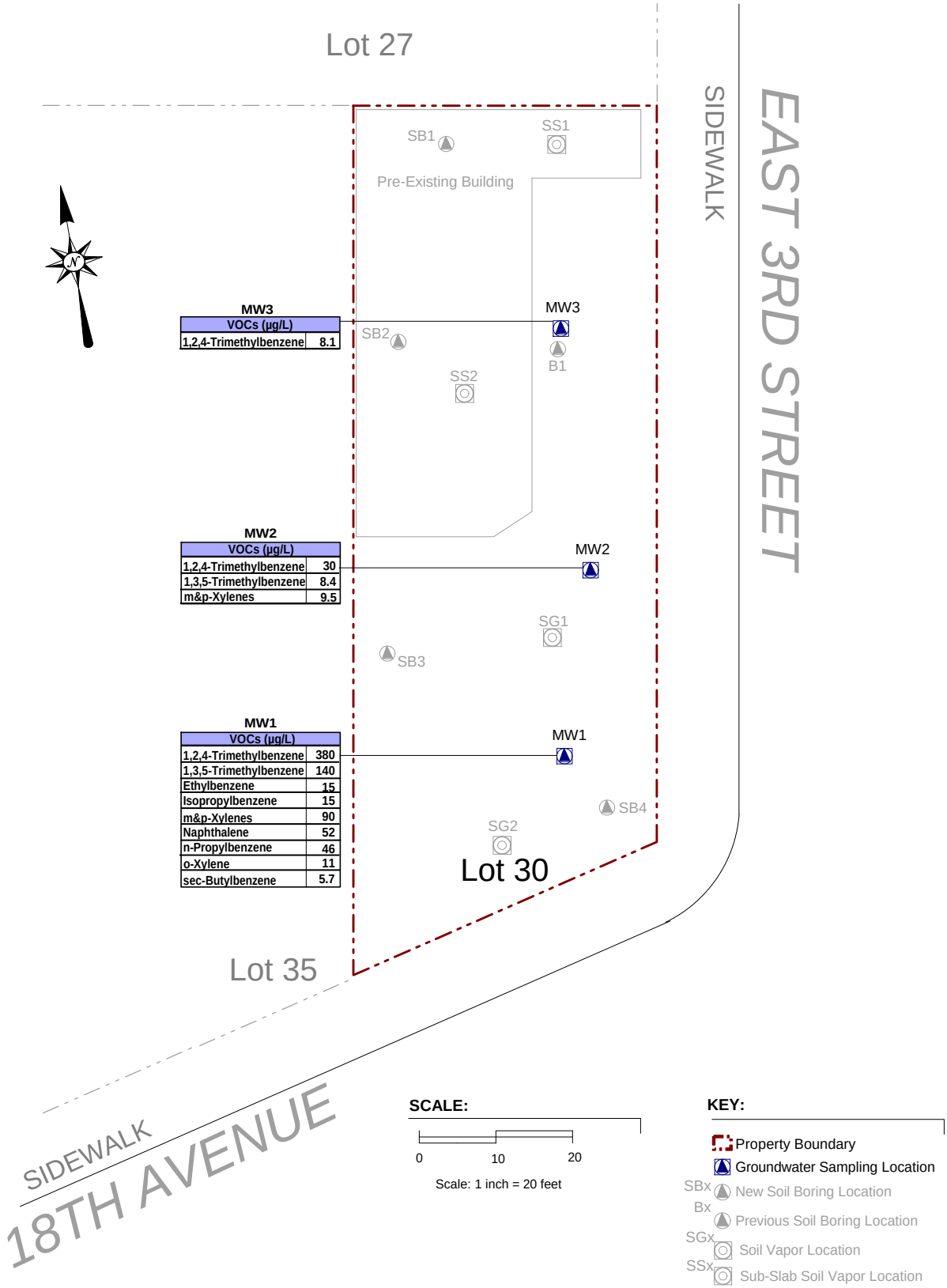

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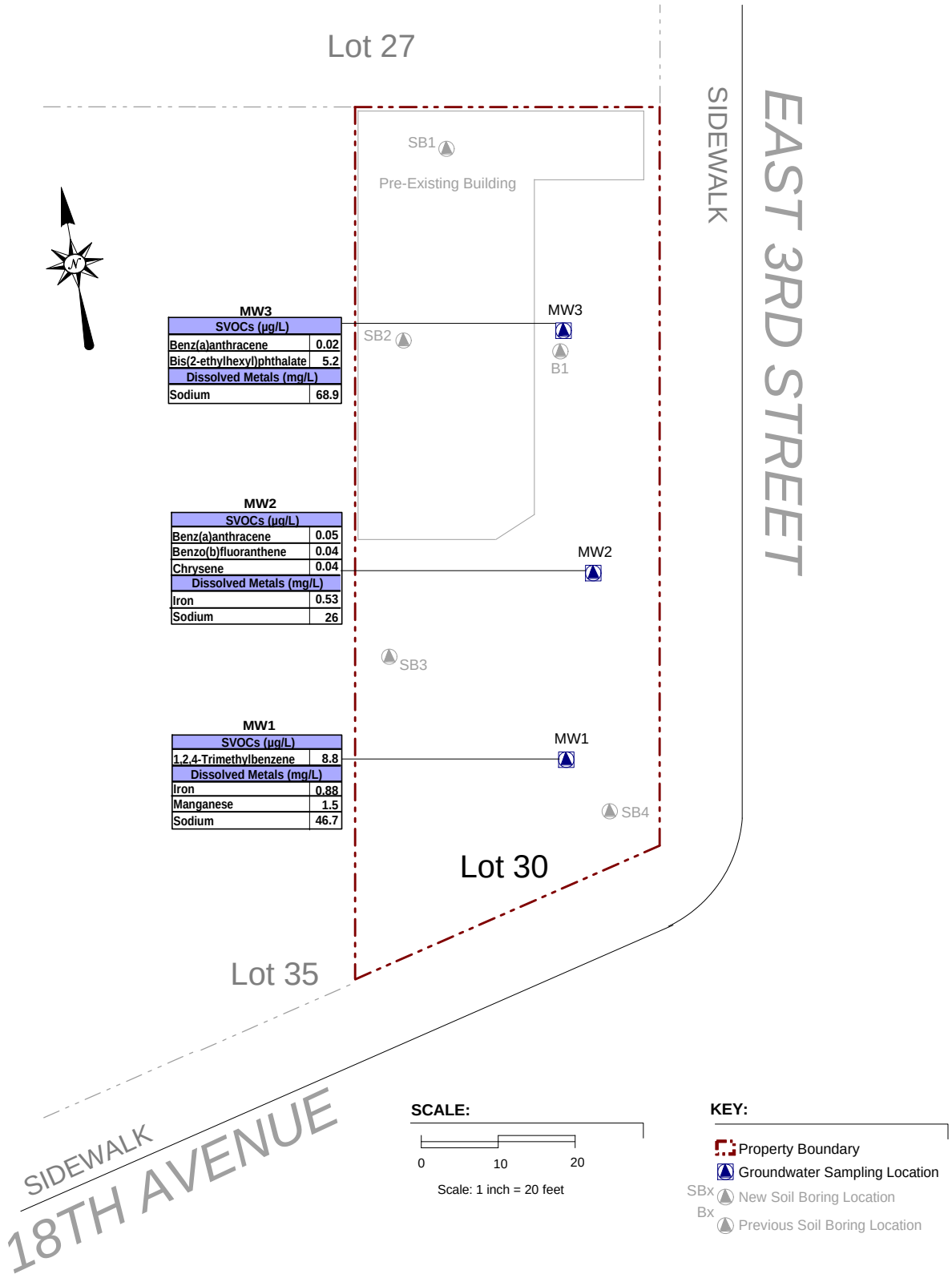
Figure No. 7

Site Name: Redevelopment Project

Site Address: 4202 18th Avenue, Brooklyn, NY

Drawing Title: Ground Water Exceedences - December Sampling



MW3

SVOCs (µg/L)	
Benz(a)anthracene	0.02
Bis(2-ethylhexyl)phthalate	5.2
Dissolved Metals (mg/L)	
Sodium	68.9

MW2

SVOCs (µg/L)	
Benz(a)anthracene	0.05
Benzo(b)fluoranthene	0.04
Chrysene	0.04
Dissolved Metals (mg/L)	
Iron	0.53
Sodium	26

MW1

SVOCs (µg/L)	
1,2,4-Trimethylbenzene	8.8
Dissolved Metals (mg/L)	
Iron	0.88
Manganese	1.5
Sodium	46.7

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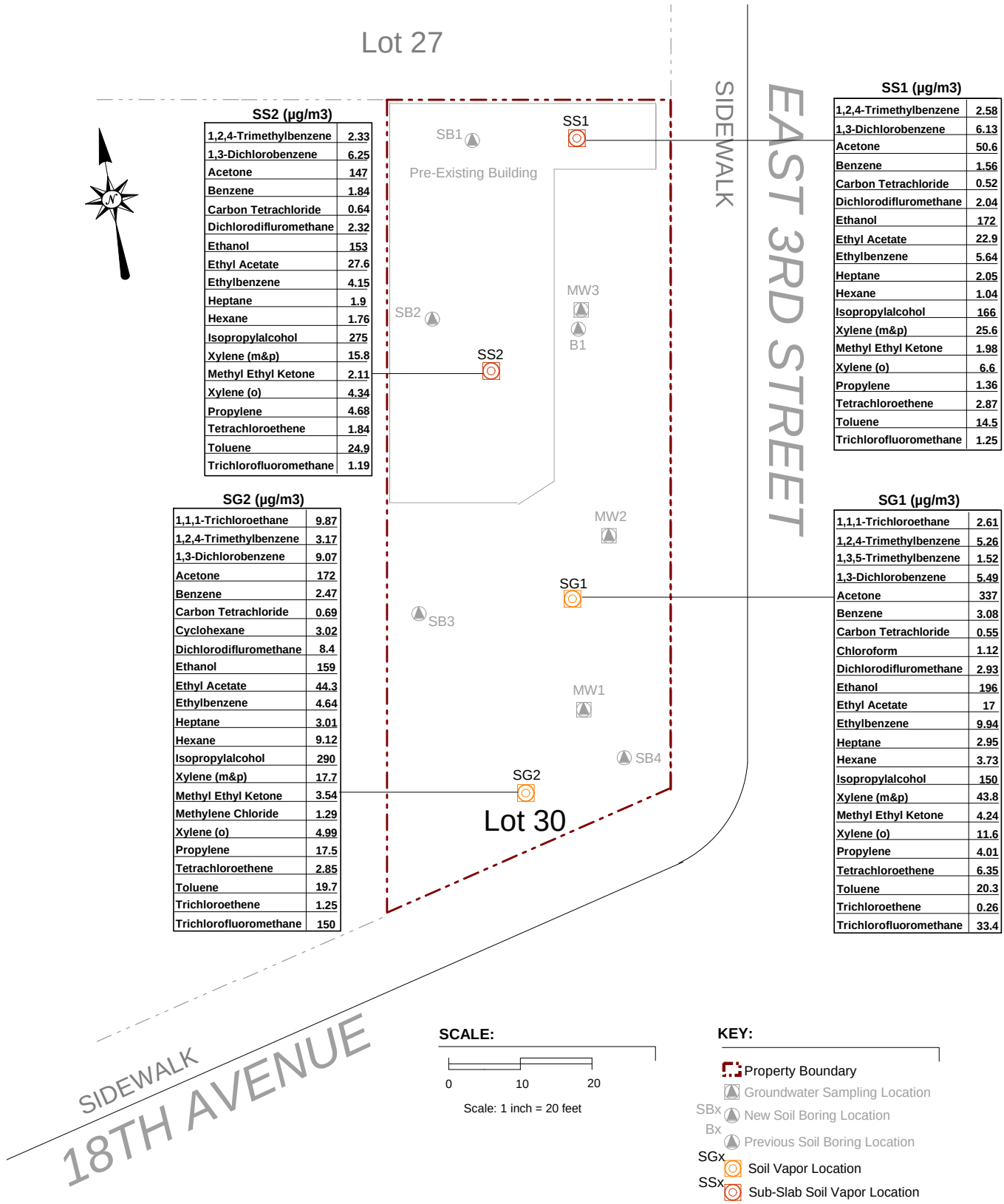
Figure No. 7a

Site Name: Redevelopment Project
Site Address: 4202 18th Avenue, Brooklyn, NY
Drawing Title: Ground Water Exceedences - February Sampling



SS2 (µg/m3)

1,2,4-Trimethylbenzene	2.33
1,3-Dichlorobenzene	6.25
Acetone	147
Benzene	1.84
Carbon Tetrachloride	0.64
Dichlorodifluromethane	2.32
Ethanol	153
Ethyl Acetate	27.6
Ethylbenzene	4.15
Heptane	1.9
Hexane	1.76
Isopropylalcohol	275
Xylene (m&p)	15.8
Methyl Ethyl Ketone	2.11
Xylene (o)	4.34
Propylene	4.68
Tetrachloroethene	1.84
Toluene	24.9
Trichlorofluoromethane	1.19

SS1 (µg/m3)

1,2,4-Trimethylbenzene	2.58
1,3-Dichlorobenzene	6.13
Acetone	50.6
Benzene	1.56
Carbon Tetrachloride	0.52
Dichlorodifluromethane	2.04
Ethanol	172
Ethyl Acetate	22.9
Ethylbenzene	5.64
Heptane	2.05
Hexane	1.04
Isopropylalcohol	166
Xylene (m&p)	25.6
Methyl Ethyl Ketone	1.98
Xylene (o)	6.6
Propylene	1.36
Tetrachloroethene	2.87
Toluene	14.5
Trichlorofluoromethane	1.25

SG2 (µg/m3)

1,1,1-Trichloroethane	9.87
1,2,4-Trimethylbenzene	3.17
1,3-Dichlorobenzene	9.07
Acetone	172
Benzene	2.47
Carbon Tetrachloride	0.69
Cyclohexane	3.02
Dichlorodifluromethane	8.4
Ethanol	159
Ethyl Acetate	44.3
Ethylbenzene	4.64
Heptane	3.01
Hexane	9.12
Isopropylalcohol	290
Xylene (m&p)	17.7
Methyl Ethyl Ketone	3.54
Methylene Chloride	1.29
Xylene (o)	4.99
Propylene	17.5
Tetrachloroethene	2.85
Toluene	19.7
Trichloroethene	1.25
Trichlorofluoromethane	150

SG1 (µg/m3)

1,1,1-Trichloroethane	2.61
1,2,4-Trimethylbenzene	5.26
1,3,5-Trimethylbenzene	1.52
1,3-Dichlorobenzene	5.49
Acetone	337
Benzene	3.08
Carbon Tetrachloride	0.55
Chloroform	1.12
Dichlorodifluromethane	2.93
Ethanol	196
Ethyl Acetate	17
Ethylbenzene	9.94
Heptane	2.95
Hexane	3.73
Isopropylalcohol	150
Xylene (m&p)	43.8
Methyl Ethyl Ketone	4.24
Xylene (o)	11.6
Propylene	4.01
Tetrachloroethene	6.35
Toluene	20.3
Trichloroethene	0.26
Trichlorofluoromethane	33.4

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Figure No. 8

Site Name: Redevelopment Project
Site Address: 4202 18th Avenue, Brooklyn, NY
Drawing Title: Soil Vapor Detections

ATTACHMENT A

Previous Reports

PHASE I Screening Summary

4202 18th Avenue, Brooklyn
Block 5409 Lot 30

Lot Info:
The subject site consists of one lot located on the north side of 18th Avenue and the west side of East 3rd Street in the Mapleton Section of Brooklyn, New York. The street address of the subject site is 4202 18th Avenue, Brooklyn, New York 11218 and is identified as Block 5409 Lot 30 on the NYC Tax Map. The lot includes 43.67 feet of street frontage on 18th Avenue and 97.02 feet of street frontage on East 3rd Street for a total area of 4,240 sf.

The lot is zoned R6A with a C1-4 commercial overlay.

History:
In 1905, the Site consisted of two undeveloped lots. By 1929, the two lots were combined and developed with a one-story building (northwest corner of the Site) and a filling station with three gasoline storage tanks (south end of lot). From 1950 to 1993, the Site was identified as a filling station with several USTs. The building at the site was historically identified as an office, an auto repair garage, a greasing garage, and an auto laundry garage. In 1994, the Site was identified as an auto repair shop; no USTs identified. The site remained in this configuration until at least 2007.

Site Visit:
A Site visit has not yet been conducted.

Environmental Database Search:
The Site was listed as a NY AST, a NY UST, a historic UST and a NY Spills Site on the regulatory database. Two 275 gallon ASTs containing waste oil were closed and removed from the Site September 23, 2013. There was no indication of a leak from either tank, and AST listings do not typically represent significant environmental concerns. A total of 10 USTs were removed from the Site. A 2,000 gallon underground storage tank containing gasoline was closed and removed March 1, 1996. No evidence of leakage was visible. Another two underground storage tanks were also closed and removed March 1, 1996. Both tanks were 550 gallon gasoline storage tanks. A third 550 gallon UST and six 1,000 gallon USTs were closed and removed September 23, 2014. Two historic USTs are listed for the Site, both 550 gallon unleaded gasoline tanks remaining from the former filling station. Both were closed March 1, 1996 but were not removed. No adjacent properties were listed under as an AST, UST or Spills site.

NYC DOB:
There are no open violations on file with the Environmental Control Board. A total of 40 actions are listed on file with NYCDOB for the property, including two actions in 1928 pertaining to grease pits; and an application for an oil burner in 1962. A certificate of occupancy dated 1935 identifies the Site with a car washing and gasoline station. A certificate of occupancy dated 1999 identifies the site with an auto shop described as “minor repair with hands only”, and used car sales.

The Site is identified as being assigned an E-designation (E-44) for Hazmat as part of the Ocean Parkway District Rezoning completed by the City in August 1993 (CEQR 93DCP013K).

Conclusions/Recommendations:
Based upon reconnaissance of the subject site and surrounding properties, and review of historical records and regulatory agency databases, EBC identified the following recognized environmental concerns (RECs) in connection with the Site:

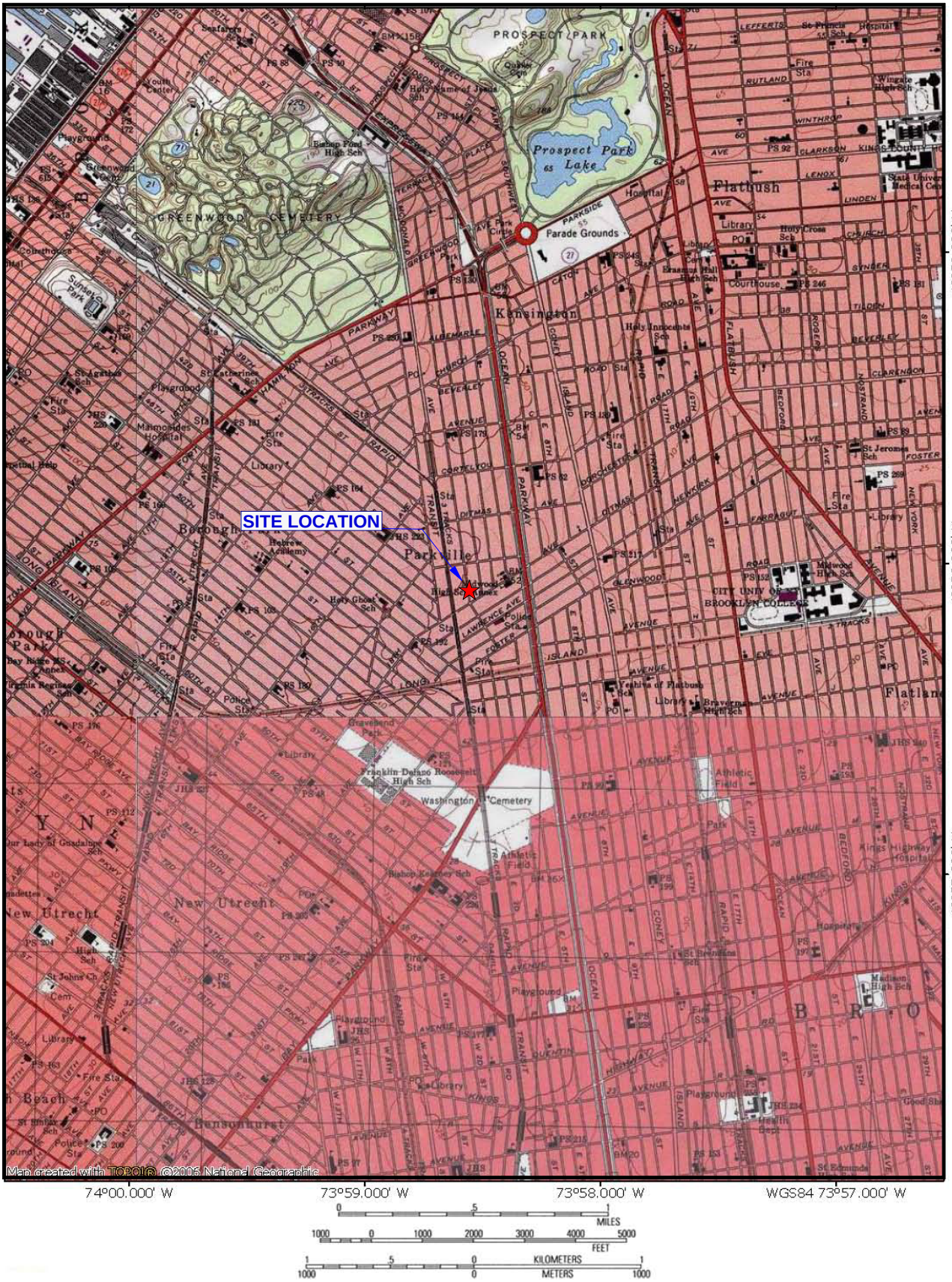
Historic Gas Station/Auto Repair
The Site was historically identified as a gasoline station and auto repair, and included a greasing garage and auto laundry garage. Two 550-gallon USTs listed for the Site were documented as closed in-place. EBC recommends that a Phase II subsurface investigation be performed to determine if the USTs and UST system have leaked. The investigation should include a geophysical survey to locate any underground tanks on the property. Soil borings should be advanced in the vicinity of the USTs to the water table at approximately 20 ft below the surface. Soil samples should be screened and submitted for analysis of VOCs (full list) and SVOCs (CP51 list only). Groundwater samples should also be collected and submitted for VOCs only. If evidence of hydraulic lifts are present, a boring should be performed at this location with PCBs added to the analysis.

In addition, the following environmental issues which are not considered RECs were identified:

Asbestos
Based on the age of the building, asbestos containing materials (roofing, roof flashing, and other concealed materials) could be present. An asbestos survey is recommended prior to any renovations or demolition of the building.

Lead Based Paint
Based on the age of the building, lead based paint may be present in unrenovated portions of the building. A lead based paint survey is recommended prior to any renovations or demolition of the building.

FIGURES



USGS Central Park, NY Quadrangle 1995, Contour Interval = 10 feet

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4202 18TH AVENUE, BROOKLYN, NY

FIGURE 1 SITE LOCATION MAP

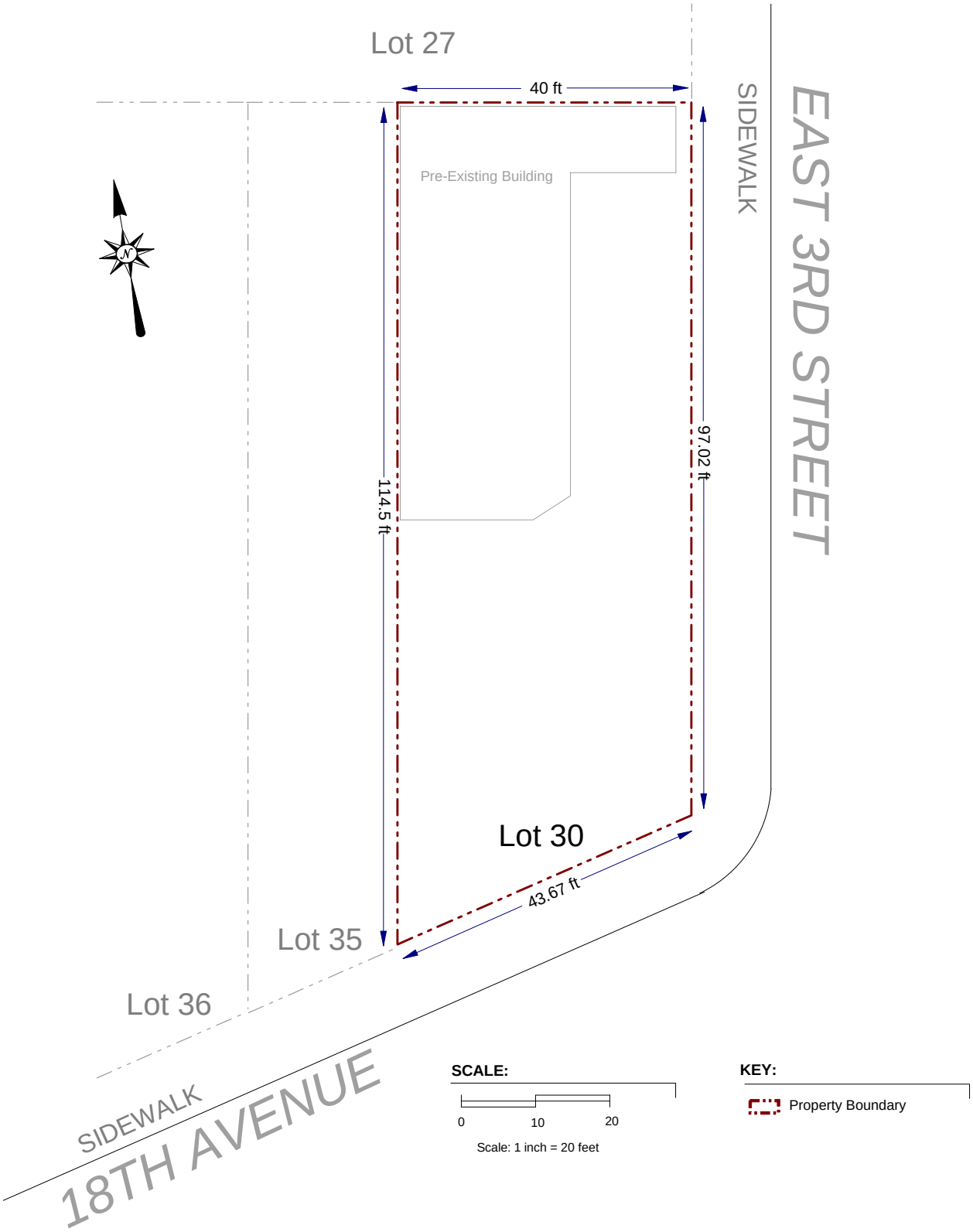

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Figure No. 2

Site Name: Redevelopment Project
Site Address: 4202 18th Avenue, Brooklyn, NY
Drawing Title: Site Boundary Map

SANBORN MAPS

4202 18th Avenue

4202 18th Avenue

Brooklyn, NY 11218

Inquiry Number: 4172845.3

January 05, 2015

Certified Sanborn® Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

1/05/15

Site Name:
4202 18th Avenue
4202 18th Avenue
Brooklyn, NY 11218

Client Name:
Env. Business Consultants
1808 Middle Country Road
Ridge, NY 11961

EDR Inquiry # 4172845.3

Contact: Patrick Recio

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Env. Business Consultants were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

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Certified Sanborn Results:

Site Name: 4202 18th Avenue
Address: 4202 18th Avenue
City, State, Zip: Brooklyn, NY 11218
Cross Street:
P.O. # NA
Project: 4202 18th Avenue
Certification # 0DB5-4830-9529

Maps Provided:

2007	2001	1988	1977
2006	1995	1987	1969
2005	1994	1986	1950
2004	1993	1983	1929
2003	1992	1981	1905
2002	1989	1979	1893

Sanborn® Library search results
Certification # 0DB5-4830-9529

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- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

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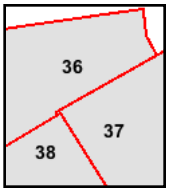

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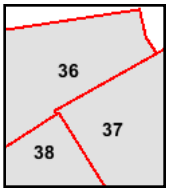

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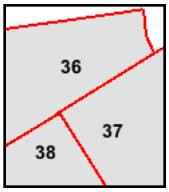

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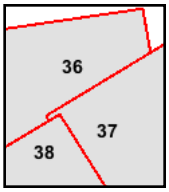

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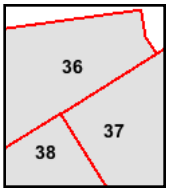

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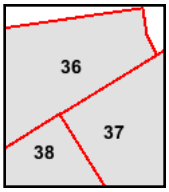

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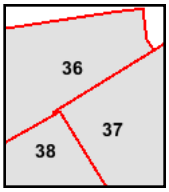

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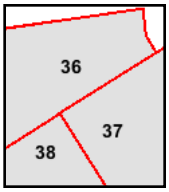

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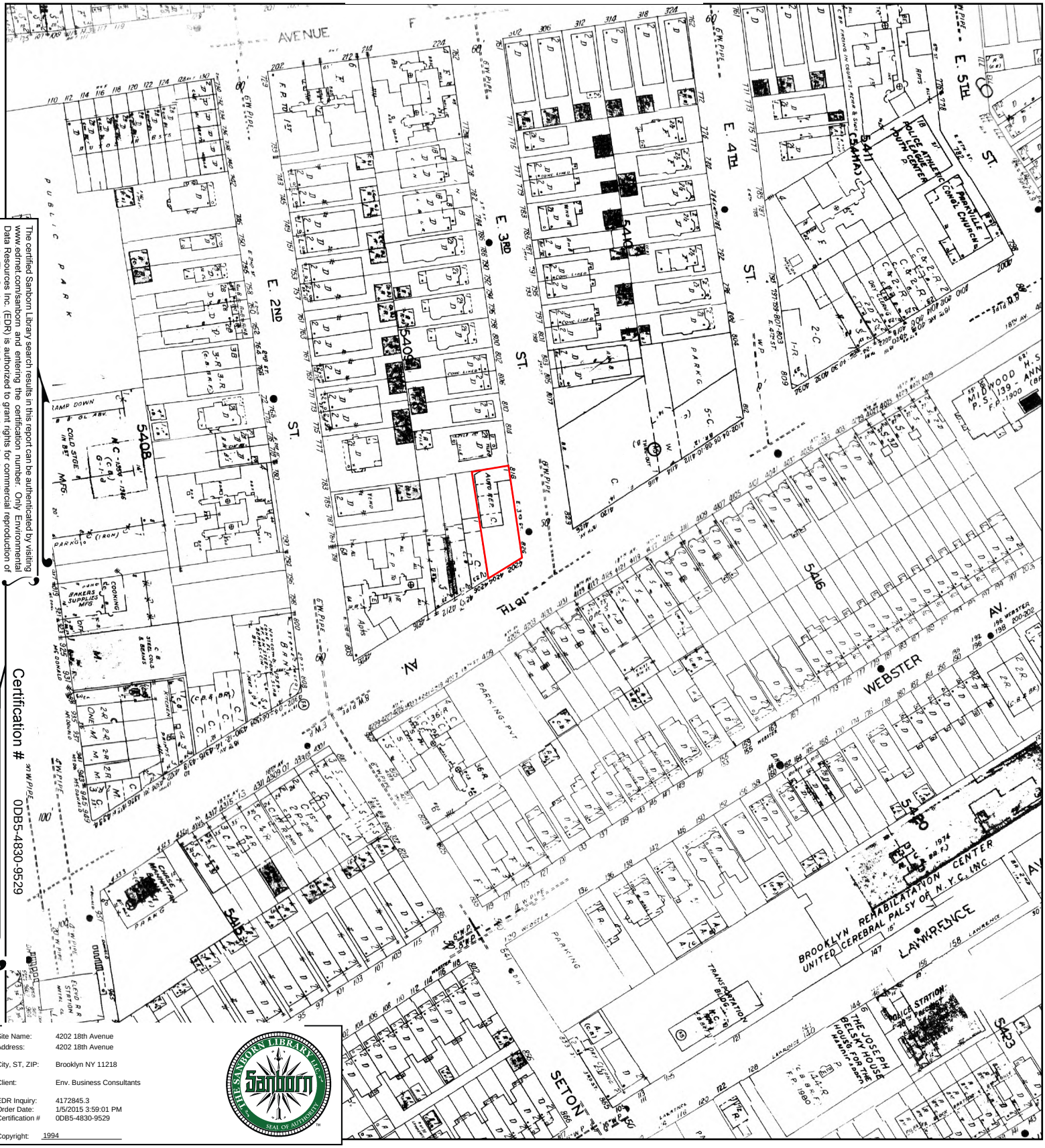

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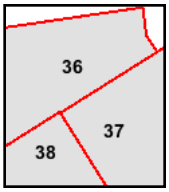

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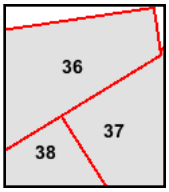

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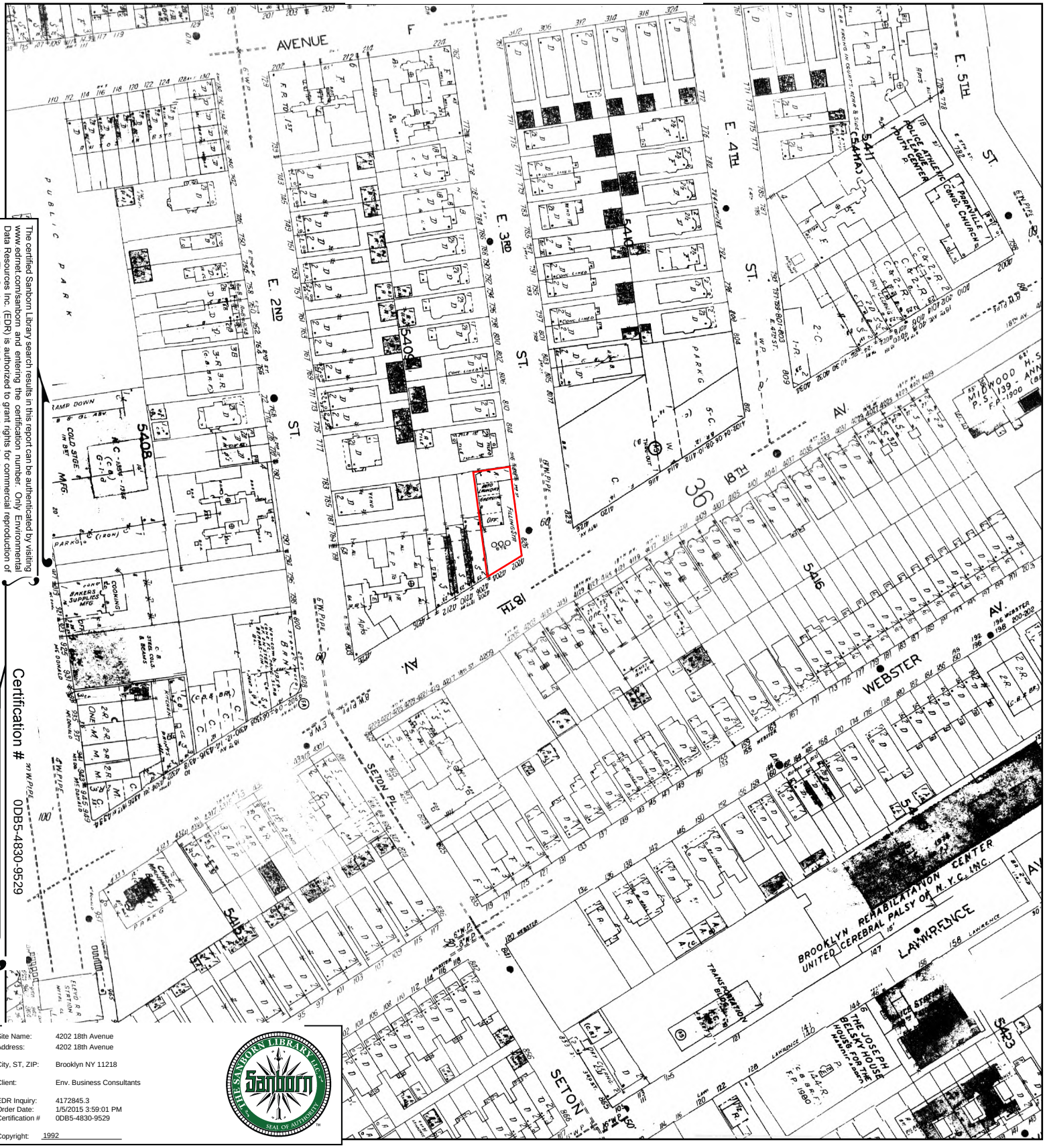

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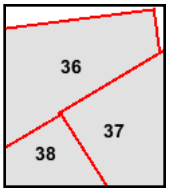

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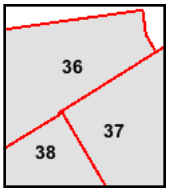

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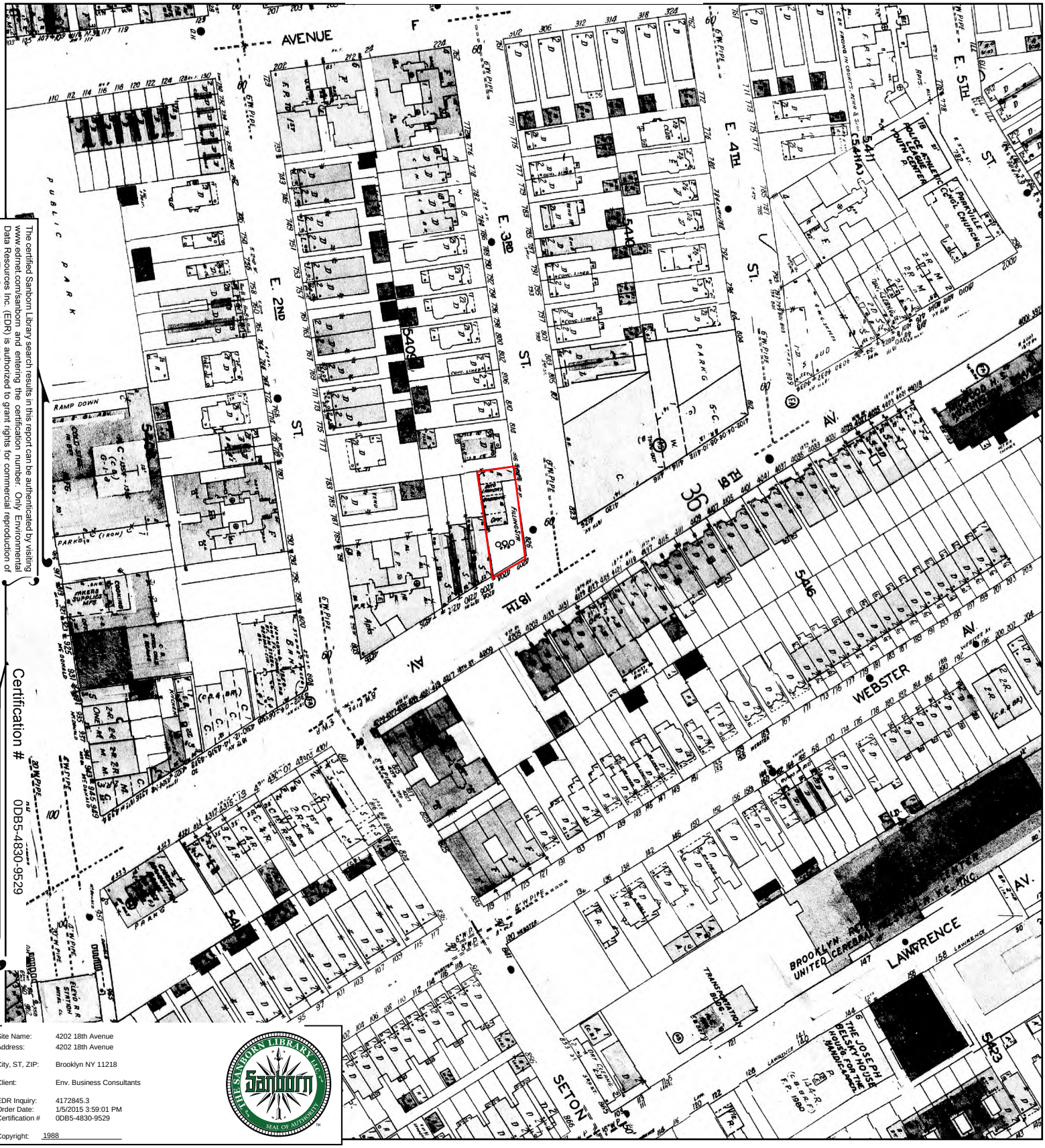

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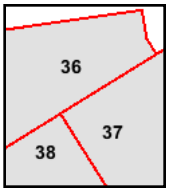

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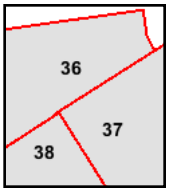

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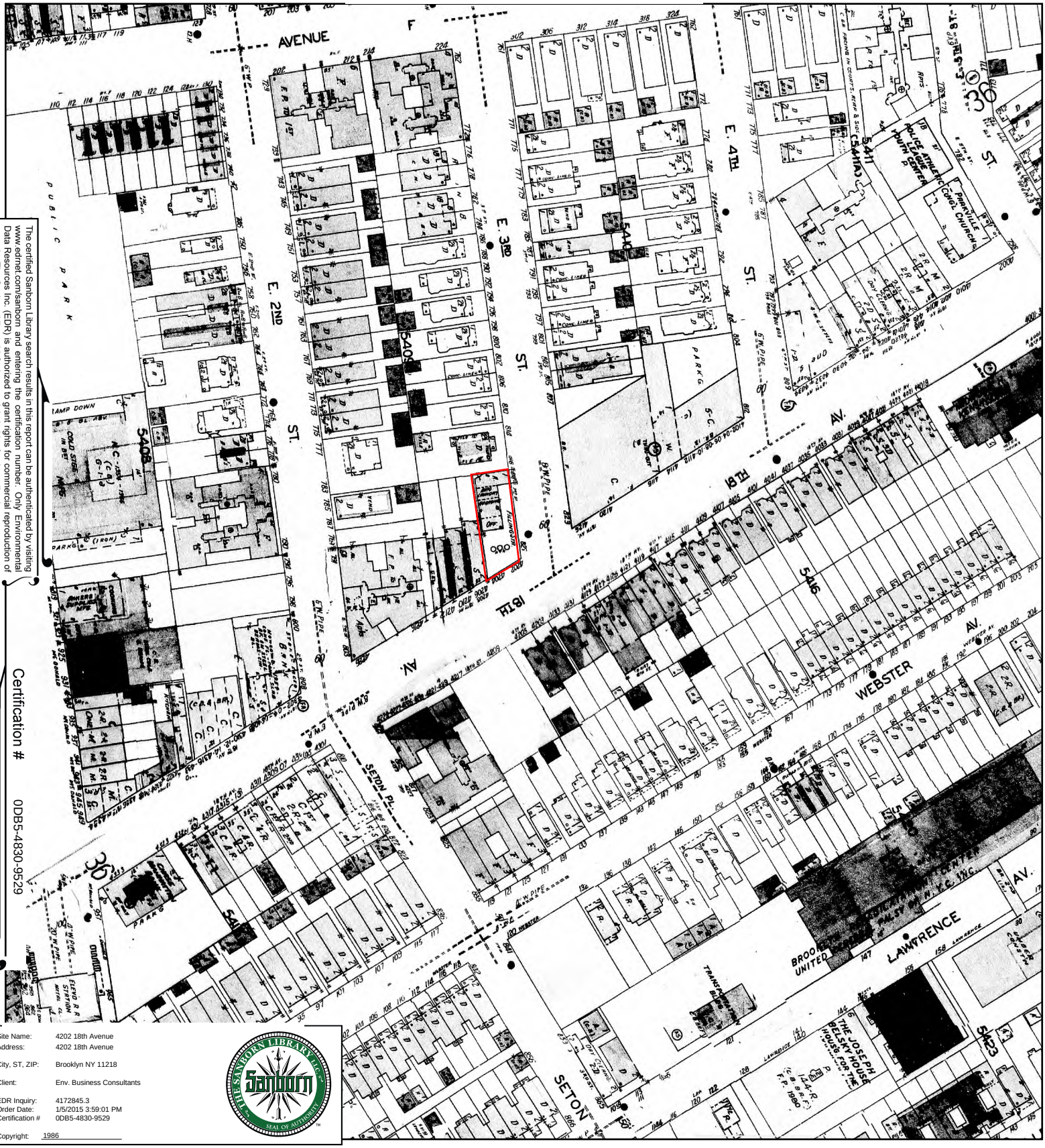

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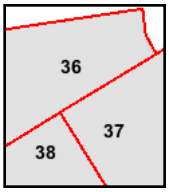

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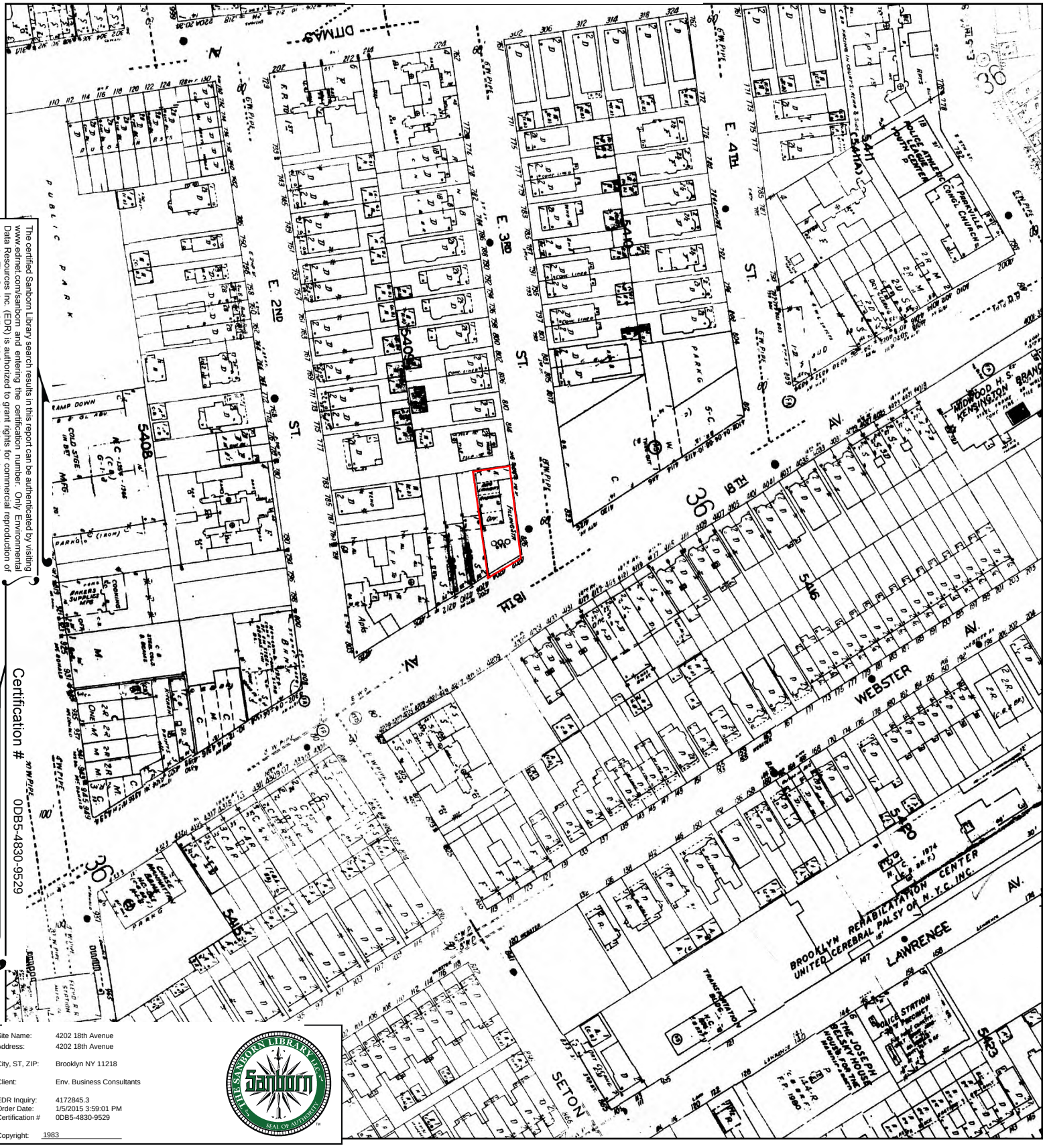

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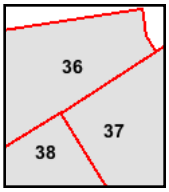

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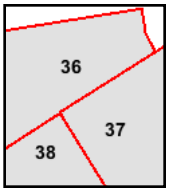

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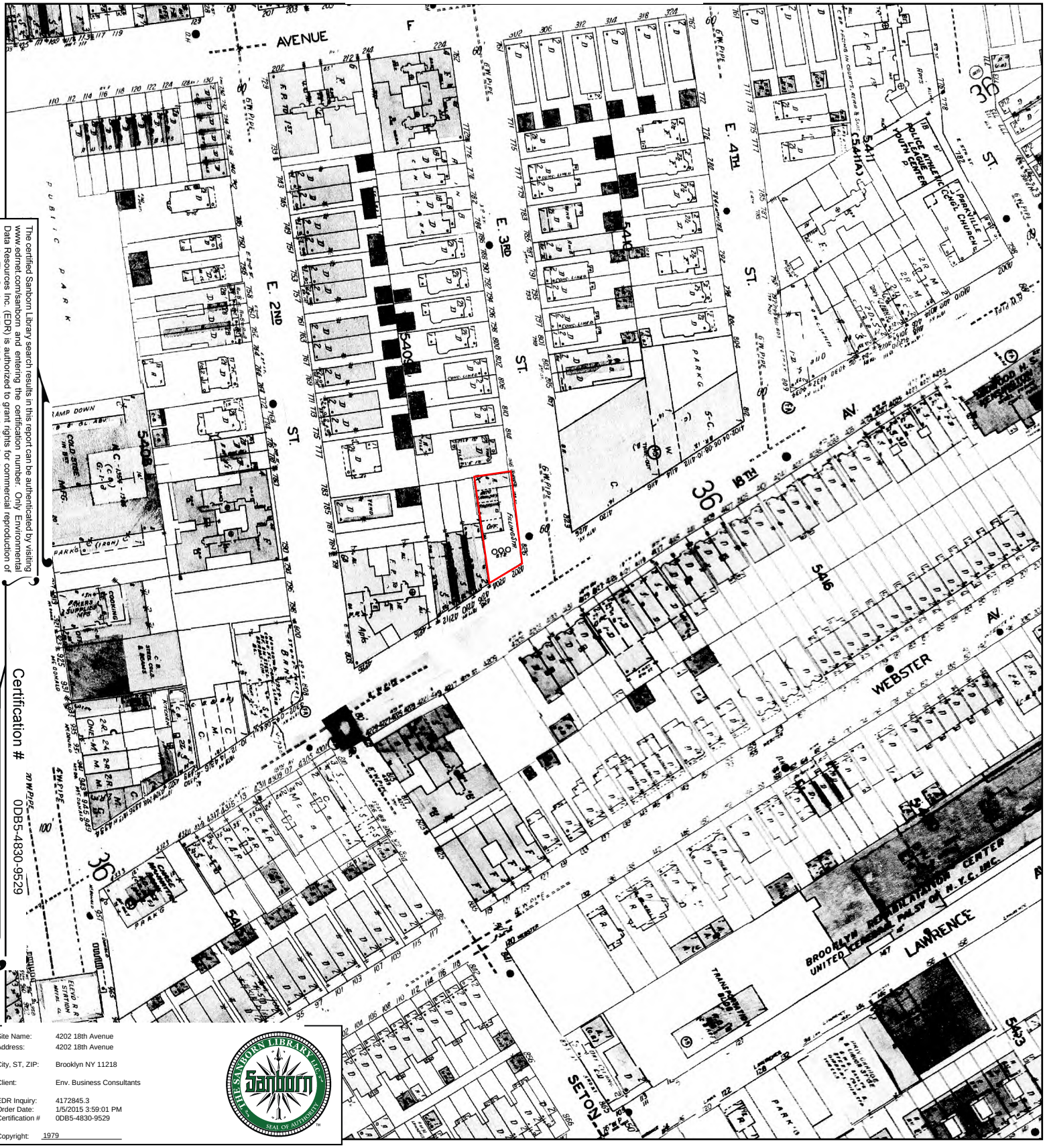

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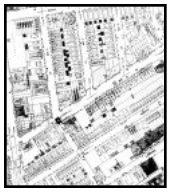

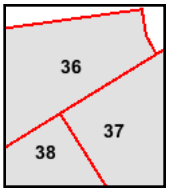

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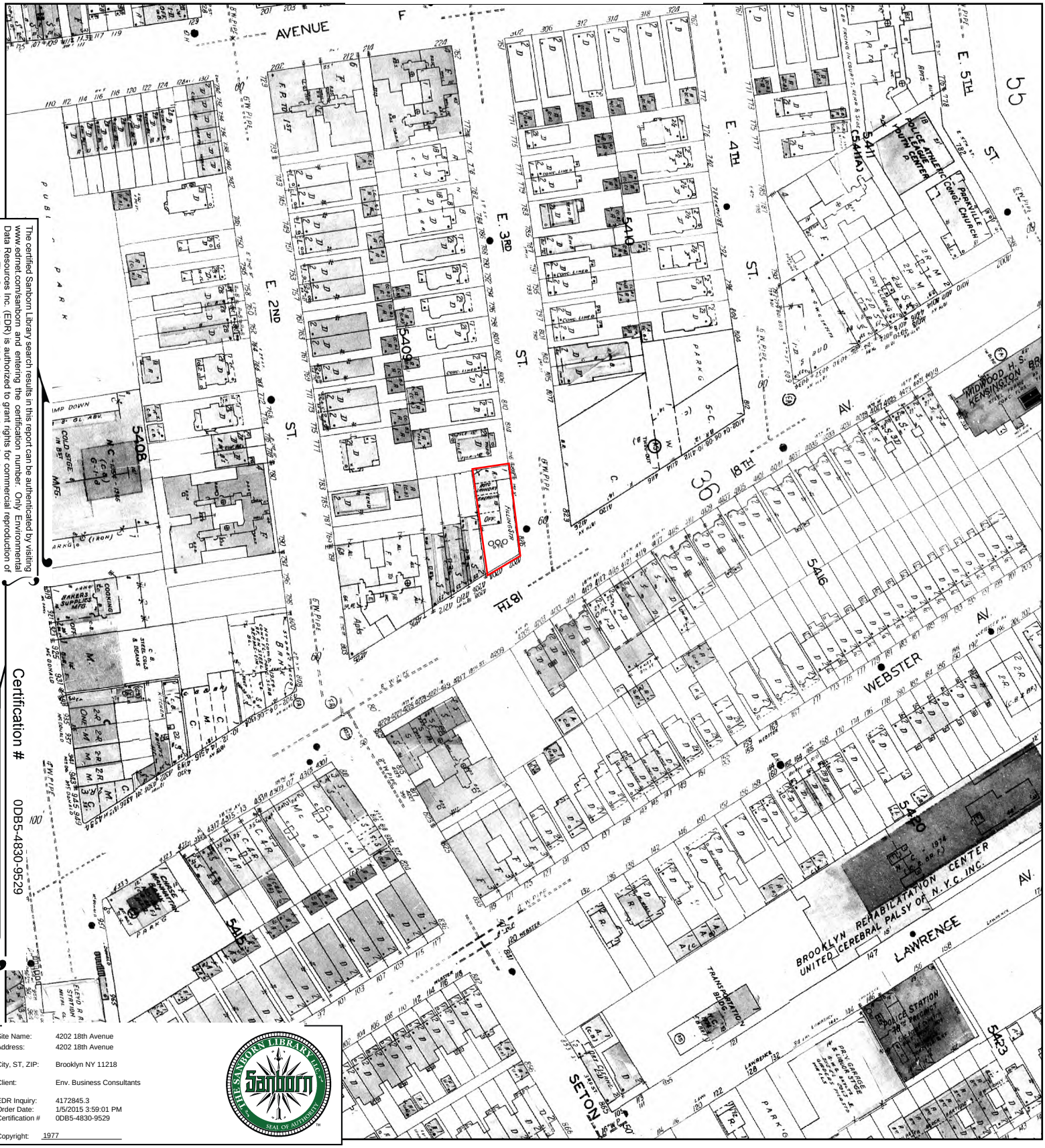

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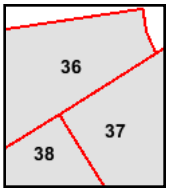

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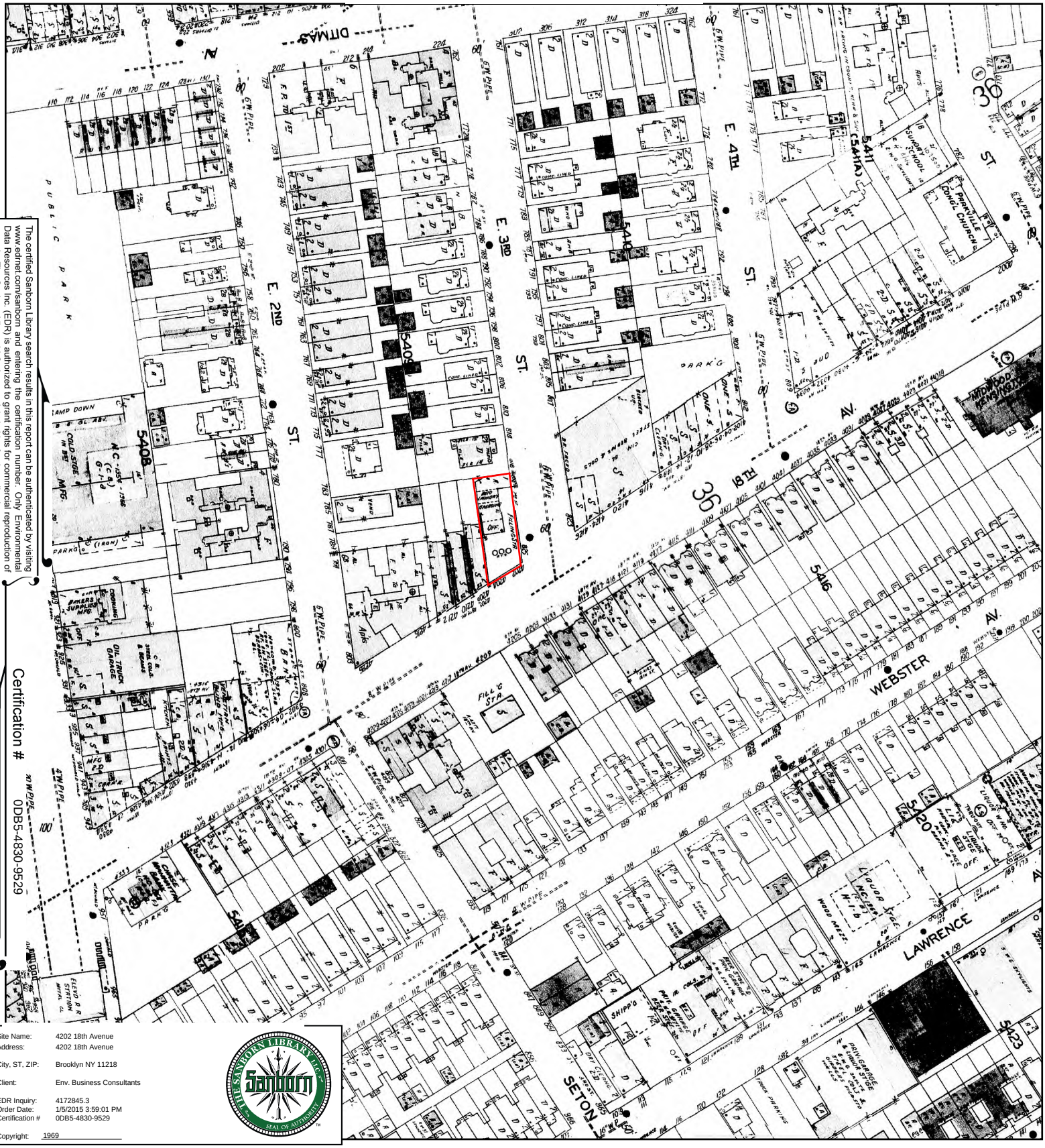

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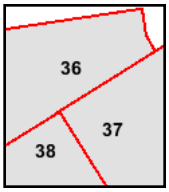

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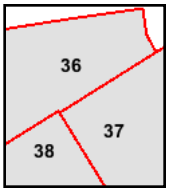

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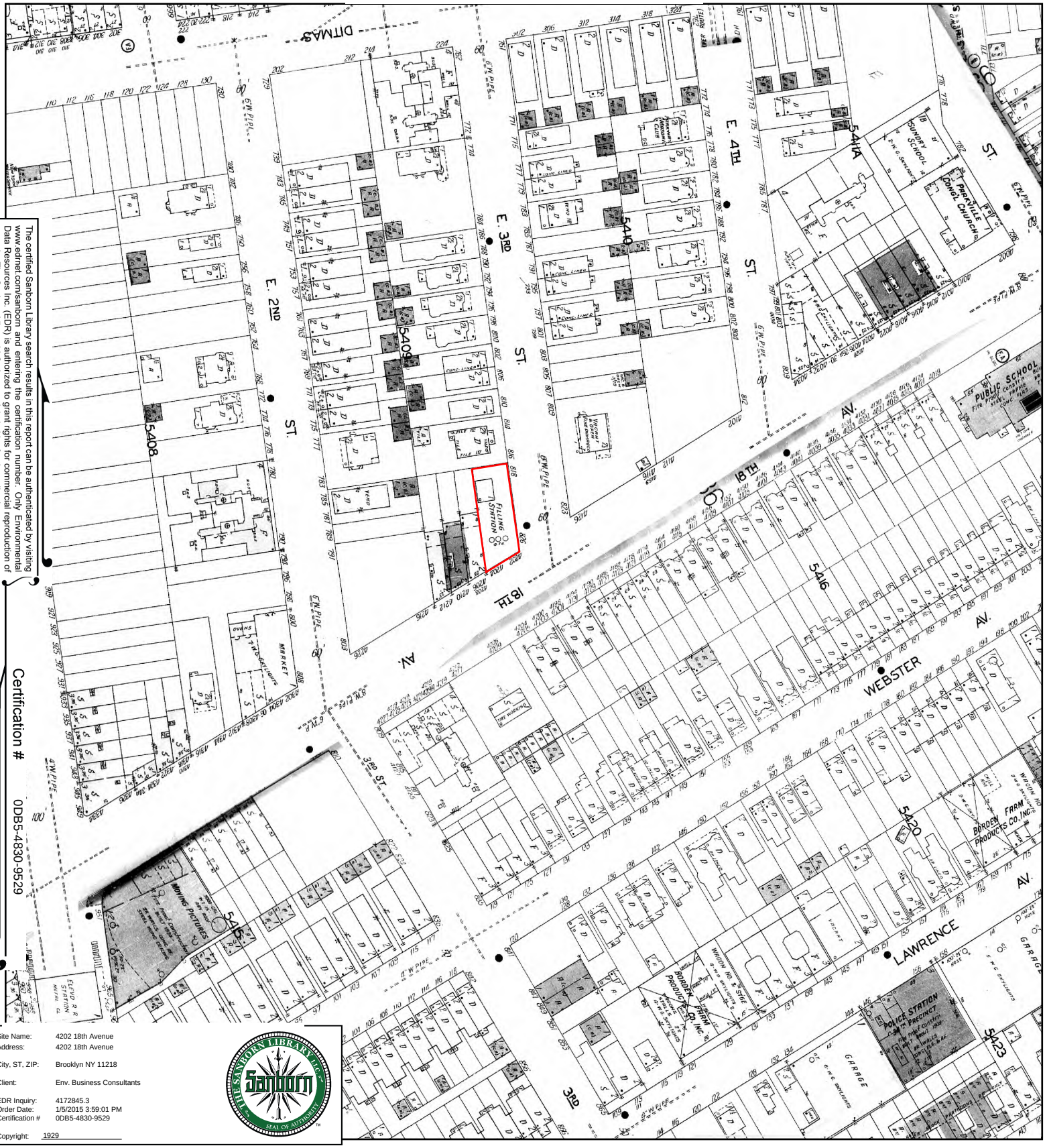

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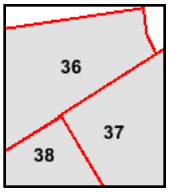

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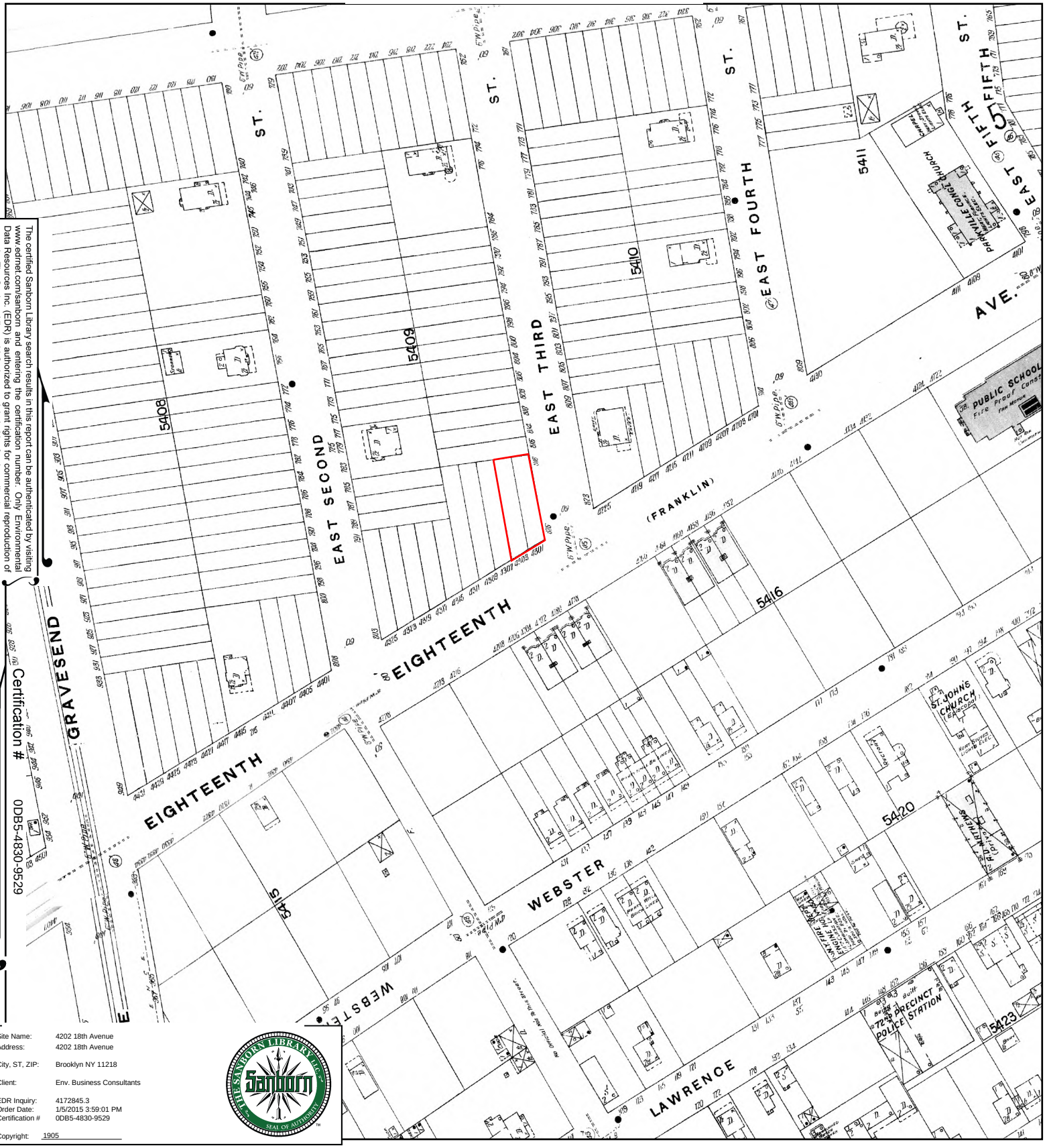

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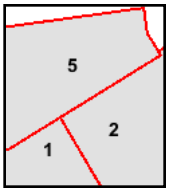

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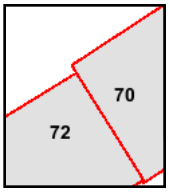

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PHASE II SUBSURFACE INVESTIGATION REPORT
JANUARY 2013

4202 18TH Avenue
Brooklyn, NY
Peak Project No. 5338

<u>Prepared For:</u>
Mr. Steve Talmud
Shapiro Living Trust
5 Patriots Court
East Brunswick, NJ 08816

PEAK ENVIRONMENTAL INC

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P: 732-326-1010
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Appendix A – Geophysical Investigation Report (prepared by GeoSeek LLC, Dated November 23, 2012)

Appendix B - Soil Boring Logs

Appendix C - Laboratory Data Deliverables

1 INTRODUCTION

Peak Environmental Inc. (Peak) was engaged by Shapiro Living Trust to perform a limited Phase II Subsurface Investigation (Phase II) at the property located at 4202 18th Avenue in Brooklyn, NY (each herein referenced to as the Site). The Site is situated along the 18th Avenue commercial corridor and consists of a 0.1 acre parcel of land that is improved with a single structure that is utilized for auto repair operations. Based on publically available records, the structure on the Site was constructed circa 1933.

The findings of the investigation are intended to provide evidence to support an opinion related to the presence or likely presence of hazardous substances or petroleum products under conditions that indicate a current or past release.

2 HISTORICAL INFORMATION

On November 16, 2012 GeoSeek LLC (GeoSeek) conducted a geophysical investigation at the Site. The Site was scanned for the presence of possible underground storage tanks (USTs) and to identify other possible subsurface anomalies. The investigation included the use of electromagnetic (EM) metal detection, ground penetrating radar (GPR) and utility location technology.

Analysis of the geophysical data collected at the Site allowed the delineation of eight (8) possible UST locations. Seven (7) suspect USTs were identified in the paved area to the south of the structure (presumed to be gasoline) and one (1) suspect UST was identified in front of the center garage bay (presumed to be waste oil). The approximate perimeters of the USTs were marked with spray paint in the field. In addition, a suspect oil-water separator fed by floor drains was observed near the interior of the southern-most garage door. These were also marked in the field with spray paint. The Geophysical Report is included as Appendix A.

The Phase II scope of work was developed to assess a potential release of petroleum products from the above referenced USTs and floor drain system.

3 PHYSICAL SETTING

The site is located at the northwest corner of 18th Avenue and 3rd Street in the Midwood section of Brooklyn, as shown on Figure 1 below.

Figure 1 – Site Location Map

3.1 Physical Conditions

3.1.1 Soils

Soils encountered during remedial investigations conducted at the site are documented on the Boring Logs presented in Appendix B. These soils were characterized as light brown coarse sands with some gravel. A thin clay layer was observed at depths ranging from 0.5' to 2' below ground surface (bgs).

3.1.2 Hydrogeology

Site specific hydrogeologic data obtained during the advancement of soil borings indicated that no groundwater was encountered within 20' bgs.

3.1.3 Topography

The USGS mapping for the site vicinity identifies local topography sloping gently in a south southeast direction toward the Lower New York Bay. As such, shallow groundwater flow in unconsolidated formations would be expected to follow local topography and flow in a south southeast direction.

4 TECHNICAL OVERVIEW

On January 4, 2013 a Geologist from Peak directed the use of a direct-push drilling rig to advance eight (8) soil borings and collect subsurface soil samples from each boring. The borings were field screened for structure and texture and for observable evidence of environmental discharges. The borings were also screened with a photoionization detector (PID) for the presence of Volatile Organic Compounds (VOCs).

A discrete grab sample was collected from each boring with the sample depth biased towards the results of the field screening. In the absence of staining, odors, or elevated PID readings, the sample depths were biased towards the approximate invert of the suspect UST or piping run. Boring and sample locations are depicted on Drawing Nos. 1 and 2. Boring logs are included as Appendix B.

A total of eight (8) soil borings were advanced at the Site. Five of the borings targeted the suspect gasoline USTs and former pump island (SB-2, SB-3, SB-4, SB-5, SB-6). These samples were analyzed for VOC gasoline constituents as defined in Table 2 of the New York State Department of Environmental Conservation (NYSDEC) CP-51 Soil Cleanup Guidance. Sample results were compared to 6 NYCRR Part 375, Environmental Remediation Programs, Unrestricted Use Soil Cleanup Objectives (SCOs), Table 375-6.8b.

Three of the borings targeted the waste oil tank (SB-1), oil-water separator (SB-7), and floor drain system (SB-8), and as such, targeted waste oil constituents. These samples were analyzed for Extractable Petroleum Hydrocarbons (EPH) with contingent analyses for VOCs, Semi-Volatile Organic Compounds (SVOCs), PCBs, and Metals in those samples in which EPH was detected.

Two (2) of the soil borings were advanced to a terminal depth of 20' bgs and no groundwater was encountered in the borings. The remaining six (6) soil borings were advanced to a terminal depth of 15' bgs and no groundwater was encountered in these borings. As such, no groundwater samples were collected during the investigation.

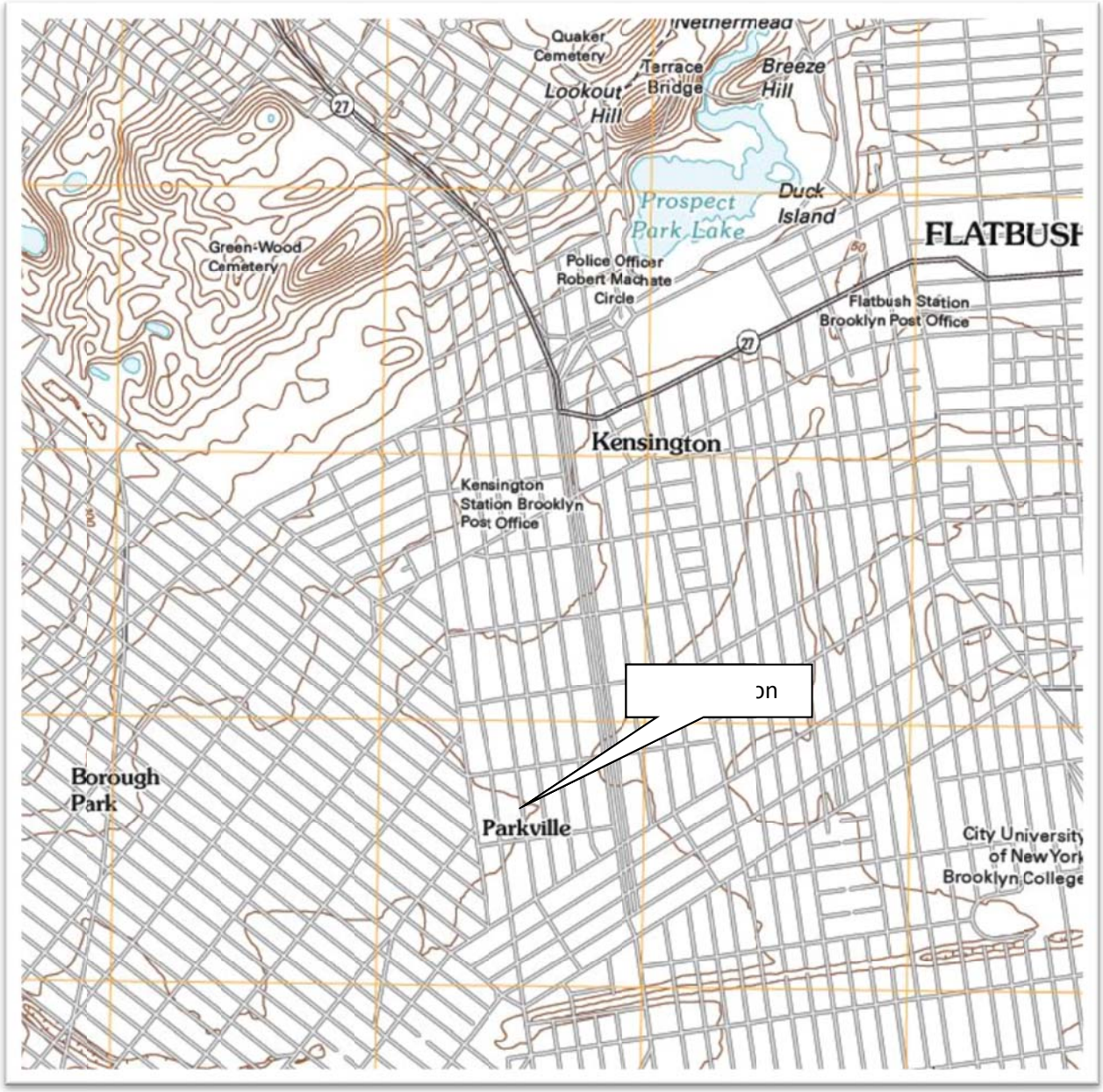


Figure 2 – USGS Topographic Map [Brooklyn], NY Quadrangle

4.1 Reliability of Laboratory Analytical Data

Laboratory analysis was implemented by Integrated Analytical Laboratories, LLC. (IAL), a New York Department of Health (NYDOH) Certified Analytical Laboratory (NYDOH ELAP Cert. # 11402). Reduced

Data Laboratory Deliverables, including QA/QC data, the laboratory's discussion of the reliability of the data, ability to meet holding times, and certifications are included as the final Appendix of this report.

4.2 Summary of the Overall Nature of Contamination

The overall nature of contamination at the site is summarized as the presence of volatile gasoline constituents in soil including Toluene, Ethylbenzene, Xylenes, Isopropylbenzene, n-Propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene (see Table 1 below). These compounds were detected in concentrations in excess of the NYSDEC Unrestricted Use Soil Cleanup Objectives (SCO), Table 375-6.8a, at sample location SB-3, which is located in proximity to the former pump island and feed/return lines associated with closed-in-place gasoline USTs present in the southeast corner of the Site. These compounds are indicative of a gasoline release.

Table 1 – Summary of VOCs at SB-3

Compound	NYSDEC Track 1 Unrestricted Use SCO	NYSDEC Track 2 Restricted Use SCO (Residential)	Concentration at SB-3 (ppm)
Toluene	0.7	100	4.01
Ethylbenzene	1.00	30.0	12.0
Total Xylenes	0.26	100	199
Isopropylbenzene	2.30	NP	4.95
n-Propylbenzene	3.90	100	14.8
1,3,5-Trimethylbenzene	8.40	47.0	208
1,2,4-Trimethylbenzene	3.60	47.0	590
n-Butylbenzene	12.0	NP	29.9
Naphthalene	12.0	NP	86.3

4.3 Significant Events or Seasonal Variation

The investigation which is the subject of this report was conducted in January of 2013. No significant events or seasonal variations occurred during the investigation which are known or suspected to have influenced sampling procedures or analytical results.

5 FINDINGS/RECOMMENDATIONS

Five of the borings targeted the suspect gasoline USTs and former pump island (SB-2, SB-3, SB-4, SB-5, SB-6). These samples were analyzed for VOC gasoline constituents as defined in Table 2 of the NYSDEC CP-51 Soil Cleanup Guidance. The results of the analyses indicate that no compounds were detected above the method detection limit (MDL) for all of the samples with the exception of sample SB-3. SB-3 was collected in the vicinity of the former gasoline pump island and product fill line in the southeast corner of the lot. SB-3 was collected from the 5-5.5' interval due to petroleum odors and elevated PID readings (40 ppm) that were recorded here. Concentrations of Toluene, Ethylbenzene, Xylenes,

Isopropylbenzene, n-Propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene were detected in SB-3 at concentrations in excess of the Unrestricted Use SCOs, as presented in Table 1 above. The complete analytical results are included as Table 2.

Three of the borings targeted the waste oil tank (SB-1), oil-water separator (SB-7), and floor drain system (SB-8), and as such, targeted waste oil constituents. These samples were analyzed for Extractable Petroleum Hydrocarbons (EPH) with contingent analysis for VOCs, Semi-Volatile Organic Compounds (SVOCs), PCBs, and Metals analysis in those samples in which EPH was detected. SB-1 and SB-8 were non-detect for EPH. Total EPH was detected in SB-7 at a concentration of 4190 ppm (see Table 3). Given these concentrations, contingent analysis for VOCs, SVOCs, PCBs, and Metals for SB-7 was activated. The results of the analysis did not indicate the presence of contaminants above NYSDEC Unrestricted Use SCOs, with the exception of lead and nickel (see Table 3 below). Lead was detected at a concentration of 130 ppm, which is above the Unrestricted SCO of 63 ppm, but below the Restricted Use SCO. Nickel was detected at a concentration of 30.4, which is slightly above the Unrestricted SCO of 30 ppm. The complete analytical results for SB-7 are included as Table 2.

Table 3 – Summary of Metals at SB-7

Compound	NYSDEC Track 1 Unrestricted Use SCO	NYSDEC Track 2 Restricted Use SCO (Residential)	Concentration at SB-7 (ppm)
Lead	63	400	130
Nickel	30	140	30.4

This slight exceedance of the Unrestricted Use SCO for lead and nickel appears to be an anomaly and does not appear to be indicative of a release. Furthermore, given that these compounds were detected at concentrations below the restricted use criteria, these contaminants could be managed in place under a redevelopment scenario. As such, no further investigation of the waste oil tank, oil-water separator and floor drain is proposed.

Based on the findings presented above, Peak is of the opinion that a release of gasoline has occurred in the vicinity of the former gasoline pump island and product fill line. Peak recommends reporting this incident to NYSDEC and investigating and remediating this release in accordance with NYSDEC rules and guidance.

DRAWINGS

PEAK ENVIRONMENTAL INC
74 MAIN STREET, 2ND FL
WOODBRIDGE, NJ 07095
(732) 326-1010

POSSIBLE UST LOCATION

FLOOR DRAIN
PRODUCT PIPING
FORMER PUMP ISLAND

SITE MAP

PHASE II SUBSURFACE INVESTIGATION – JANUARY 2013

SHAPIRO LIVING COURT
4202 18TH AVENUE
BROOKLYN, NEW YORK

NJDEP P.I.#: N/A
PROJECT: TS 5338
DATE: JANUARY 21, 2013
DRAWN BY: KEW
CHECKED BY: SCS

DRAWING 1

NYSDEC TRACK 1 (mg/Kg) UNRESTRICTED USE SCO		0.7	1.00	0.26	2.30	3.90	8.40	3.60	12	12
SAMPLE ID	DEPTH	TL	EBENZ	TX	IPB	N-PB	1,3,5-TMB	1,2,4-TMB	N-BB	NAP
SB-2	9.0'-9.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-3	5.0'-5.5'	4.04	12.0	199	4.95	14.8	208	590	29.9	86.3
SB-4	12.5'-13.0'	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-5	11.0'-11.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-6	12.0'-12.5'	ND	ND	ND	ND	ND	ND	ND	ND	ND

= BELOW CRITERIA
= ABOVE CRITERIA
ND = NOT DETECTED
~ = NOT ANALYZED
NP = NOT PUBLISHED

TL = TOLUENE
EBENZ = ETHYLBENZENE
TX = TOTAL XYLENES
IPB = ISOPROPYLBENZENE
N–PB = N–PROPYLBENZENE
1,3,5–TMB = 1,3,5–TRIMETHYLBENZENE
1,2,4–TMB = 1,2,4–TRIMETHYLBENZENE
N–BB = N–BUTYLBENZENE
NAP = NAPHTHALENE

SAMPLE ID	DEPTH	TOTAL EPH
SB-1	5.5'-6.0'	ND
SB-7	1.0'-1.5'	4190
SB-8	1.0'-1.5'	ND

N
W
E
S

PEAK ENVIRONMENTAL INC
74 MAIN STREET, 2ND FL
WOODBRIDGE, NJ 07095
(732) 326-1010

SOIL SAMPLE
A – SAMPLES COLLECTED 1/5/13
GREEN = COMPLIANT
RED = NON–COMPLIANT

UST LOCATION

FLOOR DRAIN
PRODUCT PIPING
FORMER PUMP ISLAND

SAMPLE LOCATION MAP

PHASE II SUBSURFACE INVESTIGATION – JANUARY 2013

SHAPIRO LIVING COURT
4202 18TH AVENUE
BROOKLYN, NEW YORK

NJDEP P.I.#: N/A
PROJECT: TS 5338
DATE: JANUARY 21, 2013
DRAWN BY: KEW
CHECKED BY: SCS

DRAWING 2

TABLES

Table 2 Page 1 of 4
Soil Summary: January 4, 2013
Project: Shapiro Living Trust- 4202 18th Avenue, Brooklyn, NY 11218
Project Number: TS: 5338

Client ID:	NYSDEC Track 1	NYSDEC Track 2	SB-2			SB-3			SB-4			SB-5			SB-6		
Sample Depth:	Unrestricted Use SCO*	Restricted Use SCO**	9/9.5			5/5.5			12.5/13			11/11.5			12/12.5		
Lab ID:			00144-001			00144-002			00144-003			00144-004			00144-005		
Date Sampled:			01/04/2013			01/04/2013			01/04/2013			01/04/2013			01/04/2013		
Matrix:	(mg/kg)	(mg/kg)	Soil			Soil			Soil			Soil			Soil		
Volatiles (Units)			Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Methyl tert-butyl ether (MTBE)	0.93	62	ND		0.000971	ND		1.12	ND		0.00138	ND		0.00127	ND		0.000922
Benzene	0.06	2.9	ND		0.00101	ND		0.962	ND		0.00144	ND		0.00132	ND		0.000962
Toluene	**0.7**	100	ND		0.00106	**4.01**		0.921	ND		0.0015	ND		0.00138	ND		0.001
Ethylbenzene	**1.00**	**30.0**	ND		0.00131	**12.0**		1.44	ND		0.00186	ND		0.00171	ND		0.00124
Total Xylenes	**0.26**	**100**	ND		0.0045	**199**		2.80	ND		0.0064	ND		0.0058	ND		0.0043
Isopropylbenzene	**2.30**	NP	ND		0.00173	**4.95**		1.08	ND		0.00246	ND		0.00226	ND		0.00164
n-Propylbenzene	**3.90**	100	ND		0.00148	**14.8**		1.48	ND		0.0021	ND		0.00193	ND		0.0014
1,3,5-Trimethylbenzene	**8.40**	**47.0**	ND		0.0016	**208**		1.40	ND		0.00228	ND		0.00209	ND		0.00152
tert-Butylbenzene	5.90	100	ND		0.00143	ND		1.24	ND		0.00204	ND		0.00187	ND		0.00136
1,2,4-Trimethylbenzene	**3.60**	**47.0**	ND		0.0016	**590**		1.36	ND		0.00228	ND		0.00209	ND		0.00152
sec-Butylbenzene	11.0	100	ND		0.00169	ND		1.52	ND		0.0024	ND		0.0022	ND		0.0016
4-Isopropyltoluene	10.0	NP	ND		0.0019	5.00		1.56	ND		0.0027	ND		0.00248	ND		0.0018
n-Butylbenzene	**12.0**	NP	ND		0.00198	**29.9**		1.92	ND		0.00282	ND		0.00259	ND		0.00188
Naphthalene	**12.0**	NP	ND		0.00177	**86.3**		1.04	ND		0.00252	ND		0.00231	ND		0.00168

BOLD INDICATES A CONCENTRATION THAT EXCEEDS SOIL CLEANUP CRITERIA

MDL	METHOD DETECTION LIMIT
CONC	CONCENTRATION
ND	ANALYZED FOR BUT NOT DETECTED AT THE MDL
NP	NOT PUBLISHED
*	* NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06
**	* NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8b 12/06

Table 2 Page 2 of 4
Soil Summary: January 4, 2013
Project: Shapiro Living Trust- 4202 18th Avenue, Brooklyn, NY 11218
Project Number: TS: 5338

Client ID:	NYSDEC Track 1	SB-7			
Sample Depth:	Unrestricted Use SCO*	1/1.5			
Lab ID:		00167-002			
Date Sampled:		01/04/2013			
Matrix:	(mg/kg)	Soil			
Volatiles (mg/Kg)		**Conc**	**Q**	**RL**	**MDL**
Dichlorodifluoromethane	NS	ND		0.00105	0.00042
Chloromethane	NS	ND		0.00105	0.000431
Vinyl chloride	0.02	ND		0.00105	0.000504
Bromomethane	NS	ND		0.0021	0.000368
Chloroethane	NS	ND		0.0021	0.000473
Trichlorofluoromethane	NS	ND		0.00105	0.000431
1,1-Dichloroethene	0.33	ND		0.00105	0.000525
Acetone	0.05	ND		0.00525	0.000735
Carbon disulfide	NS	ND		0.00105	0.000357
Methylene chloride	0.05	ND		0.0021	0.00208
trans-1,2-Dichloroethene	0.19	ND		0.00105	0.000452
Methyl tert-butyl ether (MTBE)	0.93	ND		0.00105	0.000242
1,1-Dichloroethane	0.27	ND		0.00105	0.000284
cis-1,2-Dichloroethene	0.25	ND		0.00105	0.000326
2-Butanone (MEK)	0.12	ND		0.0021	0.000389
Bromochloromethane	NS	ND		0.00105	0.000252
Chloroform	0.37	ND		0.0021	0.000305
1,1,1-Trichloroethane	0.68	ND		0.00105	0.000347
Carbon tetrachloride	0.76	ND		0.00105	0.000431
1,2-Dichloroethane (EDC)	0.02	ND		0.00105	0.000221
Benzene	0.06	ND		0.00105	0.000252
Trichloroethene	0.47	ND		0.00105	0.000336
1,2-Dichloropropane	NS	ND		0.00105	0.000231
1,4-Dioxane	0.1	ND		**0.210**	0.016
Bromodichloromethane	NS	ND		0.00105	0.000336
cis-1,3-Dichloropropene	NS	ND		0.00105	0.000273
4-Methyl-2-pentanone (MIBK)	NS	ND		0.00105	0.000252
Toluene	0.7	ND		0.00105	0.000263
trans-1,3-Dichloropropene	NS	ND		0.00105	0.000273
1,1,2-Trichloroethane	NS	ND		0.00105	0.00021
Tetrachloroethene	1.3	0.00161		0.00105	0.000273
2-Hexanone	NS	ND		0.00105	0.000378
Dibromochloromethane	NS	ND		0.00105	0.000231
1,2-Dibromoethane (EDB)	NS	ND		0.00105	0.000221
Chlorobenzene	1.1	ND		0.00105	0.000231
Ethylbenzene	1	ND		0.00105	0.000326
Total Xylenes	0.26	ND		0.0021	0.0011
Styrene	NS	ND		0.00105	0.000315
Bromoform	NS	ND		0.00105	0.000336
Isopropylbenzene	NS	ND		0.00105	0.000431
1,1,2,2-Tetrachloroethane	NS	ND		0.0021	0.000242
1,3-Dichlorobenzene	2.4	ND		0.00105	0.000326
1,4-Dichlorobenzene	1.8	ND		0.00105	0.000326
1,2-Dichlorobenzene	1.1	ND		0.0021	0.000378
1,2-Dibromo-3-chloropropane	NS	ND		0.00105	0.000525
1,2,4-Trichlorobenzene	NS	ND		0.0021	0.000546
1,2,3-Trichlorobenzene	NS	ND		0.0021	0.000504
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	ND		0.00105	0.000578
Methyl acetate	NS	ND		0.00525	0.000609
Cyclohexane	NS	ND		0.00525	0.000441
Methylcyclohexane	NS	ND		0.00105	0.000525
1,3-Dichloropropene (cis- and trans-)	NS	ND		0.00105	0.000273
TOTAL VO's:	NS	0.00161			NA
TOTAL TIC's:	NS	ND			NA
TOTAL VO's & TIC's:	NS	0.00161			NA

BOLD	INDICATES A CONCENTRATION THAT EXCEEDS SOIL CLEANUP CRITERIA

MDL	METHOD DETECTION LIMIT
CONC	CONCENTRATION
ND	ANALYZED FOR BUT NOT DETECTED AT THE MDL
NP	NOT PUBLISHED
*	* NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06

Table 2 Page 3 of 4
Soil Summary: January 4, 2013
Project: Shapiro Living Trust- 4202 18th Avenue, Brooklyn, NY 11218
Project Number: TS: 5338

Client ID: Sample Depth: Lab ID: Date Sampled: Matrix:	NYSDEC Track 1 Unrestricted Use SCO* (mg/kg)	SB-7 1/1.5 00167-002 01/04/2013 Soil			
Semivolatiles - BN (mg/Kg)		**Conc**	**Q**	**RL**	**MDL**
Benzaldehyde	NS	ND		0.035	0.013
Bis(2-chloroethyl) ether	NS	ND		0.035	0.024
Bis(2-chloroisopropyl) ether	NS	ND		0.035	0.013
N-Nitrosodi-n-propylamine	NS	ND		0.035	0.023
Acetophenone	NS	ND		0.035	0.012
Hexachloroethane	NS	ND		0.035	0.013
Nitrobenzene	NS	ND		0.035	0.031
Isophorone	NS	ND		0.035	0.023
Bis(2-chloroethoxy) methane	NS	ND		0.035	0.029
Naphthalene	12	ND		0.035	0.027
4-Chloroaniline	NS	ND		0.035	0.033
Hexachlorobutadiene	NS	ND		0.035	0.034
Caprolactam	NS	ND		0.035	0.022
2-Methylnaphthalene	NS	ND		0.035	0.029
Hexachlorocyclopentadiene	NS	ND		0.035	0.011
1,1'-Biphenyl	NS	ND		0.035	0.010
2-Chloronaphthalene	NS	ND		0.035	0.033
2-Nitroaniline	NS	ND		0.035	0.021
Dimethyl phthalate	NS	ND		0.035	0.010
2,6-Dinitrotoluene	NS	ND		0.035	0.020
Acenaphthylene	100	ND		0.035	0.024
3-Nitroaniline	NS	ND		0.035	0.010
Acenaphthene	20	ND		0.035	0.028
2,4-Dinitrotoluene	NS	ND		0.035	0.030
Dibenzofuran	7	ND		0.035	0.012
Diethyl phthalate	NS	ND		0.035	0.026
Fluorene	30	ND		0.035	0.019
4-Chlorophenyl phenyl ether	NS	ND		0.035	0.016
4-Nitroaniline	NS	ND		0.035	0.022
1,2,4,5-Tetrachlorobenzene	NS	ND		0.035	0.010
N-Nitrosodiphenylamine	NS	ND		0.035	0.015
4-Bromophenyl phenyl ether	NS	ND		0.035	0.020
Hexachlorobenzene	0.33	ND		0.035	0.025
Atrazine	NS	ND		0.035	0.024
Phenanthrene	100	ND		0.035	0.023
Anthracene	100	ND		0.035	0.034
Carbazole	NS	ND		0.035	0.020
Di-n-butyl phthalate	NS	ND		0.035	0.025
Fluoranthene	100	ND		0.035	0.014
Pyrene	100	ND		0.035	0.026
Butyl benzyl phthalate	NS	ND		0.035	0.022
3,3'-Dichlorobenzidine	NS	ND		0.035	0.024
Benzo[a]anthracene	1	ND		0.035	0.034
Chrysene	1	ND		0.035	0.024
Bis(2-ethylhexyl) phthalate	NS	ND		0.035	0.017
Di-n-octyl phthalate	NS	ND		0.035	0.014
Benzo[b]fluoranthene	1	ND		0.035	0.018
Benzo[k]fluoranthene	0.8	ND		0.035	0.013
Benzo[a]pyrene	1	ND		0.035	0.019
Indeno[1,2,3-cd]pyrene	0.5	ND		0.035	0.018
Dibenz[a,h]anthracene	0.33	ND		0.035	0.021
Benzo[g,h,i]perylene	100	ND		0.035	0.011
Dinitrotoluene (2,4- and 2,6-)	NS	ND		0.035	0.030
TOTAL BN'S:	NS	ND			NA
TOTAL TIC's:	NS	1.03			NA
TOTAL BN'S & TIC's:	NS	1.03			NA
PCB's (mg/Kg)		**Conc**	**Q**	**RL**	**MDL**
Aroclor-1016	NS	ND		0.044	0.017
Aroclor-1221	NS	ND		0.044	0.017
Aroclor-1232	NS	ND		0.044	0.017
Aroclor-1242	NS	ND		0.044	0.017
Aroclor-1248	NS	ND		0.044	0.017
Aroclor-1254	NS	ND		0.044	0.017
Aroclor-1260	NS	ND		0.044	0.017
Aroclor-1262	NS	ND		0.044	0.017
Aroclor-1268	NS	ND		0.044	0.017
PCBs	0.1	ND		0.044	0.017
Metals (mg/Kg)		**Conc**	**Q**	**RL**	**MDL**
Aluminum	NS	11800		12.0	5.98
Antimony	NS	ND		1.20	0.299
Arsenic	13	3.85		0.598	0.299
Barium	350	58.3		12.0	2.99
Beryllium	7.2	0.690		0.418	0.239
Cadmium	2.5	0.199	J	0.598	0.149
Calcium	NS	1170		59.8	29.9
Chromium	NS	22.9		2.39	0.598
Cobalt	NS	8.13		2.39	0.598
Copper	50	28.1		2.39	0.598
Iron	NS	16700		29.9	14.9
Lead	**63**	**130**		0.598	0.149
Magnesium	NS	3770		59.8	14.9
Manganese	1600	199		1.20	0.299
Mercury	0.18	0.018		0.014	0.00667
Nickel	**30**	**30.4**		1.20	0.598
Potassium	NS	1220		59.8	14.9
Selenium	3.9	ND		2.39	1.20
Silver	2	ND		0.598	0.149
Sodium	NS	129		120	29.9
Thallium	NS	ND		0.598	0.149
Vanadium	NS	29.2		2.39	0.598
Zinc	109	60.7		2.39	2.39

BOLD	INDICATES A CONCENTRATION THAT EXCEEDS SOIL CLEANUP CRITERIA

MDL	METHOD DETECTION LIMIT
CONC	CONCENTRATION
ND	ANALYZED FOR BUT NOT DETECTED AT THE MDL
NP	NOT PUBLISHED
*	* NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06

Table 2 Page 4 of 4
Soil Summary: January 4, 2013
Project: Shapiro Living Trust- 4202 18th Avenue, Brooklyn, NY 11218
Project Number: TS: 5338

Client ID:	NYSDEC Track 1 Unrestricted Use SCO*	SB-1				SB-7				SB-8			
Sample Depth:		5.5/6				1/1.5				1/1.5			
Lab ID:		00167-001				00167-002				00167-003			
Date Sampled:		01/04/2013				01/04/2013				01/04/2013			
Matrix:	(mg/kg)	Soil				Soil				Soil			
NJ-EPH-C40 (mg/Kg)		**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
C9-C40	NS	ND		36.6	9.15	~		~	~	ND		41.0	10.3
NJ-EPH-Fractionated (mg/Kg)		**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
C9-C12 Aliphatics	NS	~		~	~	ND		12.7	2.12	~		~	~
C12-C16 Aliphatics	NS	~		~	~	62.1		8.49	2.12	~		~	~
C16-C21 Aliphatics	NS	~		~	~	570		12.7	2.12	~		~	~
C21-C40 Aliphatics	NS	~		~	~	2170		42.5	4.25	~		~	~
Total Aliphatics	NS	~		~	~	2800		42.5	4.25	~		~	~
C10-C12 Aromatics	NS	~		~	~	ND		8.49	2.12	~		~	~
C12-C16 Aromatics	NS	~		~	~	ND		12.7	2.12	~		~	~
C16-C21 Aromatics	NS	~		~	~	238		21.2	3.19	~		~	~
C21-C36 Aromatics	NS	~		~	~	1150		34.0	4.25	~		~	~
Total Aromatics	NS	~		~	~	1390		34.0	4.25	~		~	~
Total NJ-EPH	NS	~		~	~	4190		42.5	4.25	~		~	~

BOLD	INDICATES A CONCENTRATION THAT EXCEEDS SOIL CLEANUP CRITERIA

~	SAMPLE NOT ANALYZED FOR
MDL	METHOD DETECTION LIMIT
CONC	CONCENTRATION
ND	ANALYZED FOR BUT NOT DETECTED AT THE MDL
NP	NOT PUBLISHED
*	* NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06
**	* NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8b 12/06

APPENDIX A

GEOPHYSICAL INVESTIGATION REPORT

4202 18TH AVENUE
BROOKLYN, NEW YORK

Prepared for:

Peak Environmental Inc.
74 Main St., 2nd Fl.
Woodbridge, New Jersey 07095

Prepared by:

217 Henley Avenue
Pine Beach, NJ 08741

November 23, 2012
GeoSeek Project 12177

GEOPHYSICAL INVESTIGATION REPORT

4202 18th Avenue
Brooklyn, New York
November 23, 2012

INTRODUCTION

On November 16, 2012 GeoSeek LLC (GeoSeek) conducted a geophysical investigation at the property identified 4202 18th Avenue, Brooklyn, New York (each herein referenced to as the Site). The purpose of the project was to scan the site for the presence of possible underground storage tanks (USTs) and identify other possible subsurface anomalies. The investigation included the use of electromagnetic (EM) metal detection, ground penetrating radar (GPR) and utility location technology.

METHODOLOGY AND LIMITATIONS

A. *Electromagnetic Metal Detection Survey*: GeoSeek utilized a Fisher Model TW-6 Twinbox (transmitter/receiver) Metal Detector (TW-6) to assist in locating a potential USTs at the site. The TW-6 transmitter produces an electromagnetic (EM) radio signal which creates a secondary current in subsurface metal objects. The secondary current creates a magnetic field which is detected by the receiver. The unit's audible signal will rise in pitch and the analog meter will indicate a rise in response when the unit is over a metallic object. The operator carries the TW-6 and walks a grid pattern over the areas to be scanned. If the TW-6 indicates the presence of metallic objects, the operator will mark the location.

B. *Ground-Penetrating Radar (GPR) Survey*: GPR data were collected with a Sensors and Software Inc. Noggin^{plus} SmartCart GPR System (SmartCart) utilizing a 250 MHz antenna. The antenna, containing both a transmitter and a receiver, is rolled along the ground surface during the GPR survey. The transmitter radiates short pulses of high-frequency EM energy into the ground. When the wave encounters the interface between two materials having different dielectric constants (dielectric permittivity), a portion of the energy is reflected back. The signal is transmitted to a control unit, displayed on a monitor, and digitally recorded.

The Noggin^{plus} system records an image of the subsurface by plotting two-way travel time of the reflected EM pulse on the vertical axis with the distance traveled along the ground surface plotted on the horizontal axis. The depth of the reflecting object or stratum is then determined by using standard soil velocity functions and calculating the two-way travel time. The maximum depth of investigation was approximately 5 feet at this Site. The data were processed using Ekko View software. Generally, the potential presence of USTs or other significant subsurface objects are indicated by the presence of large hyperbolic signatures at depth. Smaller objects such as utilities, piping or other objects are indicated by the presence of smaller hyperbolic signatures.

C. *Pipe/Utility Locator Survey:* GeoSeek utilized a Radiodetection RD8000 Utility Locator to assist in locating utilities and trace piping at the Site. The transmitter of the unit was connected to the observed piping and the induced signals were then traced via the audible signal and visual data readings on the hand-held receiver as the piping extends into the subsurface. The operator will mark the location of the piping with spray paint.

D. *Limitations:* Limitations encountered during the investigation included the presence of the building on Site, steel-reinforced concrete, vehicles, equipment within the garage, debris, possible subsurface utilities and other obstructions. Please note that EM and GPR are remote sensing methods and in some instances, due to interference or other geophysical limitations, do not reveal data which may be indicative of subsurface anomalies. The findings of this investigation should only be used as a tool in evaluating the possibility that utilities, USTs or other subsurface hazards are or were once present on the property and should not be considered a guarantee regarding the presence/absence or location of utilities, USTs or other subsurface hazards. Due to the limitations at the Site, the possibility that undiscovered subsurface objects exists.

GEOPHYSICAL RESULTS

A. TW6 Results: GeoSeek investigated the accessible areas around the exterior of the building on Site with the TW-6. Audible and meter readings indicated the presence of large metallic objects consistent with the presence of multiple USTs in the paved area to south of the building.

B. Ground-Penetrating Radar (GPR) Results*:* GPR data were collected from the Site and analyzed for the presence of subsurface objects. The maximum depth of radar penetration was approximately 5 feet below grade. Analysis of the GPR data at the Site allowed the delineation of 8 possible UST locations at the Site. (Seven in the paved area to the south and 1 in front of the center garage bay.) The approximate perimeters of the USTs were marked with spray paint in the field and are called out on the attached Figure 1 and photographs. The presence of steel-reinforced concrete and other limitations may have affected the accuracy of the marked-out areas, therefore the orientations and number of USTs are estimated.

Oil Water Separator and Interior Floor Drains: A possible oil-water separator fed by floor drains was observed near the interior of the southern-most garage door. These were marked in the field with spray paint and are shown on the attached photographs.

C. Utility Locator Results: The RD8000 transmitter was connected to suspect piping at the Site. The path of the piping was marked in the field, and is shown on the attached Site photographs. Water and electrical piping were also traced and marked in the field.

Remote Fills: Two concrete-filled possible remote fill ports were observed in the sidewalk along E. 3rd Street. These were traced and found to terminate in the area of possible USTs in the southern paved area. These were marked with spray paint in the field and are called out on the attached Figure 1 and photographs

Vent Pipes: GeoSeek observed 2 possible vent pipes at the Site. The RD8000 transmitter was connected to each of the vent pipes observed and the signal was traced into the southern paved area in the vicinity of the possible marked USTs.

Pump Island: Evidence of a former pump island was observed in the southern paved area. This was marked with spray paint in the field and is called out on the attached Figure 1 and photographs

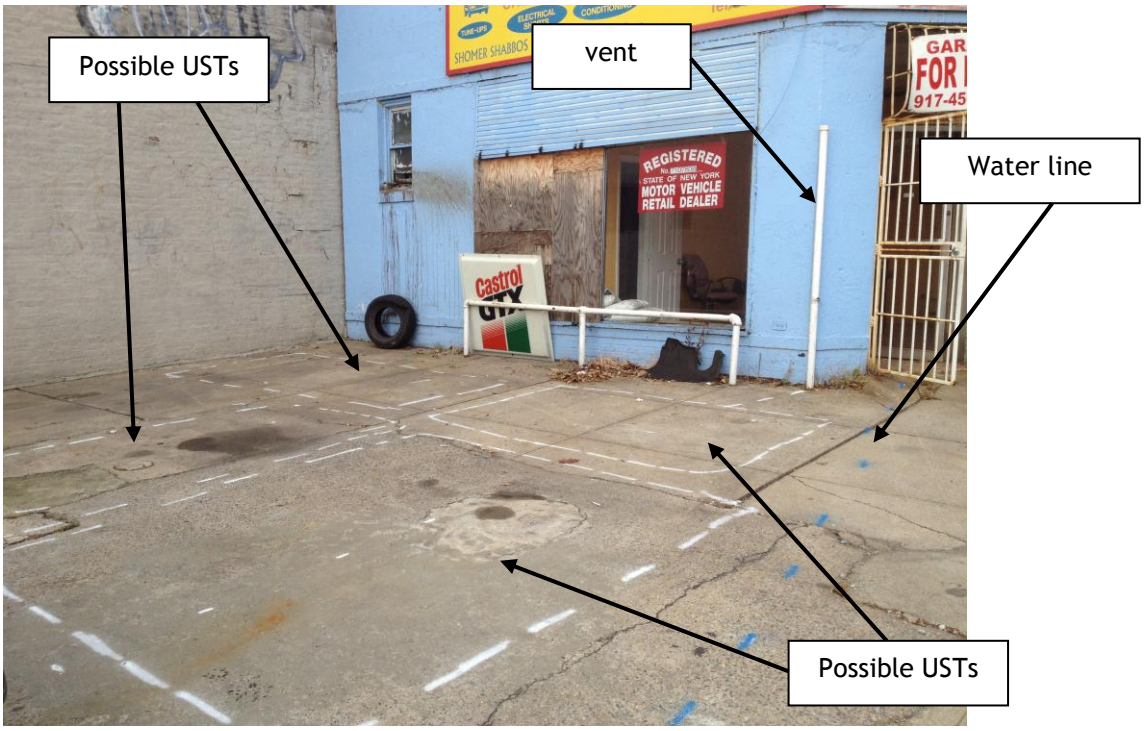
These results are based upon the interpretation of the geophysical data and visual observations at the Site, therefore, conclusive identification of any anomalous data would require intrusive investigation. If there are any questions regarding this report, please contact the undersigned at 732-505-0990.

This report has been prepared and is respectfully submitted by

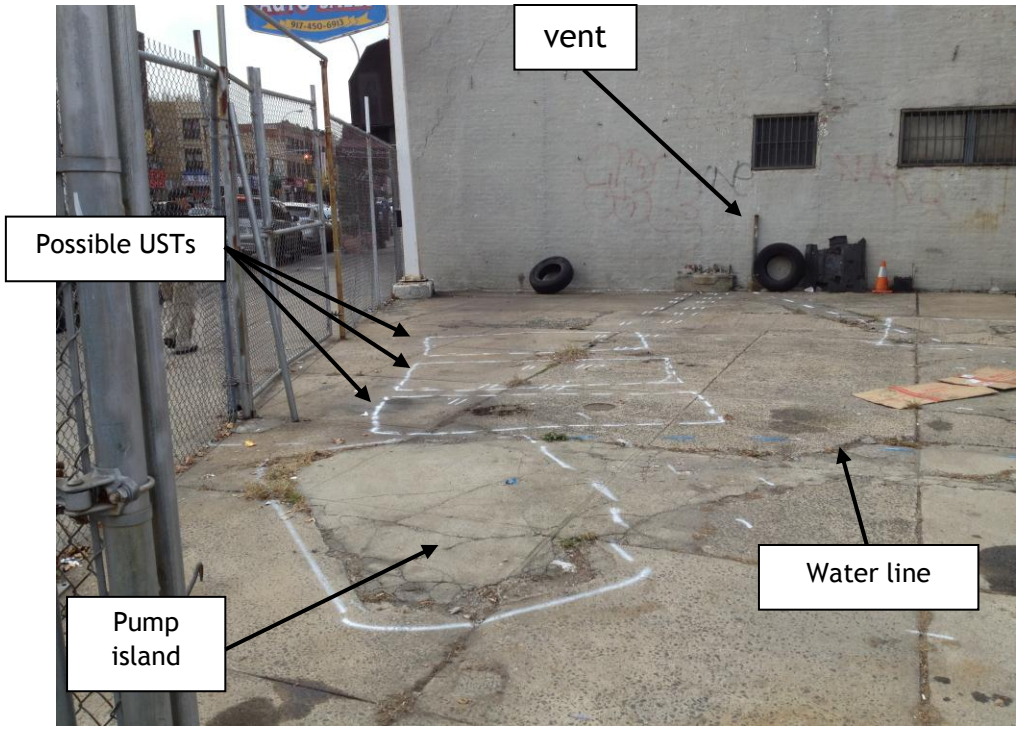
GEOSEEK LLC

Dru E. Wilbur, P.G.
President

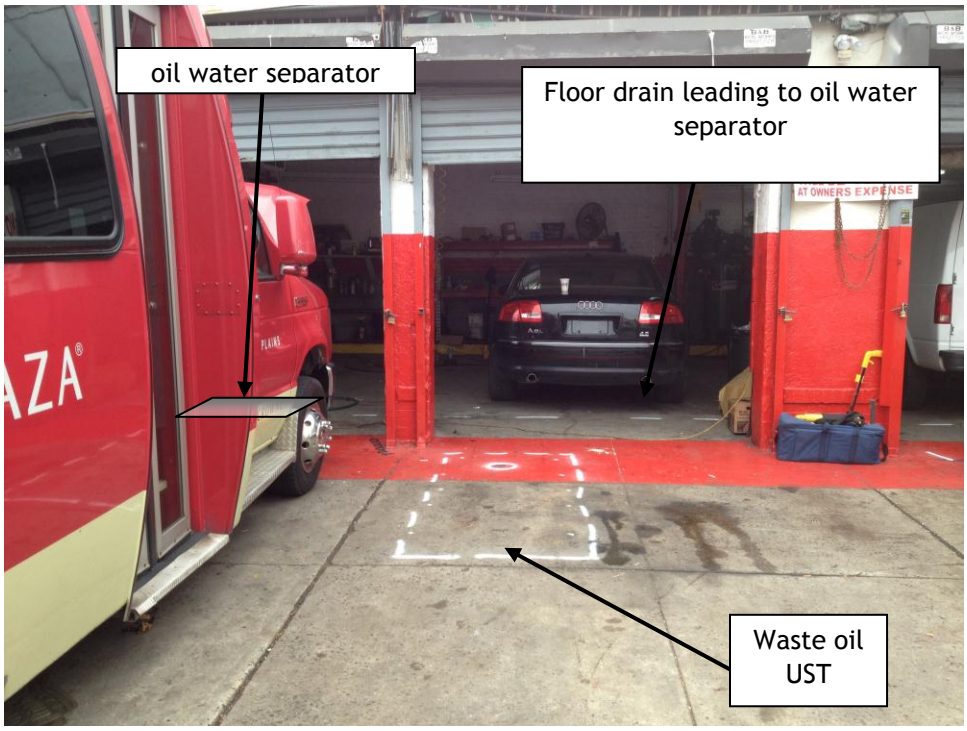
Site Photographs



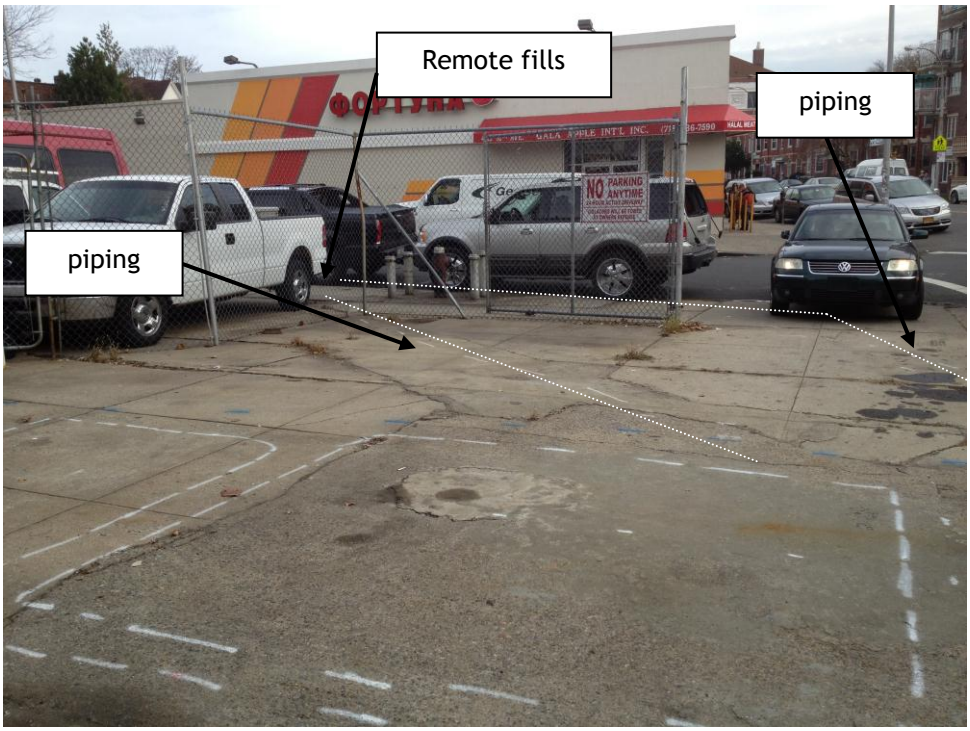
Photograph 1 of 4: Location of 4 possible USTs near southern side of building. Vent pipe and water line also shown.



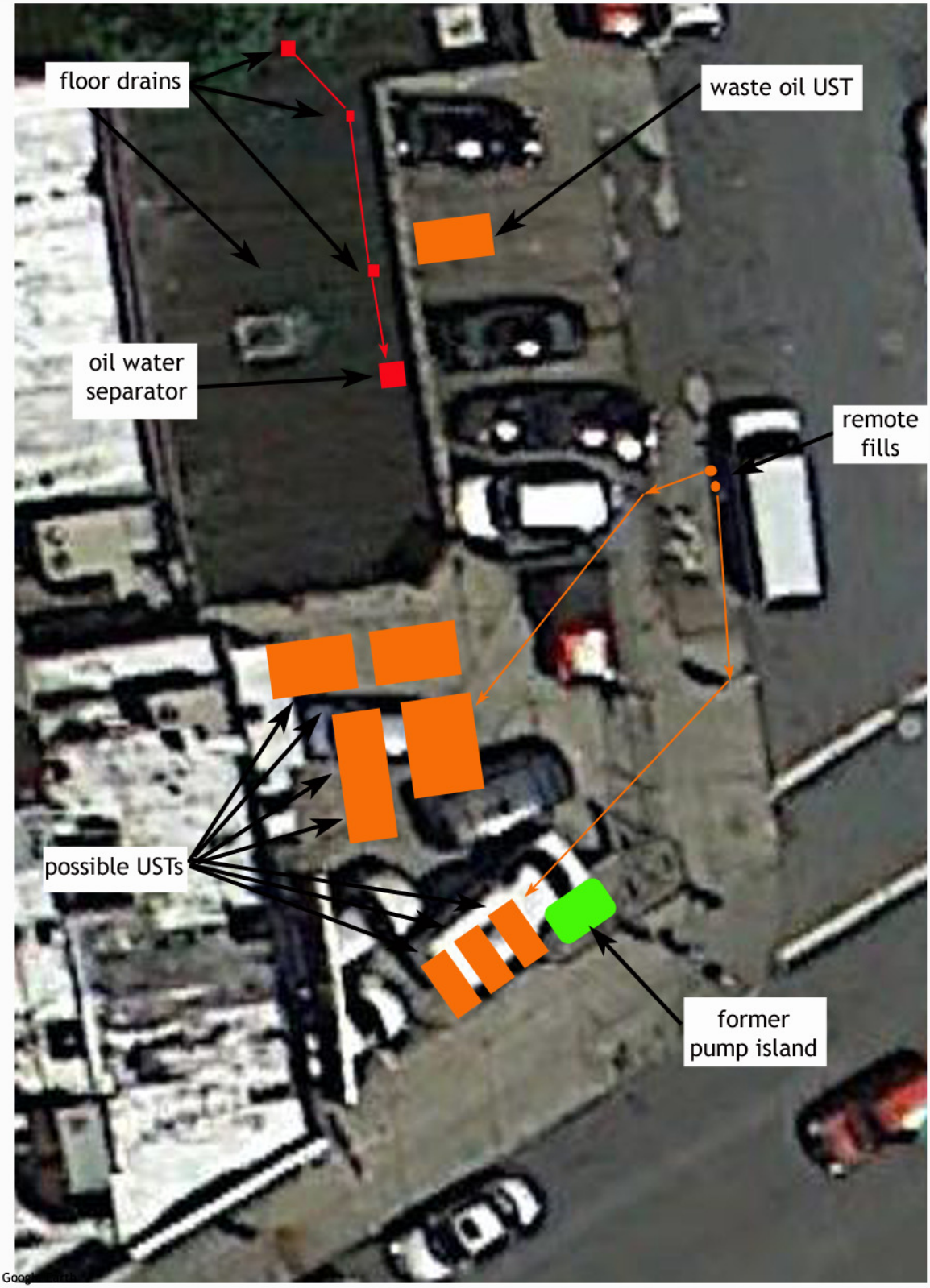
Photograph 2 of 4: Location of 3 possible USTs on 18th Ave. side of paved lot. Vent pipe, pump island and water line also shown.



Photograph 3 of 4: Location of waste oil UST and oil water separator.



Photograph 4 of 4: Location of remote fills and associated piping.



Aerial photograph from Google Earth

Prepared by

GeoSeek LLC

217 Henley Avenue
Pine Beach, NJ 08741

Figure 1
UST/Anomaly Location Map

4202 18th Avenue
Brooklyn, New York

GeoSeek Project 12177	for Peak Environmental Inc. 74 Main St., 2nd Fl. Woodbridge, New Jersey 07095	November 23, 2012

APPENDIX B

PROJECT: Shapiro Living Court	TOTAL DEPTH:
BORING NO.: SB-1	DRILLING METHOD: Direct Push (5' Split Spoons)
DATE: 1/4/2013	LAT:
	LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY	LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling	BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval	REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings	

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
1, 2, 3		SB-1	Concrete Brown Fine Clay with some silt. Slightly Moist. No Odor. Light Brown Sand with Gravel and Concrete, dry. No Odor.	0.0	3' Recovery
4			No Recovery		No Recovery
5, 6, 7, 8			Light Brown Coarse Sand with Small Pieces of Red and White Gravel, Dry, No Odor. Olive Green Coarse Sand, dry. No Odor. Light Brown Coarse Sand with Small Pieces of Red and White	0.0	3' Recovery
9			No Recovery		No Recovery
10, 11, 12, 13			Coarse Light Brown Sand with Gravel Fragments, Dry, No Odor. Gravel Layer Fine Dark Brown Sand with Gravel Fragments, Dry, No Odor.	0.0	3' Recovery
14			No Recovery		No Recovery
15, 16, 17, 18			Coarse Brown Sand with Grey and Red Gravel, Dry, No Odor.	0.0	3' Recovery
19			No Recovery		No Recovery
20, 21, 22, 23, 24			END OF BORING NO GW ENCOUNTERED NO TEMP WELL INSTALLED		

PROJECT: Shapiro Living Court	TOTAL DEPTH:
BORING NO.: SB-2	DRILLING METHOD: Direct Push (5' Split Spoons)
DATE: 1/4/2013	LAT:
	LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY	LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling	BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval	REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings	

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
			Concrete		
1			Coarse Brown Sand and Gravel, Dry, No Odor.	0.0	1.5' Recovery
2					
3			No Recovery		No Recovery
4					
5					
6			Coarse Brown Sand with Some Gravel, Dry, No Odor.	0.0	
7					4.0' Recovery
8			Fine Brown Sand with Red Brick and Gravel, Dry.	0.0	
9		SB-2			
10			No Recovery		No Recovery
11					
12			Fine Brown Sand with Red Clay and Brown Gravel.	0.0	4.0' Recovery
13					
14					
15			END OF BORING NO GW ENCOUNTERED, NO TEMP WELL INSTALLED		
16					
17					
18					
19					
20					
21					
22					
23					
24					

PROJECT: Shapiro Living Court	TOTAL DEPTH:
BORING NO.: SB-3	DRILLING METHOD: Direct Push (5' Split Spoons)
DATE: 1/4/2013	LAT:
	LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY	LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling	BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval	REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings	

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
1		SB-3	Concrete Grey Fine Clay with Some Silt, Dry, Petro Odor. Brown Clay with Some Silt, Dry, Petro Odor. Coarse Brown Sand with Red Streaks and Some Gravel, Dry, Petro Odor.	131	4' Recovery
2					
3					
4			No Recovery		
5			Brown Fine Clay, Dry, Petro Odor.	40	2' Recovery
6			Coarse Brown Sand with Some Gravel, Dry, Petro Odor.		
7			No Recovery		No Recovery
8					
9					
10			Coarse Brown Sand with Some Gravel, Dry, Petro Odor.	17.3	4' Recovery
11					
12					
13					
14			END OF BORING NO GW ENCOUNTERED NO TEMP WELL INSTALLED		
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

PEAK ENVIRONMENTAL INC	PROJECT: Shapiro Living Court	TOTAL DEPTH:
	BORING NO.: SB-4	DRILLING METHOD: Direct Push (5' Split Spoons)
	DATE: 1/4/2013	LAT:
		LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY		LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling		BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval		REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings		

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
			Concrete		
1			Brown Clay with Coarse Brown Sand and Some Gravel, Dry, No Odor.	0	2' Recovery
2					
3			No Recovery		No Recovery
4					
5			Coarse Brown Sand with Gravel. Layer of Red Stone at 6.0', Dry, No Odor.		
6				0	3' Recovery
7			Coarse Brown Sand with 1/2' White Gravel Layer at 7.5', Dry, No Odor.		
8					
9			No Recovery		No Recovery
10			Coarse Brown Sand with Gravel.		
11				0	3' Recovery
12			Coarse Brown Sand with 1/2' Fine Sand Layer at 12', Dry, No Odor.		
13		SB-4			
14			No Recovery		No Recovery
15			END OF BORING. NO GW ENCOUNTERED, NO TWP INSTALLED		
16					
17					
18					
19					
20					
21					
22					
23					
24					

PROJECT: Shapiro Living Court	TOTAL DEPTH:
BORING NO.: SB-5	DRILLING METHOD: Direct Push (5' Split Spoons)
DATE: 1/4/2013	LAT:
	LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY	LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling	BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval	REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings	

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
			Concrete		
1			Fine Brown Clay, Dry, No Odor.	0	2' Recovery
2			Coarse Light Brown Sand with Gravel, Dry, No Odor.		
3			No Recovery		No Recovery
4					
5			Coarse Brown Sand, Dry, No Odor.	0	4' Recovery
6					
7					
8			Chunks of White and Red Gravel. Shale at 9.0'. Dry, No Odor.		
9			No Recovery		No Recovery
10			Coarse Brown Sand with Some White and Red Gravel Fragments.	0	1.5' Recovery
11		SB-5			
12			No Recovery		No Recovery
13					
14					
15			END OF BORING. NO GW ENCOUNTERED, NO TWP INSTALLED		
16					
17					
18					
19					
20					
21					
22					
23					
24					

PROJECT: Shapiro Living Court	TOTAL DEPTH:
BORING NO.:	DRILLING METHOD: Direct Push (5' Split Spoons)
DATE: 1/4/2013	LAT:
	LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY	LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling	BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval	REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings	

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
			Concrete		
1			Fine Brown Clay, Dry, No Odor.	0	2' Recovery
2			Coarse Brown Sand with Gravel, Dry, No Odor.		
3			No Recovery		No Recovery
4					
5			Coarse Brown Sand with Some Silt and Gravel, Dry, No Odor.		
6			Coarse Brown Sand with Gravel. Layer of Cobbles at 7'. Dry, No Odor.	0	2.5' Recovery
7					
8			No Recovery		No Recovery
9					
10					
11			Coarse Brown Sand with Some Brown and White Gravel, Dry, No Odor.	0	2.5' Recovery
12		SB-6			
13			No Recovery		No Recovery
14					
15			END OF BORING. NO GW ENCOUNTERED, NO TWP INSTALLED		
16					
17					
18					
19					
20					
21					
22					
23					
24					

PROJECT: Shapiro Living Court	TOTAL DEPTH:
BORING NO.: SB-7	DRILLING METHOD: Direct Push (5' Split Spoons)
DATE: 1/4/2013	LAT:
	LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY	LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling	BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval	REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings	

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
			Concrete		
1		SB-7	Coarse Brown Sand with Some Clay and Gravel. Dry, Slight Petro Odor.	1.8	1.5' Recovery
2			END OF BORING. NO GW ENCOUNTERED, NO TWP INSTALLED		
3					
4					
5					
6					
7					
8					
9					
10					
11					
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14					
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16					
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23					
24					

PEAK ENVIRONMENTAL INC	PROJECT: Shapiro Living Court	TOTAL DEPTH:
	BORING NO.: SB-8	DRILLING METHOD: Direct Push (5' Split Spoons)
	DATE: 1/4/2013	LAT:
		LONG:
LOCATION: 4202 18th Avenue, Brooklyn, NY		LOGGED BY: J. Rizzo
DRILLING CONTRACTOR: Zebra Drilling		BORING DIA: 2"
SAMPLING METHOLOGY: Pid Impacts or Deepest 6" Interval		REMARKS:
BACKFILL MATERIAL AND METHOD: Field Cuttings		

DEPTH BGS (FT)	LITHOLOGY	SAMPLE DEPTH FT BGS	LITHOLOGY DISCRIPTION	VOLATILE ORGANIC VAPORS PID	NOTES
			Concrete		
1		SB-8	Coarse Brown Sand with Gravel and Concrete Fragments	1.3	1.5' Recovery
2			END OF BORING. NO GW ENCOUNTERED, NO TWP INSTALLED		
3					
4					
5					
6					
7					
8					
9					
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23					
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APPENDIX C

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

Peak Environmental Inc.
74 Main Street
2nd Floor
Woodbridge, NJ 07095

Project Name: **4202 18TH AVE.**
IAL Case Number: **E13-00167**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

Sample Summary

IAL Case No.

E13-00167

Client Peak Environmental Inc.

Project 4202 18TH AVE.

Received On 1/ 4/2013@18:00

Lab ID	Client Sample ID	Depth Top/Bottom	Sampling Time	Matrix	# of Container
00167-001	SB-1	5.5/6	1/ 4/2013@08:20	Soil	5
00167-002	SB-7	1/1.5	1/ 4/2013@11:55	Soil	5
00167-003	SB-8	1/1.5	1/ 4/2013@12:40	Soil	5

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on January 28, 2013

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicated analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument for that specific analysis.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received three (3) soil sample(s) from Peak Environmental Inc. (IAL SDG # E13-00167, Project: 4202 18TH AVE.) on January 4, 2013 for the analysis of:

(1) TCL VO + 15
(1) TCL BN + 15
(1) TCL PCB
(2) NJ-EPH-C40
(1) NJ-EPH-Fractionated
(1) TAL Metals

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by	1/25/13 Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00167

Volatiles By 8260B

Batch ID: F130118-01	Matrix: Soil

QC
- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E13-00167
- All samples were analyzed within holding time.
- 00167-002 was run straight.

1/23/13

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00167

Semivolatiles By **8270C/625**

Batch ID: 130118-02	**Matrix:** Soil

QC

- Calibration Curve met criteria.
- Internal standard recovery met criteria.
- Surrogate recovery met criteria.
- Method blank met criteria.
- Laboratory control sample recovery met criteria.
- Matrix Spike / Matrix Spike Duplicate recoveries did not meet criteria.
- MS and MSD failed due to high concentration of target compounds.

E13-00167

- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

JAM 1/22/13

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00167

PCB By 8082

Batch ID: 130118-06	**Matrix: Soil**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 002

E13-00167

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 00167 -002 in batch 130118-06.

gs 1-21-13

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00167

NJ-EPH By Method 10.08 Rev 3

Batch ID: 130108-04	Matrix: SOIL

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- MS Percent Recovery met QC criteria.
- RPD between the Sample/Duplicate met QC criteria.

E13-00167

- All samples were extracted within holding time.
- All samples were fractionated within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- All samples were analyzed straight.

1/17/13

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00167

NJ-EPH-C40 By Method 10.08 Rev 3

Batch ID: 130108-02	Matrix: Soil

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- MS Percent Recovery met QC criteria.
- RPD between the Sample/Duplicate met QC criteria.

E13-00167

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- The samples were run straight.

1/11/13

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00167

METAL By Method 6020

Matrix: SOIL	Batch ID: 025A

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- Laboratory Control Sample Recovery met criteria.
- Matrix Spike Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E13-00167
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

1/23/13

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Peak Environmental Inc.
Project: 4202 18TH AVE.
Lab Case No.: E13-00167

Lab ID:	00167-001		00167-002		00167-003	
Client ID:	SB-1		SB-7		SB-8	
Depth:	5.5/6		1/1.5		1/1.5	
Matrix:	Soil		Soil		Soil	
Sampled Date	1/4/13		1/4/13		1/4/13	
PARAMETER(Units)	Conc Q	MDL	Conc Q	MDL	Conc Q	MDL
Volatiles (Units)	*(mg/Kg-ppm)*		*(mg/Kg-ppm)*		*(mg/Kg-ppm)*	
Tetrachloroethene	~	~	0.00161	0.000273	~	~
TOTAL VO's:	~	~	0.00161		~	~
TOTAL TIC's:	~	~	ND		~	~
TOTAL VO's & TIC's:	~	~	0.00161		~	~
Semivolatiles - BN (Units)	*(mg/Kg-ppm)*		*(mg/Kg-ppm)*		*(mg/Kg-ppm)*	
TOTAL BN'S:	~	~	ND		~	~
TOTAL TIC's:	~	~	1.03		~	~
TOTAL BN'S & TIC's:	~	~	1.03		~	~
PCB's (Units)	*(mg/Kg-ppm)*		*(mg/Kg-ppm)*		*(mg/Kg-ppm)*	
Aroclor-1016	~	~	ND	0.017	~	~
Aroclor-1221	~	~	ND	0.017	~	~
Aroclor-1232	~	~	ND	0.017	~	~
Aroclor-1242	~	~	ND	0.017	~	~
Aroclor-1248	~	~	ND	0.017	~	~
Aroclor-1254	~	~	ND	0.017	~	~
Aroclor-1260	~	~	ND	0.017	~	~
Aroclor-1262	~	~	ND	0.017	~	~
Aroclor-1268	~	~	ND	0.017	~	~
PCBs	~	~	ND	0.017	~	~
NJ-EPH-C40 (Units)	*(mg/Kg-ppm)*		*(mg/Kg-ppm)*		*(mg/Kg-ppm)*	
C9-C40	ND	9.15	~	~	ND	10.3
NJ-EPH-Fractionated (Units)	*(mg/Kg-ppm)*		*(mg/Kg-ppm)*		*(mg/Kg-ppm)*	
C9-C12 Aliphatics	~	~	ND	2.12	~	~
C12-C16 Aliphatics	~	~	62.1	2.12	~	~
C16-C21 Aliphatics	~	~	570	2.12	~	~
C21-C40 Aliphatics	~	~	2170	4.25	~	~
Total Aliphatics	~	~	2800	4.25	~	~
C10-C12 Aromatics	~	~	ND	2.12	~	~
C12-C16 Aromatics	~	~	ND	2.12	~	~
C16-C21 Aromatics	~	~	238	3.19	~	~
C21-C36 Aromatics	~	~	1150	4.25	~	~
Total Aromatics	~	~	1390	4.25	~	~
Total NJ-EPH	~	~	4190	4.25	~	~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Peak Environmental Inc.
Project: 4202 18TH AVE.
Lab Case No.: E13-00167

Lab ID:	00167-001			00167-002			00167-003		
Client ID:	SB-1			SB-7			SB-8		
Depth:	5.5/6			1/1.5			1/1.5		
Matrix:	Soil			Soil			Soil		
Sampled Date	1/4/13			1/4/13			1/4/13		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (Units)	*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*		
Aluminum	~		~	11800		5.98	~		~
Antimony	~		~	ND		0.299	~		~
Arsenic	~		~	3.85		0.299	~		~
Barium	~		~	58.3		2.99	~		~
Beryllium	~		~	0.690		0.239	~		~
Cadmium	~		~	0.199	J	0.149	~		~
Calcium	~		~	1170		29.9	~		~
Chromium	~		~	22.9		0.598	~		~
Cobalt	~		~	8.13		0.598	~		~
Copper	~		~	28.1		0.598	~		~
Iron	~		~	16700		14.9	~		~
Lead	~		~	130		0.149	~		~
Magnesium	~		~	3770		14.9	~		~
Manganese	~		~	199		0.299	~		~
Mercury	~		~	0.018		0.00667	~		~
Nickel	~		~	30.4		0.598	~		~
Potassium	~		~	1220		14.9	~		~
Selenium	~		~	ND		1.20	~		~
Silver	~		~	ND		0.149	~		~
Sodium	~		~	129		29.9	~		~
Thallium	~		~	ND		0.149	~		~
Vanadium	~		~	29.2		0.598	~		~
Zinc	~		~	60.7		2.39	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Analyzed: 01/18/2013
Data file: F1836.D

GC/MS Column: DB-624
Sample wt/vol: 5.2g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00105	0.00042
Chloromethane	ND		0.00105	0.000431
Vinyl chloride	ND		0.00105	0.000504
Bromomethane	ND		0.0021	0.000368
Chloroethane	ND		0.0021	0.000473
Trichlorofluoromethane	ND		0.00105	0.000431
1,1-Dichloroethene	ND		0.00105	0.000525
Acetone	ND		0.00525	0.000735
Carbon disulfide	ND		0.00105	0.000357
Methylene chloride	ND		0.0021	0.00208
trans-1,2-Dichloroethene	ND		0.00105	0.000452
Methyl tert-butyl ether (MTBE)	ND		0.00105	0.000242
1,1-Dichloroethane	ND		0.00105	0.000284
cis-1,2-Dichloroethene	ND		0.00105	0.000326
2-Butanone (MEK)	ND		0.0021	0.000389
Bromochloromethane	ND		0.00105	0.000252
Chloroform	ND		0.0021	0.000305
1,1,1-Trichloroethane	ND		0.00105	0.000347
Carbon tetrachloride	ND		0.00105	0.000431
1,2-Dichloroethane (EDC)	ND		0.00105	0.000221
Benzene	ND		0.00105	0.000252
Trichloroethene	ND		0.00105	0.000336
1,2-Dichloropropane	ND		0.00105	0.000231
1,4-Dioxane	ND		0.210	0.016
Bromodichloromethane	ND		0.00105	0.000336
cis-1,3-Dichloropropene	ND		0.00105	0.000273
4-Methyl-2-pentanone (MIBK)	ND		0.00105	0.000252

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Analyzed: 01/18/2013
Data file: F1836.D

GC/MS Column: DB-624
Sample wt/vol: 5.2g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00105	0.000263
trans-1,3-Dichloropropene	ND		0.00105	0.000273
1,1,2-Trichloroethane	ND		0.00105	0.00021
Tetrachloroethene	0.00161		0.00105	0.000273
2-Hexanone	ND		0.00105	0.000378
Dibromochloromethane	ND		0.00105	0.000231
1,2-Dibromoethane (EDB)	ND		0.00105	0.000221
Chlorobenzene	ND		0.00105	0.000231
Ethylbenzene	ND		0.00105	0.000326
Total Xylenes	ND		0.0021	0.0011
Styrene	ND		0.00105	0.000315
Bromoform	ND		0.00105	0.000336
Isopropylbenzene	ND		0.00105	0.000431
1,1,2,2-Tetrachloroethane	ND		0.0021	0.000242
1,3-Dichlorobenzene	ND		0.00105	0.000326
1,4-Dichlorobenzene	ND		0.00105	0.000326
1,2-Dichlorobenzene	ND		0.0021	0.000378
1,2-Dibromo-3-chloropropane	ND		0.00105	0.000525
1,2,4-Trichlorobenzene	ND		0.0021	0.000546
1,2,3-Trichlorobenzene	ND		0.0021	0.000504
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00105	0.000578
Methyl acetate	ND		0.00525	0.000609
Cyclohexane	ND		0.00525	0.000441
Methylcyclohexane	ND		0.00105	0.000525
1,3-Dichloropropene (cis- and trans-)	ND		0.00105	0.000273

Total Target Compounds (52): 0.00161

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Analyzed: 01/18/2013
Date File: F1836.D

GC/MS Column: DB-624
Sample wt/vol: 5.2g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E12-00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2355.D

GC/MS Column: DB-5
Sample wt/vol: 15.6g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.035	0.013
Bis(2-chloroethyl) ether	ND		0.035	0.024
Bis(2-chloroisopropyl) ether	ND		0.035	0.013
N-Nitrosodi-n-propylamine	ND		0.035	0.023
Acetophenone	ND		0.035	0.012
Hexachloroethane	ND		0.035	0.013
Nitrobenzene	ND		0.035	0.031
Isophorone	ND		0.035	0.023
Bis(2-chloroethoxy) methane	ND		0.035	0.029
Naphthalene	ND		0.035	0.027
4-Chloroaniline	ND		0.035	0.033
Hexachlorobutadiene	ND		0.035	0.034
Caprolactam	ND		0.035	0.022
2-Methylnaphthalene	ND		0.035	0.029
Hexachlorocyclopentadiene	ND		0.035	0.011
1,1'-Biphenyl	ND		0.035	0.010
2-Chloronaphthalene	ND		0.035	0.033
2-Nitroaniline	ND		0.035	0.021
Dimethyl phthalate	ND		0.035	0.010

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E12-00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2355.D

GC/MS Column: DB-5
Sample wt/vol: 15.6g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.035	0.020
Acenaphthylene	ND		0.035	0.024
3-Nitroaniline	ND		0.035	0.010
Acenaphthene	ND		0.035	0.028
2,4-Dinitrotoluene	ND		0.035	0.030
Dibenzofuran	ND		0.035	0.012
Diethyl phthalate	ND		0.035	0.026
Fluorene	ND		0.035	0.019
4-Chlorophenyl phenyl ether	ND		0.035	0.016
4-Nitroaniline	ND		0.035	0.022
1,2,4,5-Tetrachlorobenzene	ND		0.035	0.010
N-Nitrosodiphenylamine	ND		0.035	0.015
4-Bromophenyl phenyl ether	ND		0.035	0.020
Hexachlorobenzene	ND		0.035	0.025
Atrazine	ND		0.035	0.024
Phenanthrene	ND		0.035	0.023
Anthracene	ND		0.035	0.034
Carbazole	ND		0.035	0.020
Di-n-butyl phthalate	ND		0.035	0.025
Fluoranthene	ND		0.035	0.014
Pyrene	ND		0.035	0.026
Butyl benzyl phthalate	ND		0.035	0.022
3,3'-Dichlorobenzidine	ND		0.035	0.024
Benzo[a]anthracene	ND		0.035	0.034
Chrysene	ND		0.035	0.024
Bis(2-ethylhexyl) phthalate	ND		0.035	0.017
Di-n-octyl phthalate	ND		0.035	0.014
Benzo[b]fluoranthene	ND		0.035	0.018
Benzo[k]fluoranthene	ND		0.035	0.013
Benzo[a]pyrene	ND		0.035	0.019
Indeno[1,2,3-cd]pyrene	ND		0.035	0.018
Dibenz[a,h]anthracene	ND		0.035	0.021
Benzo[g,h,i]perylene	ND		0.035	0.011
Dinitrotoluene (2,4- and 2,6-)	ND		0.035	0.030

Total Target Compounds (53): 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E12-00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Date File: C2355.D

GC/MS Column: DB-5
Sample wt/vol: 15.6g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown SV	0.241	4.04
	Unknown SV	0.328	4.08
	Unknown SV	0.461	4.14

Total TICs = 1.03

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: 00167-002
Client ID: SB-7/1-1.5
Date Received: 01/04/2013
Date Extracted: 01/18/2013
Date Analyzed: 01/18/2013
Data file: R6912.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.017
Aroclor-1221	ND		0.044	0.017
Aroclor-1232	ND		0.044	0.017
Aroclor-1242	ND		0.044	0.017
Aroclor-1248	ND		0.044	0.017
Aroclor-1254	ND		0.044	0.017
Aroclor-1260	ND		0.044	0.017
Aroclor-1262	ND		0.044	0.017
Aroclor-1268	ND		0.044	0.017
PCBs	ND		0.044	0.017

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-C40

Lab ID: 00167-001
Client ID: SB-1/5.5
Date Received: 01/04/2013
Date Extracted: 01/08/2013
Date Analyzed: 01/10/2013
Data file: TB0491.D

GC Column: RTX-5
Sample wt/vol: 10.43g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 5.70

Compound	Concentration	Q	RL	MDL
C9-C40	ND		36.6	9.15

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-C40

Lab ID: 00167-003
Client ID: SB-8/1-1
Date Received: 01/04/2013
Date Extracted: 01/08/2013
Date Analyzed: 01/10/2013
Data file: TB0492.D

GC Column: RTX-5
Sample wt/vol: 10.07g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 12.9

Compound	Concentration	Q	RL	MDL
C9-C40	ND		41.0	10.3

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-Fractionated

Lab ID: 00167-002
Client ID: SB-7/1-1
Date Received: 01/04/2013
Date Extracted: 01/11/2013
Ali Date Analyzed: 01/13/2013
Data file: U2546.D
Dilution Factor: 1

GC Column: HP-5
Sample wt/vol: 5.13g
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 8.20
Aro Date Analyzed: 01/13/2013
Data file: UB0731.D
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
C9-C12 Aliphatics	ND		12.7	2.12
C12-C16 Aliphatics	62.1		8.49	2.12
C16-C21 Aliphatics	570		12.7	2.12
C21-C40 Aliphatics	2170		42.5	4.25
Total Aliphatics	2800		42.5	4.25
C10-C12 Aromatics	ND		8.49	2.12
C12-C16 Aromatics	ND		12.7	2.12
C16-C21 Aromatics	238		21.2	3.19
C21-C36 Aromatics	1150		34.0	4.25
Total Aromatics	1390		34.0	4.25
Total NJ-EPH	4190		42.5	4.25

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: PEAK/4202 18TH AVE.

Lab ID: E13-00167-002
Client ID: SB-7
Date Collected: 1/4/2013
Date Received: 1/4/2013
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 8.20
Batch #: 025

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	11800		1	12.0	5.98	01/21/13	6020
Antimony	ND		1	1.20	0.299	01/21/13	6020
Arsenic	3.85		1	0.598	0.299	01/21/13	6020
Barium	58.3		1	12.0	2.99	01/21/13	6020
Beryllium	0.690		1	0.418	0.239	01/21/13	6020
Cadmium	0.199	J	1	0.598	0.149	01/21/13	6020
Calcium	1170		1	59.8	29.9	01/21/13	6020
Chromium	22.9		1	2.39	0.598	01/21/13	6020
Cobalt	8.13		1	2.39	0.598	01/21/13	6020
Copper	28.1		1	2.39	0.598	01/21/13	6020
Iron	16700		1	29.9	14.9	01/21/13	6020
Lead	130		1	0.598	0.149	01/23/13	6020
Magnesium	3770		1	59.8	14.9	01/21/13	6020
Manganese	199		1	1.20	0.299	01/21/13	6020
Mercury	0.018		1	0.014	0.00667	01/22/13	7471A
Nickel	30.4		1	1.20	0.598	01/21/13	6020
Potassium	1220		1	59.8	14.9	01/21/13	6020
Selenium	ND		1	2.39	1.20	01/21/13	6020
Silver	ND		1	0.598	0.149	01/21/13	6020
Sodium	129		1	120	29.9	01/21/13	6020
Thallium	ND		1	0.598	0.149	01/23/13	6020
Vanadium	29.2		1	2.39	0.598	01/21/13	6020
Zinc	60.7		1	2.39	2.39	01/21/13	6020

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/18/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS130118-01	SOIL	F1832.D	79	98	97
LCSS130118-01	SOIL	F1833.D	98	102	99
00167-002	SOIL	F1836.D	86	98	97
00475-001	SOIL	F1837.D	79	99	98
00475-002	SOIL	F1838.D	79	98	99
00475-003	SOIL	F1839.D	80	99	98
00475-004	SOIL	F1840.D	78	100	100
00475-005	SOIL	F1841.D	81	99	99
00475-006	SOIL	F1842.D	81	100	99
00427-001	SOIL	F1843.D	82	98	99
00500-002	SOIL	F1844.D	87	100	101
00500-004	SOIL	F1845.D	82	100	100
00500-006	SOIL	F1846.D	90	100	100
00500-009	SOIL	F1847.D	87	100	101
00500-015	SOIL	F1848.D	81	100	100
00475-001MS	SOIL	F1849.D	100	103	99
00475-001MSD	SOIL	F1850.D	98	104	100

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	55-153	37-158
SMC2 = Toluene-d8	50 ppb	56-151	45-154
SMC3 = Bromofluorobenzene	50 ppb	67-140	46-150

Column to be used to flag recovery values

FORM 2

INTEGRATED ANALYTICAL LABORATORIES

8260LCS

LCS ACCURACY REPORT

Lab ID: LCSS130118-01
Date Received:
Date Analyzed: 01/18/2013
LCS Data file: F1833.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.00	61.8	124
Chloromethane	50.0	0.00	48.6	97
Vinyl chloride	50.0	0.00	50.6	101
Bromomethane	50.0	0.00	46.6	93
Chloroethane	50.0	0.00	48.2	96
Trichlorofluoromethane	50.0	0.00	48.3	97
Acrolein	150	0.00	130.7	87
1,1-Dichloroethene	50.0	0.00	48.4	97
Acetone	50.0	0.00	45.2	90
Carbon disulfide	50.0	0.00	49.2	98
Vinyl acetate	50.0	0.00	51.9	104
Methylene chloride	50.0	0.00	45.2	90
Acrylonitrile	150.0	0.00	155.5	104
tert-Butyl alcohol (TBA)	100.0	0.00	89.8	90
trans-1,2-Dichloroethene	50.0	0.00	49.8	100
Methyl tert-butyl ether (MTBE)	50.0	0.00	46.7	93
1,1-Dichloroethane	50.0	0.00	50.5	101
Diisopropyl ether (DIPE)	50.0	0.00	49.1	98
cis-1,2-Dichloroethene	50.0	0.00	50.1	100
2,2-Dichloropropane	50.0	0.00	47.4	95
2-Butanone (MEK)	50.0	0.00	50.6	101
Bromochloromethane	50.0	0.00	48.2	96
Chloroform	50.0	0.00	49.4	99
1,1,1-Trichloroethane	50.0	0.00	52.3	105
Carbon tetrachloride	50.0	0.00	55.0	110
1,1-Dichloropropene	50.0	0.00	54.6	109
1,2-Dichloroethane (EDC)	50.0	0.00	49.9	100
Benzene	50.0	0.00	51.1	102
Trichloroethene	50.0	0.00	52.8	106
1,2-Dichloropropane	50.0	0.00	52.1	104
Dibromomethane	50.0	0.00	49.5	99
1,4-Dioxane	1500	0.00	1361	91
Bromodichloromethane	50.0	0.00	53.7	107
2-Chloroethyl vinyl ether	50.0	0.00	58.4	117
cis-1,3-Dichloropropene	50.0	0.00	57.4	115
4-Methyl-2-pentanone (MIBK)	50.0	0.00	50.8	102
Toluene	50.0	0.00	53.3	107
trans-1,3-Dichloropropene	50.0	0.00	57.1	114
1,1,2-Trichloroethane	50.0	0.00	51.8	104
Tetrachloroethene	50.0	0.00	54.3	109
1,3-Dichloropropane	50.0	0.00	54.8	110

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130118-01
Date Received:
Date Analyzed: 01/18/2013
LCS Data file: F1833.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.
2-Hexanone	50.0	0.00	54.1	108
Dibromochloromethane	50.0	0.00	53.5	107
1,2-Dibromoethane (EDB)	50.0	0.00	54.6	109
Chlorobenzene	50.0	0.00	50.7	101
1,1,1,2-Tetrachloroethane	50.0	0.00	53.3	107
Ethylbenzene	50.0	0.00	51.9	104
m,p-Xylene	100.0	0.00	103.0	103
o-Xylene	50.0	0.00	50.7	101
Styrene	50.0	0.00	52.1	104
Bromoform	50.0	0.00	46.8	94
Isopropylbenzene	50.0	0.00	52.0	104
1,1,2,2-Tetrachloroethane	50.0	0.00	48.4	97
Bromobenzene	50.0	0.00	48.5	97
1,2,3-Trichloropropane	50.0	0.00	46.8	94
n-Propylbenzene	50.0	0.00	51.7	103
2-Chlorotoluene	50.0	0.00	49.1	98
1,3,5-Trimethylbenzene	50.0	0.00	51.2	102
4-Chlorotoluene	50.0	0.00	49.2	98
tert-Butylbenzene	50.0	0.00	52.3	105
1,2,4-Trimethylbenzene	50.0	0.00	49.4	99
sec-Butylbenzene	50.0	0.00	51.7	103
1,3-Dichlorobenzene	50.0	0.00	47.1	94
4-Isopropyltoluene	50.0	0.00	51.0	102
1,4-Dichlorobenzene	50.0	0.00	46.8	94
n-Butylbenzene	50.0	0.00	51.2	102
1,2-Dichlorobenzene	50.0	0.00	47.5	95
1,2-Dibromo-3-chloropropane	50.0	0.00	48.4	97
1,2,4-Trichlorobenzene	50.0	0.00	48.2	96
Hexachlorobutadiene	50.0	0.00	47.5	95
Naphthalene	50.0	0.00	50.1	100
1,2,3-Trichlorobenzene	50.0	0.00	46.7	93
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.00	46.9	94
Methyl acetate	50.0	0.00	42.9	86
Cyclohexane	50.0	0.00	50.4	101
Methylcyclohexane	50.0	0.00	51.7	103

	Aqueous	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits
Up to 10% of the compounds may be out , but must be within 40-160%

INTEGRATED ANALYTICAL LABORATORIES

8260MS/MSD **MS/MSD SPIKE REPORT**

Lab ID: 00475-001
Client ID: S-1/9.5-10.0
Date Received:
Date Analyzed: 01/18/2013
MS Data file: F1849.D
MSD Data file: F1850.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50	0.0	64.0	128		63.0	126		2	
Chloromethane	50	0.0	57.9	116		55.7	111		4	
Vinyl chloride	50	0.0	57.1	114		56.7	113		1	
Bromomethane	50	0.0	57.4	115		57.3	115		0	
Chloroethane	50	0.0	58.4	117		57.8	116		1	
Trichlorofluoromethane	50	0.0	55.9	112		55.3	111		1	
Acrolein	150	0.0	186	124		157	105		17	
1,1-Dichloroethene	50	0.0	54.6	109		53.9	108		1	
Acetone	50	0.0	51.9	104		49.1	98		6	
Carbon disulfide	50	0.0	56.1	112		55.5	111		1	
Vinyl acetate	50	0.0	48.6	97		47.3	95		3	
Methylene chloride	50	0.0	53.8	108		52.5	105		2	
Acrylonitrile	150	0.0	192	128		171	114		12	
tert-Butyl alcohol (TBA)	100	0.0	89.3	89		88.5	89		1	
trans-1,2-Dichloroethene	50	0.0	51.6	103		50.2	100		3	
Methyl tert-butyl ether (MTE	50	0.0	49.7	99		48.7	97		2	
1,1-Dichloroethane	50	0.0	50.9	102		49.5	99		3	
Diisopropyl ether (DIPE)	50	0.0	51.4	103		50.4	101		2	
cis-1,2-Dichloroethene	50	0.0	51.5	103		49.9	100		3	
2,2-Dichloropropane	50	0.0	54.2	108		55.7	111		3	
2-Butanone (MEK)	50	0.0	47.5	95		43.6	87		9	
Bromochloromethane	50	0.0	49.7	99		48.7	97		2	
Chloroform	50	0.0	51.2	102		49.8	100		3	
1,1,1-Trichloroethane	50	0.0	53.6	107		53.7	107		0	
Carbon tetrachloride	50	0.0	53.7	107		56.1	112		4	
1,1-Dichloropropene	50	0.0	51.3	103		50.2	100		2	
1,2-Dichloroethane (EDC)	50	0.0	49.3	99		46.9	94		5	
Benzene	50	0.0	50.9	102		49.9	100		2	
Trichloroethene	50	3.1	51.2	96		49.9	94		3	
1,2-Dichloropropane	50	0.0	50.6	101		49.6	99		2	
Dibromomethane	50	0.0	48.1	96		46.8	94		3	
1,4-Dioxane	1,500	0.0	1328	89		1564	104		16	
Bromodichloromethane	50	0.0	51.0	102		51.1	102		0	
2-Chloroethyl vinyl ether	50	0.0	47.1	94		46.1	92		2	
cis-1,3-Dichloropropene	50	0.0	49.6	99		48.9	98		1	
4-Methyl-2-pentanone (MIBI	50	0.0	49.6	99		47.6	95		4	
Toluene	50	0.0	49.9	100		49.6	99		1	
trans-1,3-Dichloropropene	50	0.0	47.7	95		47.7	95		0	
1,1,2-Trichloroethane	50	0.0	49.2	98		47.8	96		3	
Tetrachloroethene	50	0.0	50.2	100		49.6	99		1	
1,3-Dichloropropane	50	0.0	49.0	98		48.1	96		2	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 00475-001
Client ID: S-1/9.5-10.0
Date Received:
Date Analyzed: 01/18/2013
MS Data file: F1849.D
MSD Data file: F1850.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50	0.00	47.5	95		46.4	93		2	
Dibromochloromethane	50	0.00	47.4	95		48.4	97		2	
1,2-Dibromoethane (EDB)	50	0.00	49.7	99		48.0	96		3	
Chlorobenzene	50	0.00	48.1	96		46.7	93		3	
1,1,1,2-Tetrachloroethane	50	0.00	54.3	109		54.1	108		0	
Ethylbenzene	50	0.00	51.1	102		49.8	100		3	
m,p-Xylene	100	0.00	101.2	101		98.6	99		3	
o-Xylene	50	0.00	51.9	104		50.5	101		3	
Styrene	50	0.00	50.5	101		49.3	99		2	
Bromoform	50	0.00	53.5	107		47.0	94		13	
Isopropylbenzene	50	0.00	52.8	106		51.1	102		3	
1,1,2,2-Tetrachloroethane	50	0.00	48.7	97		47.3	95		3	
Bromobenzene	50	0.00	48.3	97		47.2	94		2	
1,2,3-Trichloropropane	50	0.00	47.0	94		45.7	91		3	
n-Propylbenzene	50	0.00	51.2	102		49.9	100		3	
2-Chlorotoluene	50	0.00	50.5	101		48.7	97		4	
1,3,5-Trimethylbenzene	50	0.00	52.6	105		50.8	102		3	
4-Chlorotoluene	50	0.00	49.4	99		47.2	94		5	
tert-Butylbenzene	50	0.00	53.5	107		51.8	104		3	
1,2,4-Trimethylbenzene	50	0.00	50.8	102		49.3	99		3	
sec-Butylbenzene	50	0.00	52.0	104		50.9	102		2	
1,3-Dichlorobenzene	50	0.00	47.7	95		45.7	91		4	
4-Isopropyltoluene	50	0.00	51.4	103		49.8	100		3	
1,4-Dichlorobenzene	50	0.00	46.9	94		45.2	90		4	
n-Butylbenzene	50	0.00	51.1	102		49.2	98		4	
1,2-Dichlorobenzene	50	0.00	49.8	100		48.2	96		3	
1,2-Dibromo-3-chloropropan	50	0.00	45.8	92		48.5	97		6	
1,2,4-Trichlorobenzene	50	0.00	48.2	96		47.2	94		2	
Hexachlorobutadiene	50	0.00	47.5	95		48.7	97		2	
Naphthalene	50	0.00	50.2	100		50.0	100		0	
1,2,3-Trichlorobenzene	50	0.00	45.9	92		44.8	90		2	
1,1,2-Trichloro-1,2,2-trifluor	50	0.00	54.7	109		53.9	108		1	
Methyl acetate	50	0.00	52.2	104		49.9	100		5	
Cyclohexane	50	0.00	52.9	106		52.6	105		1	
Methylcyclohexane	50	0.00	53.6	107		53.1	106		1	

	Aqueous	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

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

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F1832.D Instrument ID: MSD_F

Date Analyzed: 01/18/2013 Time Analyzed: 12:17

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
LCS-50PPB	LCSS130118-01	01/18/2013	12:48
SB-7/1-1.5	00167-002	01/18/2013	14:19
S-1/9.5-10.0	00475-001	01/18/2013	14:49
S-2/9.5-10.0	00475-002	01/18/2013	15:19
S-3	00475-003	01/18/2013	15:49
S-4	00475-004	01/18/2013	16:19
S-5	00475-005	01/18/2013	16:50
S-6	00475-006	01/18/2013	17:26
CENTERLINE_1	00427-001	01/18/2013	17:56
AEI-B1	00500-002	01/18/2013	18:26
AEI-B2	00500-004	01/18/2013	18:56
AEI-B3	00500-006	01/18/2013	19:26
AEI-B4	00500-009	01/18/2013	19:56
AEI-B6	00500-015	01/18/2013	20:27
MS	00475-001MS	01/18/2013	20:57
MSD	00475-001MSD	01/18/2013	21:26

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1717.D BFB Injection Date: 01/15/2013

Inst ID: MSD_F BFB Injection Time: 9:56

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.2			
75	30.0 - 60.0% of mass 95	48.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.8	(	1.0	)1
174	Great than 50.0% of mass 95	77.6			
175	5.0 - 9.0% of mass 174	5.9	(	7.6	)1
176	95.0 - 101.0% of mass 174	74.4	(	95.9	)1
177	5.0 - 9.0% of mass 176	4.9	(	6.6	)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC2	ICC2	F1719.D	01/15/2013	11:48
ICC5	ICC5	F1720.D	01/15/2013	12:23
ICC1	ICC1	F1721.D	01/15/2013	13:14
ICC20	ICC20	F1722.D	01/15/2013	14:40
ICC100	ICC100	F1723.D	01/15/2013	15:24
ICC200	ICC200	F1724.D	01/15/2013	15:54
ICC150	ICC150	F1725.D	01/15/2013	16:25
ICV100	ICV100	F1728.D	01/15/2013	17:56

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1829.D BFB Injection Date: 01/18/2013

Inst ID: MSD_F BFB Injection Time: 10:47

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	21.4			
75	30.0 - 60.0% of mass 95	48.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.5	(	0.7	)1
174	Great than 50.0% of mass 95	77.0			
175	5.0 - 9.0% of mass 174	5.7	(	7.4	)1
176	95.0 - 101.0% of mass 174	74.3	(	96.5	)1
177	5.0 - 9.0% of mass 176	5.0	(	6.7	)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	F1830.D	01/18/2013	11:17
BLKS130118-01	BLKS130118-01	F1832.D	01/18/2013	12:17
LCS-50PPB	LCSS130118-01	F1833.D	01/18/2013	12:48
SB-7/1-1.5	00167-002	F1836.D	01/18/2013	14:19
S-1/9.5-10.0	00475-001	F1837.D	01/18/2013	14:49
S-2/9.5-10.0	00475-002	F1838.D	01/18/2013	15:19
S-3	00475-003	F1839.D	01/18/2013	15:49
S-4	00475-004	F1840.D	01/18/2013	16:19
S-5	00475-005	F1841.D	01/18/2013	16:50
S-6	00475-006	F1842.D	01/18/2013	17:26
CENTERLINE_1	00427-001	F1843.D	01/18/2013	17:56
AEI-B1	00500-002	F1844.D	01/18/2013	18:26
AEI-B2	00500-004	F1845.D	01/18/2013	18:56
AEI-B3	00500-006	F1846.D	01/18/2013	19:26
AEI-B4	00500-009	F1847.D	01/18/2013	19:56
AEI-B6	00500-015	F1848.D	01/18/2013	20:27
MS	00475-001MS	F1849.D	01/18/2013	20:57
MSD	00475-001MSD	F1850.D	01/18/2013	21:26

Response Factor Report MSD_F

Method Path : C:\MSDCHEM\1\METHODS\
Method File : FSO0115.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Jan 16 13:10:57 2013
Response Via : Initial Calibration

Calibration Files
1 =F1721.D 2 =F1719.D 5 =F1720.D
20 =F1722.D 100 =F1723.D 200 =F1724.D 150 =F1725.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.473	0.425	0.376	0.469	0.431	0.418	0.435	0.432	7.55
3)	P	Chloromethane	0.744	0.627	0.607	0.725	0.613	0.576	0.574	0.638	10.80
4)	C	Vinyl chloride	0.631	0.497	0.493	0.624	0.559	0.537	0.509	0.550	10.55
5)	T	Bromomethane		0.279	0.283	0.301	0.244		0.209	0.263	14.03
6)	T	Chloroethane		0.310	0.294	0.313	0.274	0.235	0.243	0.278	12.07
7)	T	Trichlorofluorome	0.707	0.594	0.551	0.709	0.646	0.591	0.590	0.627	9.92
8)	T	Acrolein	0.049	0.041	0.036	0.041	0.037	0.034	0.037	0.039	12.55
9)	MC	1,1-Dichloroethen	0.434	0.374	0.362	0.455	0.401	0.395	0.381	0.400	8.38
10)	T	Acetone			0.142	0.134	0.115	0.111	0.108	0.122	12.36
11)	T	Carbon disulfide	1.452	1.232	1.207	1.532	1.365	1.363	1.309	1.352	8.54
12)	T	Vinyl acetate	2.303	1.894	1.984	2.252	2.091	2.041	2.023	2.084	7.01
13)	T	Methylene chlorid		0.470	0.438	0.499	0.410	0.406	0.396	0.436	9.32
14)	T	Acrylonitrile	0.256	0.220	0.196	0.223	0.199	0.184	0.207	0.212	11.27
15)	T	tert-Butyl alcoho		0.055	0.044	0.049	0.043	0.045	0.043	0.047	10.66
16)	T	trans-1,2-Dichlor	0.692	0.552	0.565	0.666	0.570	0.559	0.549	0.593	10.04
17)	T	Methyl tert-butyl	1.836	1.456	1.438	1.602	1.407	1.407	1.390	1.505	10.80
18)	P	1,1-Dichloroethan	1.181	0.977	1.019	1.186	1.075	1.088	1.062	1.084	7.15
19)	T	Diisopropyl ether	2.586	2.159	2.259	2.544	2.232	2.157	2.153	2.299	8.14
20)	T	cis-1,2-Dichloroe	0.698	0.570	0.583	0.681	0.603	0.596	0.585	0.617	8.28
21)	T	2,2-Dichloropropa	0.699	0.592	0.600	0.753	0.701	0.632	0.656	0.662	8.90
22)	T	2-Butanone (MEK)		0.265	0.253	0.277	0.260	0.258	0.250	0.260	3.71
23)	T	Bromochloromethan	0.311	0.248	0.260	0.291	0.265	0.268	0.259	0.272	8.05
24)	T	Tetrahydrofuran								0.000	-1.00
25)	C	Chloroform		0.978	0.955	1.063	0.960	0.966	0.941	0.977	4.48
26)	T	1,1,1-Trichloroet	0.786	0.662	0.682	0.879	0.855	0.869	0.847	0.797	11.39
27)	T	Carbon tetrachlor	0.504	0.485	0.455	0.595	0.648	0.645	0.643	0.568	14.84
28)	T	1,1-Dichloroprope	0.771	0.639	0.671	0.833	0.772	0.765	0.747	0.743	8.87
29)	T	1,2-Dichloroethan	0.877	0.750	0.744	0.802	0.742	0.754	0.730	0.771	6.74
30)	S	1,2-Dichloroethan	0.405	0.391	0.384	0.397	0.405	0.420	0.405	0.401	2.93
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.590	1.308	1.365	1.565	1.357	1.261	1.278	1.389	9.67
33)	M	Trichloroethene	0.368	0.324	0.328	0.397	0.362	0.343	0.341	0.352	7.35
34)	C	1,2-Dichloropropa	0.374	0.329	0.340	0.382	0.352	0.331	0.335	0.349	6.05
35)	T	Dibromomethane	0.205	0.176	0.177	0.192	0.174	0.166	0.165	0.179	7.92
36)	T	1,4-Dioxane	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.003	12.27
37)	T	Bromodichlorometh	0.364	0.320	0.317	0.388	0.399	0.398	0.393	0.368	9.80
38)	T	2-Chloroethyl vin	0.149	0.139	0.147	0.169	0.186	0.180	0.179	0.164	11.38
39)	T	cis-1,3-Dichlorop	0.411	0.355	0.375	0.452	0.481	0.471	0.469	0.431	11.72
40)	T	4-Methyl-2-pentan	0.368	0.303	0.298	0.360	0.358	0.335	0.333	0.336	8.23
41)	S	Toluene-d8	0.815	0.827	0.829	0.846	0.860	0.856	0.849	0.840	2.00
42)	MC	Toluene	0.929	0.803	0.804	0.947	0.860	0.791	0.801	0.848	7.76
43)	T	trans-1,3-Dichlor	0.314	0.304	0.319	0.349	0.404	0.400	0.401	0.356	12.61
44)	T	1,1,2-Trichloroet	0.208	0.183	0.186	0.200	0.196	0.187	0.189	0.193	4.66
45)	T	Tetrachloroethene	0.381	0.340	0.346	0.423	0.396	0.364	0.368	0.374	7.73
46)	T	1,3-Dichloropropa	0.410	0.377	0.380	0.415	0.417	0.397	0.395	0.399	4.06
47)	T	2-Hexanone	0.221	0.193	0.190	0.223	0.238	0.223	0.223	0.216	8.22
48)	T	Dibromochlorometh	0.205	0.182	0.192	0.202	0.251	0.256	0.255	0.221	14.58
49)	T	1,2-Dibromoethane	0.222	0.191	0.199	0.225	0.232	0.225	0.223	0.217	7.07
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.251	1.053	1.071	1.193	1.071	0.990	1.014	1.112	8.76

52)	T	1,1,1,2-Tetrachlo	0.291	0.258	0.279	0.361	0.360	0.349	0.356	0.322	13.66
53)	C	Ethylbenzene	2.100	1.825	1.915	2.284	2.015	1.825	1.888	1.979	8.48
54)	T	m,p-Xylene	0.798	0.707	0.732	0.850	0.728	0.634	0.665	0.731	10.16
55)	T	o-Xylene	0.761	0.694	0.726	0.861	0.717	0.648	0.670	0.725	9.72
56)	T	Styrene	1.201	1.064	1.174	1.324	1.160	1.054	1.101	1.154	8.11
57)	P	Bromoform	0.193	0.183	0.178	0.134	0.172	0.191	0.184	0.176	11.31
58)	T	Isopropylbenzene	1.894	1.715	1.871	2.372	2.011	1.841	1.883	1.941	10.77
59)	S	Bromofluorobenzen	0.617	0.620	0.610	0.618	0.614	0.611	0.615	0.615	0.58
60)	P	1,1,2,2-Tetrachlo		0.404	0.390	0.425	0.371	0.343	0.354	0.381	8.12
61)	T	Bromobenzene	0.546	0.477	0.482	0.526	0.467	0.422	0.436	0.479	9.32
62)	T	1,2,3-Trichloropr	0.370	0.287	0.290	0.322	0.289	0.276	0.278	0.302	11.20
63)	T	n-Propylbenzene	2.395	2.099	2.227	2.711	2.364	2.149	2.192	2.305	9.06
64)	T	2-Chlorotoluene	1.589	1.384	1.435	1.668	1.418	1.312	1.342	1.450	9.04
65)	T	1,3,5-Trimethylbe	1.696	1.506	1.663	1.995	1.657	1.521	1.562	1.657	10.05
66)	T	4-Chlorotoluene	1.871	1.594	1.683	1.845	1.607	1.479	1.516	1.656	9.22
67)	T	tert-Butylbenzene	1.350	1.241	1.357	1.758	1.473	1.371	1.411	1.423	11.48
68)	T	1,2,4-Trimethylbe	1.815	1.560	1.703	2.018	1.658	1.535	1.564	1.693	10.25
69)	T	sec-Butylbenzene	2.058	1.900	2.030	2.569	2.133	1.973	2.032	2.099	10.45
70)	T	1,3-Dichlorobenze	1.141	0.960	0.987	1.090	0.930	0.843	0.866	0.974	11.29
71)	T	4-Isopropyltoluen	1.788	1.653	1.766	2.183	1.827	1.671	1.721	1.801	9.96
72)	T	1,4-Dichlorobenze	1.184	0.981	1.010	1.083	0.945	0.852	0.873	0.990	11.77
73)	T	n-Butylbenzene	0.979	0.853	0.932	1.151	0.957	0.882	0.910	0.952	10.25
74)	T	1,2-Dichlorobenze		0.935	0.960	1.043	0.822	0.753	0.774	0.881	13.11
75)	T	1,2-Dibromo-3-chl	0.052	0.043	0.045	0.047	0.049	0.056	0.053	0.049	9.46
76)	T	1,2,4-Trichlorobe		0.633	0.652	0.660	0.566	0.550	0.559	0.603	8.37
77)	T	Hexachlorobutadie		0.380	0.376	0.366	0.300	0.311	0.314	0.341	10.70
78)	T	Naphthalene		1.199	1.183	1.308	1.116	1.087	1.116	1.168	6.93
79)	T	1,2,3-Trichlorobe		0.589	0.590	0.582	0.466	0.443	0.460	0.521	13.81
80)	T	1,1,2-Trichloro-1	0.368	0.316	0.288	0.381	0.319	0.292	0.296	0.323	11.61
81)	T	Methyl acetate			0.239	0.249	0.206	0.195	0.195	0.217	11.79
82)	T	Cyclohexane			1.095	1.184	1.046	0.958	0.995	1.055	8.40
83)	T	Methylcyclohexane	0.883	0.721	0.724	1.001	0.839	0.778	0.807	0.822	11.96
84)	T	Pentane								0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

FSO0115.M Wed Jan 16 13:11:04 2013 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\01-15-13\
Data File : F1728.D
Acq On : 15 Jan 2013 17:56
Operator : XING
Sample : ICV100,ICV100,S,5g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 16 13:44:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Wed Jan 16 13:10:57 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	104	0.00
2	T	Dichlorodifluoromethane	0.432	0.435	-0.7	105	0.00
3	P	Chloromethane	0.638	0.614	3.8	105	0.01
4	C	Vinyl chloride	0.550	0.558	-1.5	104	0.00
5	T	Bromomethane	0.263	0.244	7.2	105	0.00
6	T	Chloroethane	0.278	0.274	1.4	104	0.01
7	T	Trichlorofluoromethane	0.627	0.640	-2.1	103	0.01
8	T	Acrolein	0.039	0.037	5.1	105	0.01
9	MC	1,1-Dichloroethene	0.400	0.411	-2.7	107	0.00
10	T	Acetone	0.122	0.113	7.4	103	0.00
11	T	Carbon disulfide	1.352	1.395	-3.2	107	0.00
12	T	Vinyl acetate	2.084	2.122	-1.8	106	0.01
13	T	Methylene chloride	0.436	0.427	2.1	109	0.00
14	T	Acrylonitrile	0.212	0.212	0.0	111	0.00
15	T	tert-Butyl alcohol (TBA)	0.047	0.042	10.6	102	0.01
16	T	trans-1,2-Dichloroethene	0.593	0.590	0.5	108	0.01
17	T	Methyl tert-butyl ether (MT	1.505	1.460	3.0	108	0.00
18	P	1,1-Dichloroethane	1.084	1.124	-3.7	109	0.00
19	T	Diisopropyl ether (DIPE)	2.299	2.331	-1.4	109	0.00
20	T	cis-1,2-Dichloroethene	0.617	0.632	-2.4	110	0.01
21	T	2,2-Dichloropropane	0.662	0.696	-5.1	104	0.00
22	T	2-Butanone (MEK)	0.260	0.254	2.3	102	0.00
23	T	Bromochloromethane	0.272	0.277	-1.8	109	0.00
25	C	Chloroform	0.977	1.001	-2.5	109	0.00
26	T	1,1,1-Trichloroethane	0.797	0.882	-10.7	108	0.00
27	T	Carbon tetrachloride	0.568	0.677	-19.2	109	0.00
28	T	1,1-Dichloropropene	0.743	0.801	-7.8	108	0.00
29	T	1,2-Dichloroethane (EDC)	0.771	0.774	-0.4	109	0.00
30	S	1,2-Dichloroethane-d4	0.401	0.398	0.7	103	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	106	0.01
32	M	Benzene	1.389	1.405	-1.2	110	0.00
33	M	Trichloroethene	0.352	0.369	-4.8	108	0.00
34	C	1,2-Dichloropropane	0.349	0.362	-3.7	109	0.01
35	T	Dibromomethane	0.179	0.178	0.6	108	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	108	0.00
37	T	Bromodichloromethane	0.368	0.410	-11.4	109	0.00
38	T	2-Chloroethyl vinyl ether	0.164	0.181	-10.4	103	0.00
39	T	cis-1,3-Dichloropropene	0.431	0.489	-13.5	108	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.336	0.341	-1.5	101	0.00
41	S	Toluene-d8	0.840	0.854	-1.7	105	0.00
42	MC	Toluene	0.848	0.869	-2.5	107	0.00
43	T	trans-1,3-Dichloropropene	0.356	0.404	-13.5	106	0.00
44	T	1,1,2-Trichloroethane	0.193	0.198	-2.6	107	0.00
45	T	Tetrachloroethene	0.374	0.395	-5.6	106	0.00
46	T	1,3-Dichloropropane	0.399	0.418	-4.8	106	0.00

47	T	2-Hexanone	0.216	0.222	-2.8	99	0.00
48	T	Dibromochloromethane	0.221	0.257	-16.3	108	0.00
49	T	1,2-Dibromoethane (EDB)	0.217	0.234	-7.8	107	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
51	MP	Chlorobenzene	1.092	1.097	-0.5	107	0.00
52	T	1,1,1,2-Tetrachloroethane	0.322	0.376	-16.8	109	0.00
53	C	Ethylbenzene	1.979	2.042	-3.2	105	-0.01
54	T	m,p-Xylene	0.731	0.732	-0.1	105	0.00
55	T	o-Xylene	0.725	0.741	-2.2	108	0.00
56	T	Styrene	1.154	1.192	-3.3	107	0.00
57	P	Bromoform	0.176	0.175	0.6	106	0.00
58	T	Isopropylbenzene	1.941	2.082	-7.3	108	0.00
59	S	Bromofluorobenzene	0.615	0.609	1.0	103	0.00
60	P	1,1,2,2-Tetrachloroethane	0.381	0.373	2.1	105	0.00
61	T	Bromobenzene	0.479	0.476	0.6	106	0.00
62	T	1,2,3-Trichloropropane	0.302	0.290	4.0	104	-0.01
63	T	n-Propylbenzene	2.305	2.385	-3.5	105	0.00
64	T	2-Chlorotoluene	1.450	1.461	-0.8	107	0.00
65	T	1,3,5-Trimethylbenzene	1.657	1.717	-3.6	108	0.00
66	T	4-Chlorotoluene	1.656	1.646	0.6	107	0.00
67	T	tert-Butylbenzene	1.423	1.535	-7.9	108	0.00
68	T	1,2,4-Trimethylbenzene	1.693	1.715	-1.3	108	0.00
69	T	sec-Butylbenzene	2.099	2.234	-6.4	109	0.00
70	T	1,3-Dichlorobenzene	0.974	0.953	2.2	107	0.00
71	T	4-Isopropyltoluene	1.801	1.882	-4.5	107	0.00
72	T	1,4-Dichlorobenzene	0.990	0.953	3.7	105	0.00
73	T	n-Butylbenzene	0.952	0.985	-3.5	107	0.00
74	T	1,2-Dichlorobenzene	0.881	0.853	3.2	108	0.00
75	T	1,2-Dibromo-3-chloropropane	0.049	0.050	-2.0	108	-0.01
76	T	1,2,4-Trichlorobenzene	0.603	0.588	2.5	108	0.00
77	T	Hexachlorobutadiene	0.341	0.325	4.7	113	0.00
78	T	Naphthalene	1.168	1.173	-0.4	109	0.00
79	T	1,2,3-Trichlorobenzene	0.521	0.495	5.0	111	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.323	0.327	-1.2	107	0.00
81	T	Methyl acetate	0.217	0.205	5.5	104	0.00
82	T	Cyclohexane	1.055	1.084	-2.7	108	0.00
83	T	Methylcyclohexane	0.822	0.872	-6.1	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FSO0115.M Wed Jan 16 13:44:22 2013 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1830.D
Acq On : 18 Jan 2013 11:17
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 18 16:12:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Wed Jan 16 13:10:57 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.432	0.511	-18.3	120	0.01
3	P	Chloromethane	0.638	0.680	-6.6	113	0.01
4	C	Vinyl chloride	0.550	0.589	-7.1	107	0.01
5	T	Bromomethane	0.263	0.250	4.9	104	0.00
6	T	Chloroethane	0.278	0.279	-0.4	104	0.01
7	T	Trichlorofluoromethane	0.627	0.627	0.0	99	0.01
8	T	Acrolein	0.039	0.032	17.9	87	0.01
9	MC	1,1-Dichloroethene	0.400	0.404	-1.0	103	0.00
10	T	Acetone	0.122	0.107	12.3	95	0.00
11	T	Carbon disulfide	1.352	1.410	-4.3	105	0.00
12	T	Vinyl acetate	2.084	2.033	2.4	99	0.01
13	T	Methylene chloride	0.436	0.408	6.4	101	0.00
14	T	Acrylonitrile	0.212	0.182	14.2	93	0.00
15	T	tert-Butyl alcohol (TBA)	0.047	0.038	19.1	91	0.01
16	T	trans-1,2-Dichloroethene	0.593	0.570	3.9	102	0.01
17	T	Methyl tert-butyl ether (MT	1.505	1.363	9.4	99	0.00
18	P	1,1-Dichloroethane	1.084	1.082	0.2	102	0.00
19	T	Diisopropyl ether (DIPE)	2.299	2.201	4.3	100	0.00
20	T	cis-1,2-Dichloroethene	0.617	0.601	2.6	101	0.01
21	T	2,2-Dichloropropane	0.662	0.654	1.2	95	0.00
22	T	2-Butanone (MEK)	0.260	0.243	6.5	95	0.00
23	T	Bromochloromethane	0.272	0.257	5.5	99	0.00
25	C	Chloroform	0.977	0.958	1.9	101	0.00
26	T	1,1,1-Trichloroethane	0.797	0.840	-5.4	100	0.00
27	T	Carbon tetrachloride	0.568	0.653	-15.0	103	0.00
28	T	1,1-Dichloropropene	0.743	0.781	-5.1	103	0.00
29	T	1,2-Dichloroethane (EDC)	0.771	0.743	3.6	102	0.00
30	S	1,2-Dichloroethane-d4	0.401	0.409	-2.0	103	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	106	0.00
32	M	Benzene	1.389	1.322	4.8	104	0.00
33	M	Trichloroethene	0.352	0.349	0.9	103	0.00
34	C	1,2-Dichloropropane	0.349	0.343	1.7	104	0.00
35	T	Dibromomethane	0.179	0.166	7.3	101	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	111	0.00
37	T	Bromodichloromethane	0.368	0.388	-5.4	103	0.00
38	T	2-Chloroethyl vinyl ether	0.164	0.177	-7.9	101	0.00
39	T	cis-1,3-Dichloropropene	0.431	0.471	-9.3	104	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.336	0.312	7.1	93	-0.01
41	S	Toluene-d8	0.840	0.862	-2.6	107	0.00
42	MC	Toluene	0.848	0.829	2.2	102	0.00
43	T	trans-1,3-Dichloropropene	0.356	0.392	-10.1	103	0.00
44	T	1,1,2-Trichloroethane	0.193	0.187	3.1	101	0.00
45	T	Tetrachloroethene	0.374	0.374	0.0	100	0.00
46	T	1,3-Dichloropropane	0.399	0.399	0.0	102	0.00

47	T	2-Hexanone	0.216	0.209	3.2	93	0.00
48	T	Dibromochloromethane	0.221	0.243	-10.0	103	0.00
49	T	1,2-Dibromoethane (EDB)	0.217	0.220	-1.4	101	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
51	MP	Chlorobenzene	1.092	1.021	6.5	101	0.00
52	T	1,1,1,2-Tetrachloroethane	0.322	0.341	-5.9	100	0.00
53	C	Ethylbenzene	1.979	1.907	3.6	100	-0.01
54	T	m,p-Xylene	0.731	0.681	6.8	99	0.00
55	T	o-Xylene	0.725	0.675	6.9	100	0.00
56	T	Styrene	1.154	1.109	3.9	101	0.00
57	P	Bromoform	0.176	0.161	8.5	100	0.00
58	T	Isopropylbenzene	1.941	1.885	2.9	100	-0.01
59	S	Bromofluorobenzene	0.615	0.606	1.5	105	0.00
60	P	1,1,2,2-Tetrachloroethane	0.381	0.333	12.6	95	0.00
61	T	Bromobenzene	0.479	0.429	10.4	98	0.00
62	T	1,2,3-Trichloropropane	0.302	0.259	14.2	95	0.00
63	T	n-Propylbenzene	2.305	2.215	3.9	99	0.00
64	T	2-Chlorotoluene	1.450	1.344	7.3	101	0.00
65	T	1,3,5-Trimethylbenzene	1.657	1.573	5.1	101	0.00
66	T	4-Chlorotoluene	1.656	1.527	7.8	101	0.00
67	T	tert-Butylbenzene	1.423	1.397	1.8	101	0.00
68	T	1,2,4-Trimethylbenzene	1.693	1.572	7.1	101	0.00
69	T	sec-Butylbenzene	2.099	2.021	3.7	101	0.00
70	T	1,3-Dichlorobenzene	0.974	0.849	12.8	97	0.00
71	T	4-Isopropyltoluene	1.801	1.694	5.9	98	0.00
72	T	1,4-Dichlorobenzene	0.990	0.853	13.8	96	0.00
73	T	n-Butylbenzene	0.952	0.899	5.6	100	0.00
74	T	1,2-Dichlorobenzene	0.881	0.754	14.4	97	0.00
75	T	1,2-Dibromo-3-chloropropane	0.049	0.044	10.2	97	0.00
76	T	1,2,4-Trichlorobenzene	0.603	0.516	14.4	97	0.00
77	T	Hexachlorobutadiene	0.341	0.285	16.4	101	0.00
78	T	Naphthalene	1.168	1.015	13.1	97	0.00
79	T	1,2,3-Trichlorobenzene	0.521	0.425	18.4	97	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.323	0.303	6.2	101	0.00
81	T	Methyl acetate	0.217	0.187	13.8	97	0.00
82	T	Cyclohexane	1.055	0.996	5.6	101	0.00
83	T	Methylcyclohexane	0.822	0.804	2.2	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FSO0115.M Fri Jan 18 16:12:31 2013 RP1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1723.D Date Analyzed: 01/15/2013

Instrument ID: MSD_F Time Analyzed: 15:24

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	285024	6.11	448489	6.92	367227	10.27
	UPPER LIMIT	570048	6.61	896978	7.42	734454	10.77
	LOWER LIMIT	142512	5.61	224244.5	6.42	183613.5	9.77
	LAB SAMPLE ID						
01	ICC2	299615	6.11	453861	6.93	359925	10.27
02	ICC5	295127	6.11	444634	6.93	347695	10.27
03	ICC1	290745	6.11	430795	6.93	335692	10.27
04	ICC20	302858	6.11	459012	6.92	359093	10.27
05	ICC200	303350	6.11	511007	6.92	416339	10.27
06	ICC150	311335	6.11	508856	6.92	408532	10.27
07	ICV100	297794	6.11	474779	6.93	382093	10.27
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1830.D

Date Analyzed: 01/18/2013

Instrument ID: MSD_F

Time Analyzed: 11:17

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	289947	6.11	476860	6.92	389694	10.27
	UPPER LIMIT	579894	6.61	953720	7.42	779388	10.77
	LOWER LIMIT	144973.5	5.61	238430	6.42	194847	9.77
	LAB SAMPLE ID						
01	BLKS130118-01	255771	6.11	389651	6.92	296319	10.27
02	LCSS130118-01	293441	6.10	465154	6.92	381573	10.27
03	00167-002	258712	6.11	388822	6.92	294934	10.27
04	00475-001	253247	6.11	376017	6.92	291964	10.27
05	00475-002	249639	6.11	370517	6.92	286470	10.27
06	00475-003	241920	6.11	354934	6.92	273362	10.27
07	00475-004	254400	6.11	374503	6.92	291395	10.27
08	00475-005	244399	6.11	363907	6.92	279603	10.27
09	00475-006	260891	6.11	392172	6.93	314463	10.27
10	00427-001	217248	6.11	322601	6.92	250937	10.27
11	00500-002	182140	6.11	270419	6.92	216746	10.27
12	00500-004	239657	6.11	352418	6.93	278893	10.27
13	00500-006	246037	6.11	367460	6.93	293227	10.27
14	00500-009	242101	6.11	362896	6.92	287507	10.27
15	00500-015	237495	6.11	348111	6.93	270616	10.27
16	00475-001MS	254666	6.11	394405	6.93	319135	10.27
17	00475-001MSD	258264	6.11	396727	6.92	323581	10.27
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1836.D
Acq On : 18 Jan 2013 14:19
Operator : XING
Sample : SB-7/1-1.5,00167-002,S,5.2g,8.20
Misc : PEAK/4202_18TH_,01/04/13,01/04/13
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 22 09:12:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Wed Jan 16 13:10:57 2013
Response via : Initial Calibration

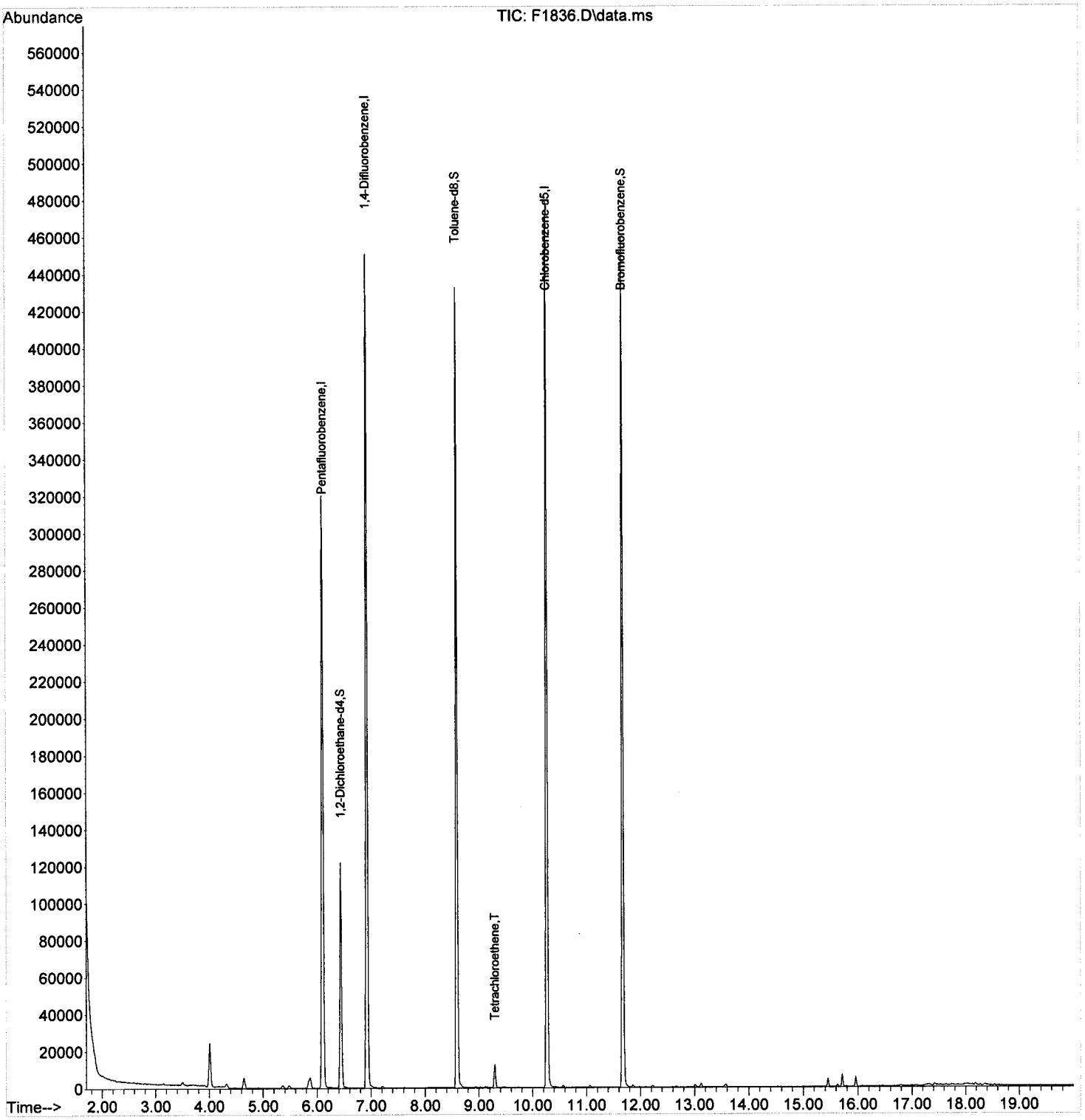
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	258712	50.00 UG	0.00
31) 1,4-Difluorobenzene	6.922	114	388822	50.00 UG	0.00
50) Chlorobenzene-d5	10.272	117	294934	50.00 UG	0.00
System Monitoring Compounds					
30) 1,2-Dichloroethane-d4	6.434	65	89214	42.99 UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 85.98%		
41) Toluene-d8	8.586	98	318784	48.79 UG	-0.01
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.58%		
59) Bromofluorobenzene	11.673	95	176702	48.71 UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 97.42%		
Target Compounds					Qvalue
45) Tetrachloroethene	9.297	166	4468	1.54 UG	# 99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1836.D
Acq On : 18 Jan 2013 14:19
Operator : XING
Sample : SB-7/1-1.5,00167-002,S,5.2g,8.20
Misc : PEAK/4202_18TH_,01/04/13,01/04/13
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 22 09:12:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Wed Jan 16 13:10:57 2013
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1836.D
Acq On : 18 Jan 2013 14:19
Operator : XING
Sample : SB-7/1-1.5,00167-002,S,5.2g,8.20
Misc : PEAK/4202_18TH_,01/04/13,01/04/13
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B

Signal : TIC: F1836.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.008	223	228	237	rVB	23579	55521	5.92%	1.199%
2	4.637	285	290	297	rVB	5521	12827	1.37%	0.277%
3	5.866	401	411	417	rBV2	5684	19938	2.13%	0.431%
4	6.099	428	434	445	rBV	320130	703325	75.01%	15.190%
5	6.434	459	467	488	rVB	122010	249887	26.65%	5.397%
6	6.922	506	515	535	rBV	450835	921952	98.32%	19.912%
7	8.586	672	679	695	rBV	432654	857200	91.42%	18.513%
8	9.297	743	749	757	rBV	12442	25105	2.68%	0.542%
9	10.272	834	845	858	rBV	478635	937668	100.00%	20.251%
10	11.673	976	983	998	rBV	459268	836588	89.22%	18.068%
11	15.713	1377	1381	1385	rBV	6550	10221	1.09%	0.221%

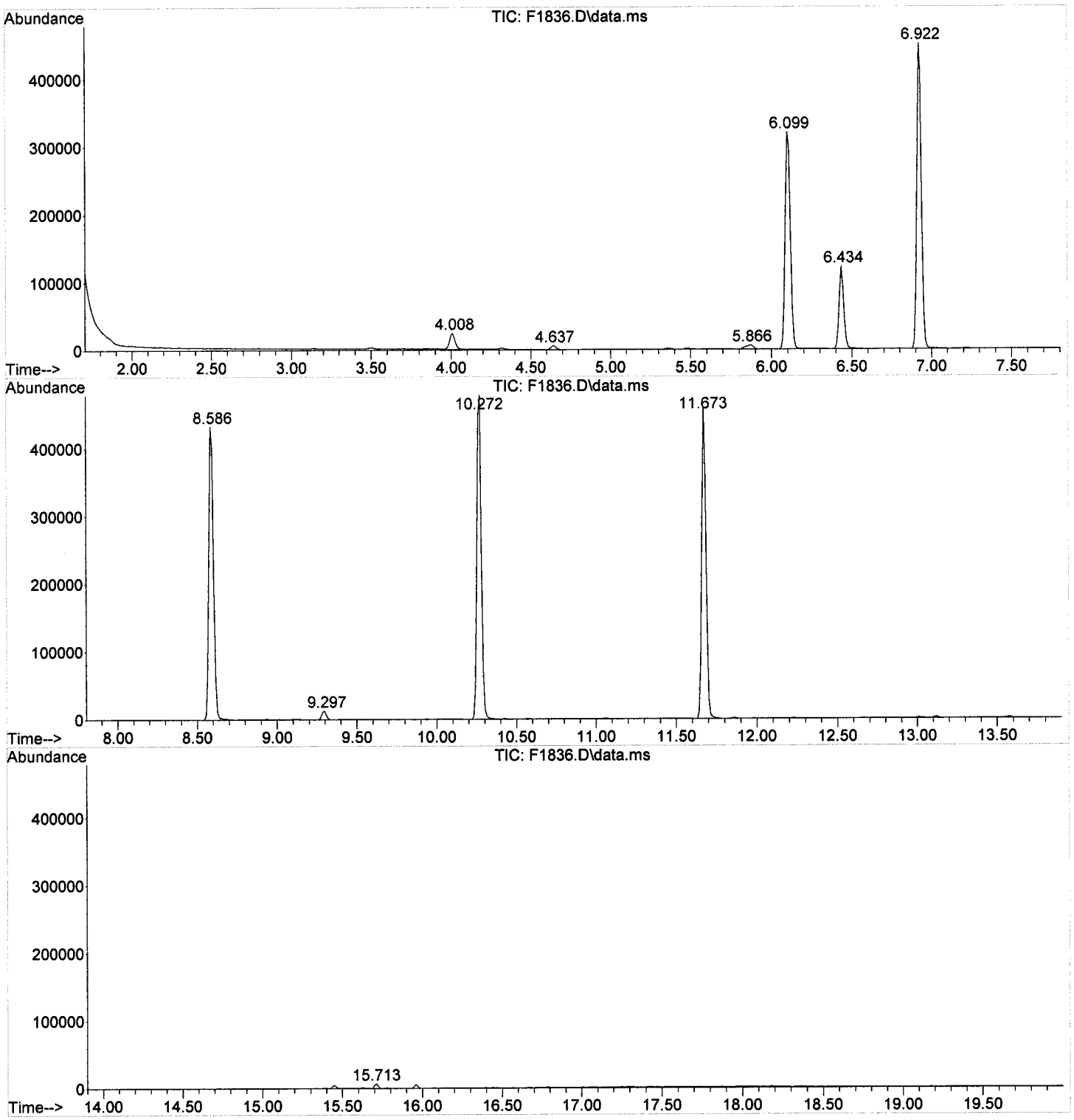
Sum of corrected areas: 4630232

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1836.D
Acq On : 18 Jan 2013 14:19
Operator : XING
Sample : SB-7/1-1.5,00167-002,S,5.2g,8.20
Misc : PEAK/4202_18TH_,01/04/13,01/04/13
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS130118-01
Client ID: BLKS130118-01
Date Received:
Date Analyzed: 01/18/2013
Data file: F1832.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.0004
Chloromethane	ND		0.001	0.00041
Vinyl chloride	ND		0.001	0.00048
Bromomethane	ND		0.002	0.00035
Chloroethane	ND		0.002	0.00045
Trichlorofluoromethane	ND		0.001	0.00041
1,1-Dichloroethene	ND		0.001	0.0005
Acetone	ND		0.005	0.0007
Carbon disulfide	ND		0.001	0.00034
Methylene chloride	ND		0.002	0.00198
trans-1,2-Dichloroethene	ND		0.001	0.00043
Methyl tert-butyl ether (MTBE)	ND		0.001	0.00023
1,1-Dichloroethane	ND		0.001	0.00027
cis-1,2-Dichloroethene	ND		0.001	0.00031
2-Butanone (MEK)	ND		0.002	0.00037
Bromochloromethane	ND		0.001	0.00024
Chloroform	ND		0.002	0.00029
1,1,1-Trichloroethane	ND		0.001	0.00033
Carbon tetrachloride	ND		0.001	0.00041
1,2-Dichloroethane (EDC)	ND		0.001	0.00021
Benzene	ND		0.001	0.00024
Trichloroethene	ND		0.001	0.00032
1,2-Dichloropropane	ND		0.001	0.00022
1,4-Dioxane	ND		0.200	0.016
Bromodichloromethane	ND		0.001	0.00032
cis-1,3-Dichloropropene	ND		0.001	0.00026
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.00024

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS130118-01
Client ID: BLKS130118-01
Date Received:
Date Analyzed: 01/18/2013
Data file: F1832.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00025
trans-1,3-Dichloropropene	ND		0.001	0.00026
1,1,2-Trichloroethane	ND		0.001	0.0002
Tetrachloroethene	ND		0.001	0.00026
2-Hexanone	ND		0.001	0.00036
Dibromochloromethane	ND		0.001	0.00022
1,2-Dibromoethane (EDB)	ND		0.001	0.00021
Chlorobenzene	ND		0.001	0.00022
Ethylbenzene	ND		0.001	0.00031
Total Xylenes	ND		0.002	0.0011
Styrene	ND		0.001	0.0003
Bromoform	ND		0.001	0.00032
Isopropylbenzene	ND		0.001	0.00041
1,1,2,2-Tetrachloroethane	ND		0.002	0.00023
1,3-Dichlorobenzene	ND		0.001	0.00031
1,4-Dichlorobenzene	ND		0.001	0.00031
1,2-Dichlorobenzene	ND		0.002	0.00036
1,2-Dibromo-3-chloropropane	ND		0.001	0.0005
1,2,4-Trichlorobenzene	ND		0.002	0.00052
1,2,3-Trichlorobenzene	ND		0.002	0.00048
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.00055
Methyl acetate	ND		0.005	0.00058
Cyclohexane	ND		0.005	0.00042
Methylcyclohexane	ND		0.001	0.0005
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.00026

Total Target Compounds (52): 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS130118-01
Client ID: BLKS130118-01
Date Received:
Date Analyzed: 01/18/2013
Date File: F1832.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1832.D
Acq On : 18 Jan 2013 12:17
Operator : XING
Sample : BLKS130118-01,BLKS130118-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 17:30:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Wed Jan 16 13:10:57 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	255771	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.921	114	389651	50.00	UG	0.00
50) Chlorobenzene-d5	10.271	117	296319	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.434	65	80688	39.33	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 78.66%			
41) Toluene-d8	8.586	98	321292	49.07	UG	-0.01
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.14%			
59) Bromofluorobenzene	11.672	95	176397	48.40	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.80%			

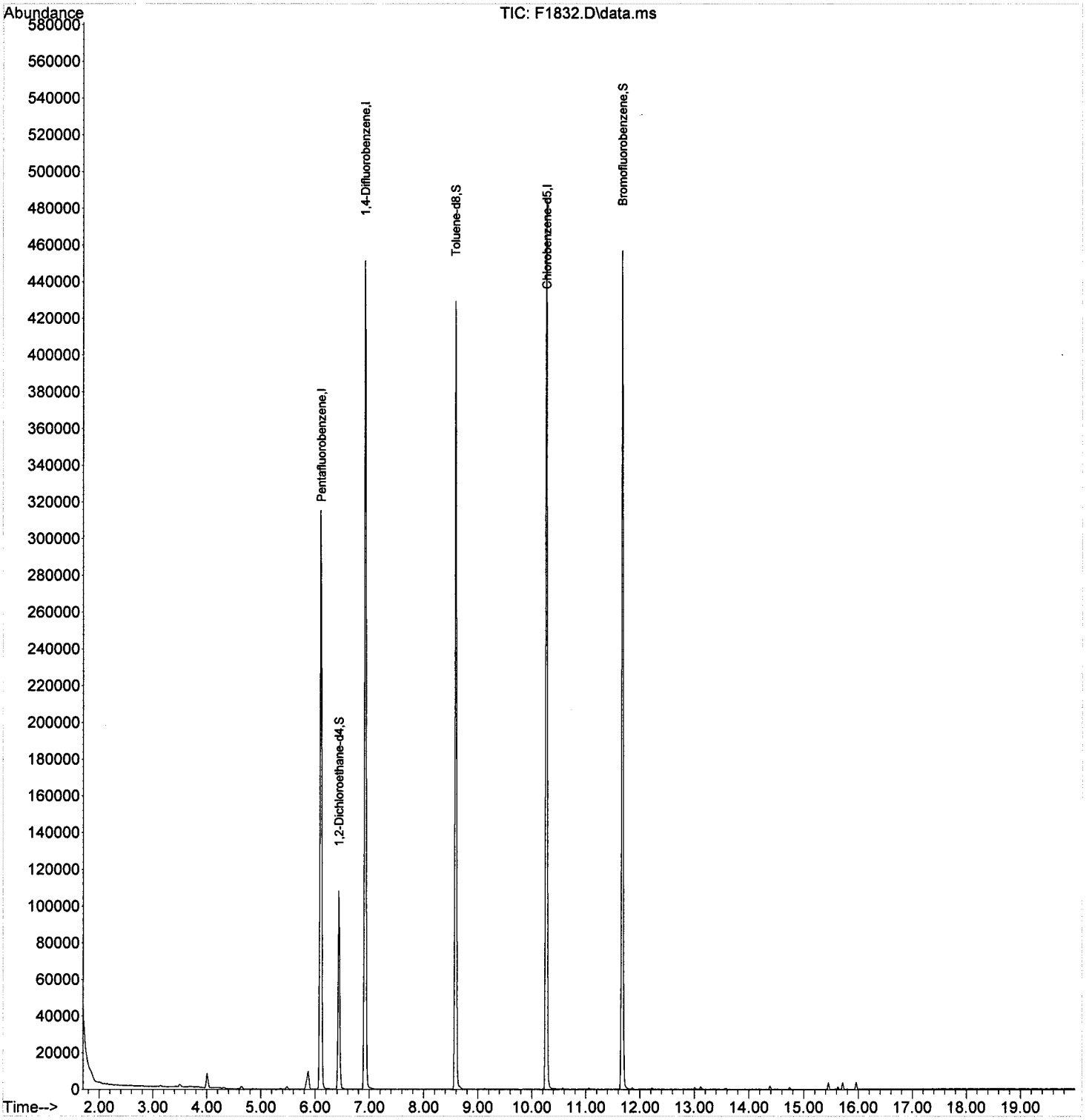
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1832.D
Acq On : 18 Jan 2013 12:17
Operator : XING
Sample : BLKS130118-01,BLKS130118-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 18 17:30:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Wed Jan 16 13:10:57 2013
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1832.D
Acq On : 18 Jan 2013 12:17
Operator : XING
Sample : BLKS130118-01,BLKS130118-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B

Signal : TIC: F1832.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.008	223	228	236	rVB	7806	18161	1.93%	0.401%
2	5.876	403	412	418	rBV2	9660	29210	3.10%	0.645%
3	6.099	425	434	453	rBV	315405	694121	73.65%	15.323%
4	6.434	461	467	484	rVB	108060	223456	23.71%	4.933%
5	6.921	509	515	535	rBV	451314	919766	97.59%	20.304%
6	8.586	672	679	698	rBV	429369	863615	91.63%	19.064%
7	10.271	839	845	859	rBV	484255	942518	100.00%	20.806%
8	11.672	975	983	998	rBV	456959	839217	89.04%	18.525%

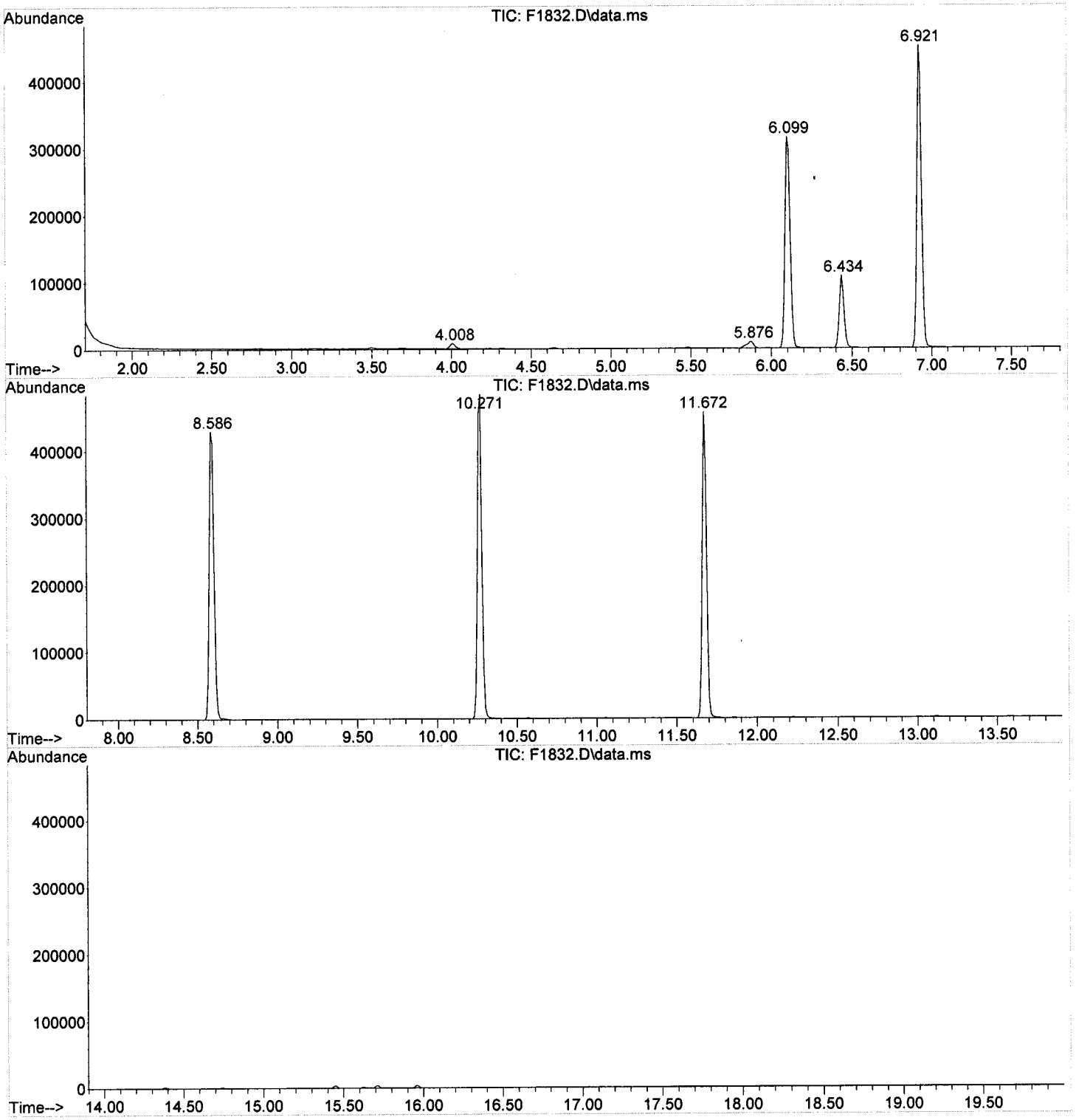
Sum of corrected areas: 4530064

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\01-18-13\
Data File : F1832.D
Acq On : 18 Jan 2013 12:17
Operator : XING
Sample : BLKS130118-01,BLKS130118-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FSO0115.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/18/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
BLKS130117-04	SOIL	C2276.D	39	38	41	49	42	36
E12-12094-003	SOIL	C2277.D	N/A	N/A	45	45	N/A	60
LCSS130117-04	SOIL	C2278.D	48	52	54	51	53	64
E12-12094-003MS	SOIL	C2279.D	45	58	55	60	64	78
E12-12094-003MSD	SOIL	C2280.D	47	58	49	65	71	70
E13-00475-001	SOIL	C2281.D	N/A	N/A	42	45	N/A	63
E13-00475-002	SOIL	C2282.D	N/A	N/A	35	45	N/A	40
E13-00475-003	SOIL	C2283.D	N/A	N/A	29	36	N/A	71
E13-00475-004	SOIL	C2284.D	N/A	N/A	39	44	N/A	72
E13-00475-005	SOIL	C2285.D	N/A	N/A	32	34	N/A	50
E13-00475-006	SOIL	C2286.D	N/A	N/A	30	40	N/A	40
E13-00176-002	SOIL	C2287.D	N/A	N/A	60	70	N/A	70

	Aqueous	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

FORM II SV

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/21/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
CCV040BNA2	SOIL	C2316.D	N/A	N/A	N/A	N/A	N/A	N/A
BLKS130118-02	SOIL	C2317.D	45	45	55	50	44	40
E12-00548-001	SOIL	C2318.D	N/A	N/A	40	49	N/A	57
LCSS130118-02	SOIL	C2319.D	43	46	40	44	44	34
E12-00167-002	SOIL	C2320.D	N/A	N/A	25	34	N/A	39
BLKS130110-05	SOIL	C2321.D	75	81	55	68	102	71
LCSS130110-05	SOIL	C2322.D	61	77	71	75	105	81
E12-12786-001	SOIL	C2323.D	N/A	N/A	45	58	N/A	47
E12-12786-002	SOIL	C2324.D	N/A	N/A	39	56	N/A	51
E12-12786-003	SOIL	C2325.D	N/A	N/A	38	53	N/A	57
E12-12786-004	SOIL	C2326.D	N/A	N/A	37	48	N/A	59
E12-12786-005	SOIL	C2327.D	N/A	N/A	41	54	N/A	61
E12-12786-006	SOIL	C2328.D	N/A	N/A	40	51	N/A	59
E12-12786-007	SOIL	C2329.D	N/A	N/A	42	58	N/A	60
E12-12786-008	SOIL	C2330.D	N/A	N/A	42	57	N/A	67
E12-12786-009	SOIL	C2331.D	N/A	N/A	45	60	N/A	73
E12-12786-010	SOIL	C2332.D	N/A	N/A	41	55	N/A	57
E12-12789-001	SOIL	C2333.D	N/A	N/A	39	54	N/A	49
E12-12789-002	SOIL	C2334.D	N/A	N/A	43	61	N/A	59
E12-12789-003	SOIL	C2335.D	N/A	N/A	44	58	N/A	44
E12-12789-004	SOIL	C2336.D	N/A	N/A	43	55	N/A	59
E12-12789-005	SOIL	C2337.D	N/A	N/A	42	54	N/A	49

	Aqueous	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/21/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
E12-12789-006	SOIL	C2338.D	N/A	N/A	38	53	N/A	46
E12-12789-007	SOIL	C2339.D	N/A	N/A	37	49	N/A	40
E12-12789-008	SOIL	C2340.D	N/A	N/A	32	43	N/A	41
E12-12789-009	SOIL	C2341.D	N/A	N/A	35	47	N/A	36
E12-12789-010	SOIL	C2342.D	N/A	N/A	34	49	N/A	38
E12-12786-001MS	SOIL	C2343.D	57	72	57	73	114	72
E12-12786-001MSD	SOIL	C2344.D	47	62	55	67	110	54
E12-12740-001	SOIL	C2345.D	N/A	N/A	30	34	N/A	28
E12-12740-002	SOIL	C2346.D	N/A	N/A	37	47	N/A	41
E12-12740-003	SOIL	C2347.D	N/A	N/A	33	45	N/A	42
E12-12740-004	SOIL	C2348.D	N/A	N/A	31	39	N/A	37
E12-12740-005	SOIL	C2349.D	N/A	N/A	30	39	N/A	38
E12-12740-006	SOIL	C2350.D	N/A	N/A	33	42	N/A	32
E12-12740-007	SOIL	C2351.D	N/A	N/A	28	36	N/A	30
E12-12740-008	SOIL	C2352.D	N/A	N/A	26	34	N/A	34
E12-12740-009	SOIL	C2353.D	N/A	N/A	30	41	N/A	42
E12-12740-010	SOIL	C2354.D	N/A	N/A	31	42	N/A	35
E12-00167-002	SOIL	C2355.D	N/A	N/A	31	36	N/A	38

	Aqueous	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130117-04
Date Received: NA
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
Data file: C2278.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	27.3	55		40 - 140
Pyridine	50.0	22.9	46		20 - 120
Benzaldehyde	50.0	26.9	54		10 - 110
Phenol	50.0	26.7	53		30 - 140
Aniline	50.0	30.6	61		40 - 140
Bis(2-chloroethyl) ether	50.0	26.7	53		40 - 140
2-Chlorophenol	50.0	23.4	47		30 - 140
1,3-Dichlorobenzene	50.0	27.0	54		40 - 140
1,4-Dichlorobenzene	50.0	25.9	52		40 - 140
Benzyl alcohol	50.0	27.8	56		40 - 140
1,2-Dichlorobenzene	50.0	26.3	53		40 - 140
2-Methylphenol	50.0	30.0	60		30 - 140
Bis(2-chloroisopropyl) ether	50.0	28.0	56		40 - 140
4-Methylphenol	50.0	27.9	56		30 - 140
N-Nitrosodi-n-propylamine	50.0	28.9	58		40 - 140
Acetophenone	50.0	33.0	66		40 - 140
3-Methylphenol	50.0	27.9	56		30 - 140
Hexachloroethane	50.0	25.3	51		40 - 140
Nitrobenzene	50.0	25.8	52		40 - 140
Isophorone	50.0	25.8	52		40 - 140
2-Nitrophenol	50.0	25.3	51		30 - 140
2,4-Dimethylphenol	50.0	27.1	54		30 - 140
Bis(2-chloroethoxy) methane	50.0	27.7	55		40 - 140
Benzoic acid	50.0	41.1	82		30 - 140
2,4-Dimethylaniline	50.0	26.8	54		40 - 140
2,4-Dichlorophenol	50.0	28.4	57		30 - 140
1,2,4-Trichlorobenzene	50.0	25.6	51		40 - 140
Naphthalene	50.0	27.7	55		40 - 140
4-Chloroaniline	50.0	29.2	58		40 - 140
Hexachlorobutadiene	50.0	27.2	54		40 - 140
Caprolactam	50.0	37.0	74		40 - 140
4-Chloro-3-methylphenol	50.0	27.0	54		30 - 140
2-Methylnaphthalene	50.0	28.8	58		40 - 140
Hexachlorocyclopentadiene	50.0	4.1	8		5 - 105
2,4,6-Trichlorophenol	50.0	25.5	51		30 - 140
2,4,5-Trichlorophenol	50.0	28.9	58		30 - 140
1,1'-Biphenyl	50.0	29.3	59		40 - 140
2-Chloronaphthalene	50.0	26.1	52		40 - 140
2-Nitroaniline	50.0	26.2	52		40 - 140
Dimethyl phthalate	50.0	28.5	57		40 - 140
2,6-Dinitrotoluene	50.0	26.5	53		40 - 140
Acenaphthylene	50.0	25.4	51		40 - 140
3-Nitroaniline	50.0	29.5	59		40 - 140
Acenaphthene	50.0	26.7	53		40 - 140
2,4-Dinitrophenol	50.0	23.4	47		5 - 105

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130117-04
Date Received: NA
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
Data file: C2278.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	23.9	48		30 - 140
2,4-Dinitrotoluene	50.0	27.5	55		40 - 140
Dibenzofuran	50.0	27.6	55		40 - 140
Diethyl phthalate	50.0	30.5	61		40 - 140
Fluorene	50.0	29.5	59		40 - 140
4-Chlorophenyl phenyl ether	50.0	30.1	60		40 - 140
4-Nitroaniline	50.0	32.9	66		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	29.2	58		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	29.1	58		40 - 140
4,6-Dinitro-2-methylphenol	50.0	24.2	48		10 - 110
N-Nitrosodiphenylamine	50.0	25.2	50		40 - 140
1,2-Diphenylhydrazine	50.0	21.6	43		40 - 140
4-Bromophenyl phenyl ether	50.0	26.5	53		40 - 140
Hexachlorobenzene	50.0	28.3	57		40 - 140
Atrazine	50.0	37.1	74		20 - 120
Pentachlorophenol	50.0	20.1	40		30 - 140
Phenanthrene	50.0	26.0	52		40 - 140
Anthracene	50.0	27.3	55		40 - 140
Carbazole	50.0	27.4	55		40 - 140
Di-n-butyl phthalate	50.0	29.1	58		40 - 140
Fluoranthene	50.0	28.6	57		40 - 140
Benzidine	50.0	16.3	33		5 - 105
Pyrene	50.0	31.1	62		40 - 140
3,3'-Dimethylbenzidine	50.0	16.8	34		5 - 105
Butyl benzyl phthalate	50.0	31.5	63		40 - 140
3,3'-Dichlorobenzidine	50.0	28.8	58		40 - 140
Benzo[a]anthracene	50.0	28.7	57		40 - 140
Chrysene	50.0	27.4	55		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	33.1	66		40 - 140
Di-n-octyl phthalate	50.0	59.1	118		40 - 140
Benzo[b]fluoranthene	50.0	41.4	83		40 - 140
Benzo[k]fluoranthene	50.0	41.1	82		40 - 140
Benzo[a]pyrene	50.0	40.7	81		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	37.6	75		40 - 140
Dibenz[a,h]anthracene	50.0	37.8	76		40 - 140
Benzo[g,h,i]perylene	50.0	38.5	77		40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130118-02
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2319.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	22.4	45		40 - 140
Pyridine	50.0	13.7	27		20 - 120
Benzaldehyde	50.0	21.8	44		10 - 110
Phenol	50.0	23.8	48		30 - 140
Aniline	50.0	23.3	47		40 - 140
Bis(2-chloroethyl) ether	50.0	20.3	41		40 - 140
2-Chlorophenol	50.0	21.0	42		30 - 140
1,3-Dichlorobenzene	50.0	23.1	46		40 - 140
1,4-Dichlorobenzene	50.0	25.7	51		40 - 140
Benzyl alcohol	50.0	25.6	51		40 - 140
1,2-Dichlorobenzene	50.0	24.3	49		40 - 140
2-Methylphenol	50.0	20.2	40		30 - 140
Bis(2-chloroisopropyl) ether	50.0	19.9	40		40 - 140
4-Methylphenol	50.0	25.6	51		30 - 140
N-Nitrosodi-n-propylamine	50.0	22.5	45		40 - 140
Acetophenone	50.0	28.6	57		40 - 140
3-Methylphenol	50.0	25.6	51		30 - 140
Hexachloroethane	50.0	22.2	44		40 - 140
Nitrobenzene	50.0	20.3	41		40 - 140
Isophorone	50.0	22.0	44		40 - 140
2-Nitrophenol	50.0	22.9	46		30 - 140
2,4-Dimethylphenol	50.0	20.7	41		30 - 140
Bis(2-chloroethoxy) methane	50.0	21.7	43		40 - 140
Benzoic acid	50.0	15.8	32		30 - 140
2,4-Dimethylaniline	50.0	22.4	45		40 - 140
2,4-Dichlorophenol	50.0	24.9	50		30 - 140
1,2,4-Trichlorobenzene	50.0	24.2	48		40 - 140
Naphthalene	50.0	24.5	49		40 - 140
4-Chloroaniline	50.0	26.6	53		40 - 140
Hexachlorobutadiene	50.0	23.2	46		40 - 140
Caprolactam	50.0	28.5	57		40 - 140
4-Chloro-3-methylphenol	50.0	21.6	43		30 - 140
2-Methylnaphthalene	50.0	26.1	52		40 - 140
Hexachlorocyclopentadiene	50.0	3.3	7		5 - 105
2,4,6-Trichlorophenol	50.0	22.8	46		30 - 140
2,4,5-Trichlorophenol	50.0	26.9	54		30 - 140
1,1'-Biphenyl	50.0	24.5	49		40 - 140
2-Chloronaphthalene	50.0	21.1	42		40 - 140
2-Nitroaniline	50.0	20.2	40		40 - 140
Dimethyl phthalate	50.0	22.5	45		40 - 140
2,6-Dinitrotoluene	50.0	22.0	44		40 - 140
Acenaphthylene	50.0	20.5	41		40 - 140
3-Nitroaniline	50.0	22.7	45		40 - 140
Acenaphthene	50.0	22.1	44		40 - 140
2,4-Dinitrophenol	50.0	19.3	39		5 - 105

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130118-02
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2319.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	17.9	36		30 - 140
2,4-Dinitrotoluene	50.0	20.5	41		40 - 140
Dibenzofuran	50.0	23.2	46		40 - 140
Diethyl phthalate	50.0	24.8	50		40 - 140
Fluorene	50.0	23.2	46		40 - 140
4-Chlorophenyl phenyl ether	50.0	23.8	48		40 - 140
4-Nitroaniline	50.0	26.6	53		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	24.0	48		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	25.4	51		40 - 140
4,6-Dinitro-2-methylphenol	50.0	6.1	12		10 - 110
N-Nitrosodiphenylamine	50.0	20.1	40		40 - 140
1,2-Diphenylhydrazine	50.0	20.0	40		40 - 140
4-Bromophenyl phenyl ether	50.0	20.8	42		40 - 140
Hexachlorobenzene	50.0	22.3	45		40 - 140
Atrazine	50.0	29.9	60		20 - 120
Pentachlorophenol	50.0	24.2	48		30 - 140
Phenanthrene	50.0	21.4	43		40 - 140
Anthracene	50.0	22.5	45		40 - 140
Carbazole	50.0	22.8	46		40 - 140
Di-n-butyl phthalate	50.0	23.3	47		40 - 140
Fluoranthene	50.0	25.2	50		40 - 140
Benzidine	50.0	15.4	31		5 - 105
Pyrene	50.0	20.4	41		40 - 140
3,3'-Dimethylbenzidine	50.0	10.7	21		5 - 105
Butyl benzyl phthalate	50.0	20.5	41		40 - 140
3,3'-Dichlorobenzidine	50.0	25.0	50		40 - 140
Benzo[a]anthracene	50.0	25.0	50		40 - 140
Chrysene	50.0	23.7	47		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	24.8	50		40 - 140
Di-n-octyl phthalate	50.0	40.3	81		40 - 140
Benzo[b]fluoranthene	50.0	34.1	68		40 - 140
Benzo[k]fluoranthene	50.0	39.0	78		40 - 140
Benzo[a]pyrene	50.0	36.5	73		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	27.0	54		40 - 140
Dibenz[a,h]anthracene	50.0	27.4	55		40 - 140
Benzo[g,h,i]perylene	50.0	26.3	53		40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E12-12094-003
Date Received: 12/07/2012
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
MS Data file: C2279.D
MSD Data file: C2280.D

GC/MS Column: DB-5
Sample wt/vol: 15.20g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 17.2
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
N-Nitrosodimethylamine	50.0	0.00	23.20	46		24.90	50		7		40-140/30
Pyridine	50.0	0.00	1.50	3	*	1.60	3	*	6		20-120/30
Benzaldehyde	50.0	0.00	43.70	87		43.40	87		1		10-110/30
Phenol	50.0	0.00	34.30	69		36.10	72		5		30-140/30
Aniline	50.0	0.00	6.90	14	*	7.10	14	*	3		40-140/30
Bis(2-chloroethyl) ether	50.0	0.00	25.30	51		25.90	52		2		40-140/30
2-Chlorophenol	50.0	0.00	29.70	59		30.40	61		2		30-140/30
1,3-Dichlorobenzene	50.0	0.00	38.30	77		38.40	77		0		40-140/30
1,4-Dichlorobenzene	50.0	0.00	39.20	78		39.30	79		0		40-140/30
Benzyl alcohol	50.0	0.00	34.90	70		35.40	71		1		40-140/30
1,2-Dichlorobenzene	50.0	0.00	38.50	77		39.00	78		1		40-140/30
2-Methylphenol	50.0	0.00	38.50	77		38.30	77		1		30-140/30
Bis(2-chloroisopropyl) ether	50.0	0.00	32.70	65		31.30	63		4		40-140/30
4-Methylphenol	50.0	0.00	40.30	81		40.40	81		0		30-140/30
N-Nitrosodi-n-propylamine	50.0	0.00	39.80	80		38.90	78		2		40-140/30
Acetophenone	50.0	0.00	83.00	166	*	80.10	160	*	4		40-140/30
3-Methylphenol	50.0	0.00	40.30	81		40.40	81		0		30-140/30
Hexachloroethane	50.0	0.00	107.70	215	*	98.70	197	*	9		40-140/30
Nitrobenzene	50.0	0.00	22.50	45		18.10	36	*	22		40-140/30
Isophorone	50.0	0.00	36.80	74		30.70	61		18		40-140/30
2-Nitrophenol	50.0	0.00	40.00	80		32.70	65		20		30-140/30
2,4-Dimethylphenol	50.0	0.00	36.70	73		30.10	60		20		30-140/30
Bis(2-chloroethoxy) methane	50.0	0.00	36.60	73		29.10	58		23		40-140/30
Benzoic acid	50.0	0.00	6.80	14	*	6.00	12	*	13		30-140/30
2,4-Dimethylaniline	50.0	0.00	37.90	76		30.50	61		22		40-140/30
2,4-Dichlorophenol	50.0	0.00	45.20	90		35.40	71		24		30-140/30
1,2,4-Trichlorobenzene	50.0	0.00	37.20	74		28.40	57		27		40-140/30
Naphthalene	50.0	74.00	174.10	200	*	134.70	121		26		40-140/30
4-Chloroaniline	50.0	0.00	86.50	173	*	69.50	139		22		40-140/30
Hexachlorobutadiene	50.0	0.00	34.80	70		27.40	55		24		40-140/30
Caprolactam	50.0	0.00	393.90	788	*	339.70	679	*	15		40-140/30
4-Chloro-3-methylphenol	50.0	0.00	62.20	124		52.00	104		18		30-140/30
2-Methylnaphthalene	50.0	390.00	347.10	-86	*	317.80	-144	*	9		40-140/30
Hexachlorocyclopentadiene	50.0	0.00	19.50	39		12.00	24		48	*	5-105/30
2,4,6-Trichlorophenol	50.0	0.00	42.60	85		30.70	61		32	*	30-140/30
2,4,5-Trichlorophenol	50.0	0.00	60.20	120		40.10	80		40	*	30-140/30
1,1'-Biphenyl	50.0	0.00	140.30	281	*	104.40	209	*	29		40-140/30
2-Chloronaphthalene	50.0	0.00	61.40	123		44.90	90		31	*	40-140/30
2-Nitroaniline	50.0	0.00	85.90	172	*	70.40	141	*	20		40-140/30
Dimethyl phthalate	50.0	0.00	43.90	88		42.30	85		4		40-140/30
2,6-Dinitrotoluene	50.0	0.00	85.00	170	*	83.90	168	*	1		40-140/30
Acenaphthylene	50.0	0.00	61.20	122		48.80	98		23		40-140/30
3-Nitroaniline	50.0	0.00	68.50	137		52.70	105		26		40-140/30
Acenaphthene	50.0	0.00	164.40	329	*	123.20	246	*	29		40-140/30
2,4-Dinitrophenol	50.0	0.00	61.30	123	*	48.30	97		24		5-105/30

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E12-12094-003
Date Received: 12/07/2012
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
MS Data file: C2279.D
MSD Data file: C2280.D

GC/MS Column: DB-5
Sample wt/vol: 15.20g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 17.2
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
4-Nitrophenol	50.0	0.00	53.80	108		48.90	98		10		30-140/30
2,4-Dinitrotoluene	50.0	0.00	34.60	69		33.20	66		4		40-140/30
Dibenzofuran	50.0	0.00	47.50	95		37.20	74		24		40-140/30
Diethyl phthalate	50.0	0.00	48.60	97		42.00	84		15		40-140/30
Fluorene	50.0	0.00	130.00	260	*	103.40	207	*	23		40-140/30
4-Chlorophenyl phenyl ether	50.0	0.00	63.70	127		42.60	85		40	*	40-140/30
4-Nitroaniline	50.0	0.00	59.70	119		49.90	100		18		40-140/30
1,2,4,5-Tetrachlorobenzene	50.0	0.00	60.30	121		43.50	87		32	*	40-140/30
2,3,4,6-Tetrachlorophenol	50.0	0.00	69.00	138		47.10	94		38	*	40-140/30
4,6-Dinitro-2-methylphenol	50.0	0.00	61.10	122	*	44.70	89		31	*	10-110/30
N-Nitrosodiphenylamine	50.0	0.00	351.60	703	*	124.90	250	*	95	*	40-140/30
1,2-Diphenylhydrazine	50.0	0.00	65.00	130		54.50	109		18		40-140/30
4-Bromophenyl phenyl ether	50.0	0.00	56.00	112		54.50	109		3		40-140/30
Hexachlorobenzene	50.0	0.00	47.00	94		46.90	94		0		40-140/30
Atrazine	50.0	0.00	12.70	25		11.10	22		13		20-120/30
Pentachlorophenol	50.0	0.00	33.50	67		30.90	62		8		30-140/30
Phenanthrene	50.0	0.00	132.90	266	*	150.00	300	*	12		40-140/30
Anthracene	50.0	0.00	72.80	146	*	76.70	153	*	5		40-140/30
Carbazole	50.0	0.00	48.80	98		49.90	100		2		40-140/30
Di-n-butyl phthalate	50.0	0.00	37.80	76		41.10	82		8		40-140/30
Fluoranthene	50.0	0.00	28.20	56		34.90	70		21		40-140/30
Benzidine	50.0	0.00	6.10	12		0.00	0	*	200	*	5-105/30
Pyrene	50.0	0.00	77.20	154	*	64.00	128		19		40-140/30
3,3'-Dimethylbenzidine	50.0	0.00	3.40	7		3.60	7		6		5-105/30
Butyl benzyl phthalate	50.0	0.00	47.30	95		42.70	85		10		40-140/30
3,3'-Dichlorobenzidine	50.0	0.00	32.80	66		31.90	64		3		40-140/30
Benzo[a]anthracene	50.0	0.00	47.20	94		46.40	93		2		40-140/30
Chrysene	50.0	0.00	46.70	93		46.20	92		1		40-140/30
Bis(2-ethylhexyl) phthalate	50.0	0.00	48.30	97		47.60	95		1		40-140/30
Di-n-octyl phthalate	50.0	0.00	62.60	125		69.30	139		10		40-140/30
Benzo[b]fluoranthene	50.0	0.00	61.70	123		65.60	131		6		40-140/30
Benzo[k]fluoranthene	50.0	0.00	60.00	120		62.60	125		4		40-140/30
Benzo[a]pyrene	50.0	0.00	64.30	129		65.20	130		1		40-140/30
Indeno[1,2,3-cd]pyrene	50.0	0.00	60.40	121		57.10	114		6		40-140/30
Dibenz[a,h]anthracene	50.0	0.00	61.10	122		57.60	115		6		40-140/30
Benzo[g,h,i]perylene	50.0	0.00	59.00	118		55.10	110		7		40-140/30

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C2276.D

Instrument ID: MSDC

Date Extracted: 01/17/13

Matrix: SOIL

Date Analyzed: 01/18/2013

Time Analyzed: 14:28

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
B-2/6.5	E12-12094-003	01/18/2013	14:44
.	LCSS130117-04	01/18/2013	15:00
.	E12-12094-003MS	01/18/2013	15:16
.	E12-12094-003MSD	01/18/2013	15:32
S-1/9.5-	E13-00475-001	01/18/2013	15:47
S-2/9.5-	E13-00475-002	01/18/2013	16:03
S-3	E13-00475-003	01/18/2013	16:18
S-4	E13-00475-004	01/18/2013	16:34
S-5	E13-00475-005	01/18/2013	16:50
S-6	E13-00475-006	01/18/2013	17:07
MR-WP1OI	E13-00176-002	01/18/2013	17:21

FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C2317.D

Instrument ID: MSDC

Date Extracted: 01/18/13

Matrix: SOIL

Date Analyzed: 01/21/2013

Time Analyzed: 12:49

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
K1_(12-12.5)/	E12-00548-001	01/21/2013	13:06
.	LCSS130118-02	01/21/2013	13:22
SB-7/1-1.5	E12-00167-002	01/21/2013	13:38
SB-7/1-1.5	E12-00167-002	01/21/2013	23:10

FORM IV SV

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C1870.D

DFTPP Injection Date : 01/04/2013

Inst ID: MSDC

DFTPP Injection Time: 11:31

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	49.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	45.9	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	40.0 - 60.0% of mass 198	54.1	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	7.2	
275	10.0 - 30.0% of mass 198	25.6	
365	Greater than 1.0% of mass 198	3.2	
441	Present, but less than mass 443	10.82	(71.9)3
442	40.0 - 100.0% of mass 198	74.9	
443	17.0 - 23.0% of mass 442	15.1	(20.1)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN156.12	ICC040BNA1	C1871.D	01/04/2013	11:41
ABN152.12	ICC001BNA1	C1872.D	01/04/2013	11:57
ABN154.12	ICC010BNA1	C1873.D	01/04/2013	12:14
ABN155.12	ICC020BNA1	C1874.D	01/04/2013	12:30
ABN157.12	ICC080BNA1	C1875.D	01/04/2013	12:45
ABN158.12	ICC120BNA1	C1876.D	01/04/2013	13:01
ABN166.12	ICV040BNA1	C1878.D	01/04/2013	13:40
ABN165.12	ICC120BNA2	C1879.D	01/04/2013	13:56
ABN164.12	ICC080BNA2	C1880.D	01/04/2013	14:12
ABN163.12	ICC040BNA2	C1881.D	01/04/2013	14:27
ABN162.12	ICC020BNA2	C1882.D	01/04/2013	14:43
ABN161.12	ICC010BNA2	C1883.D	01/04/2013	14:59
ABN159.12	ICC001BNA2	C1884.D	01/04/2013	15:14
ABN167.12	ICV040BNA2	C1885.D	01/04/2013	15:30

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C2268.D DFTPP Injection Date : 01/18/2013

Inst ID: MSDC DFTPP Injection Time: 12:28

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	36.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	36.2	
70	Less than 2.0% of mass 69	0.0	(0.0)1
127	40.0 - 60.0% of mass 198	59.2	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	5.7	
275	10.0 - 30.0% of mass 198	26.8	
365	Greater than 1.0% of mass 198	2.3	
441	Present, but less than mass 443	10.66	(70.6)3
442	40.0 - 100.0% of mass 198	75.9	
443	17.0 - 23.0% of mass 442	15.1	(19.9)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN166.12	CCV040BNA1	C2269.D	01/18/2013	12:38
ABN167.12	CCV040BNA2	C2270.D	01/18/2013	12:53
.	LCSS130116-02	C2271.D	01/18/2013	13:09
.	E13-00029-002MS	C2272.D	01/18/2013	13:25
.	E13-00029-002MSD	C2273.D	01/18/2013	13:41
T2-1	E13-00117-001	C2274.D	01/18/2013	13:57
HLW-115-	E13-00386-001	C2275.D	01/18/2013	14:13
.	BLKS130117-04	C2276.D	01/18/2013	14:28
B-2/6.5	E12-12094-003	C2277.D	01/18/2013	14:44
.	LCSS130117-04	C2278.D	01/18/2013	15:00
.	E12-12094-003MS	C2279.D	01/18/2013	15:16
.	E12-12094-003MSD	C2280.D	01/18/2013	15:32
S-1/9.5-	E13-00475-001	C2281.D	01/18/2013	15:47
S-2/9.5-	E13-00475-002	C2282.D	01/18/2013	16:03
S-3	E13-00475-003	C2283.D	01/18/2013	16:18
S-4	E13-00475-004	C2284.D	01/18/2013	16:34
S-5	E13-00475-005	C2285.D	01/18/2013	16:50
S-6	E13-00475-006	C2286.D	01/18/2013	17:07
MR-WP1OI	E13-00176-002	C2287.D	01/18/2013	17:21
.	BLKS130117-03	C2288.D	01/18/2013	17:37
.	LCSS130117-03	C2289.D	01/18/2013	17:53
BL-1/1-1	E13-00437-002	C2290.D	01/18/2013	18:09
BL-2/1-1	E13-00437-005	C2291.D	01/18/2013	18:24

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C2268.D

DFTPP Injection Date : 01/18/2013

Inst ID: MSDC

DFTPP Injection Time: 12:28

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	36.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	36.2	
70	Less than 2.0% of mass 69	0.0	(0.0)1
127	40.0 - 60.0% of mass 198	59.2	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	5.7	
275	10.0 - 30.0% of mass 198	26.8	
365	Greater than 1.0% of mass 198	2.3	
441	Present, but less than mass 443	10.66	(70.6)3
442	40.0 - 100.0% of mass 198	75.9	
443	17.0 - 23.0% of mass 442	15.1	(19.9)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
BL-3/0.5	E13-00437-007	C2292.D	01/18/2013	18:40
BL-3_COM	E13-00437-009	C2293.D	01/18/2013	18:55
BL-4/1-1	E13-00437-012	C2294.D	01/18/2013	19:11
BL-5_FIL	E13-00437-014	C2295.D	01/18/2013	19:27
BL-5/1-1	E13-00437-015	C2296.D	01/18/2013	19:42

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C2314.D DFTPP Injection Date : 01/21/2013

Inst ID: MSDC DFTPP Injection Time: 12:07

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	44.6	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	39.6	
70	Less than 2.0% of mass 69	0.4	(1.1)1
127	40.0 - 60.0% of mass 198	50.9	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 30.0% of mass 198	27.9	
365	Greater than 1.0% of mass 198	3.6	
441	Present, but less than mass 443	13.75	(69.9)3
442	40.0 - 100.0% of mass 198	91.5	
443	17.0 - 23.0% of mass 442	19.7	(21.5)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN166.12	CCV040BNA1	C2315.D	01/21/2013	12:17
ABN167.12	CCV040BNA2	C2316.D	01/21/2013	12:33
.	BLKS130118-02	C2317.D	01/21/2013	12:49
K1_(12-12.5)/	E12-00548-001	C2318.D	01/21/2013	13:06
.	LCSS130118-02	C2319.D	01/21/2013	13:22
SB-7/1-1.5	E12-00167-002	C2320.D	01/21/2013	13:38
.	BLKS130110-05	C2321.D	01/21/2013	14:10
.	LCSS130110-05	C2322.D	01/21/2013	14:27
BG-1	E12-12786-001	C2323.D	01/21/2013	14:43
BG-2	E12-12786-002	C2324.D	01/21/2013	14:59
BG-3	E12-12786-003	C2325.D	01/21/2013	15:15
BG-4	E12-12786-004	C2326.D	01/21/2013	15:31
BG-5	E12-12786-005	C2327.D	01/21/2013	15:47
BG-6	E12-12786-006	C2328.D	01/21/2013	16:03
BG-7	E12-12786-007	C2329.D	01/21/2013	16:19
BG-8	E12-12786-008	C2330.D	01/21/2013	16:35
BG-9	E12-12786-009	C2331.D	01/21/2013	16:50
BG-10	E12-12786-010	C2332.D	01/21/2013	17:06
BG-1	E12-12789-001	C2333.D	01/21/2013	17:22
BG-2	E12-12789-002	C2334.D	01/21/2013	17:38
BG-3	E12-12789-003	C2335.D	01/21/2013	17:54
BG-4	E12-12789-004	C2336.D	01/21/2013	18:10
BG-5	E12-12789-005	C2337.D	01/21/2013	18:25

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C2314.D DFTPP Injection Date : 01/21/2013

Inst ID: MSDC DFTPP Injection Time: 12:07

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	44.6	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	39.6	
70	Less than 2.0% of mass 69	0.4	(1.1)1
127	40.0 - 60.0% of mass 198	50.9	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 30.0% of mass 198	27.9	
365	Greater than 1.0% of mass 198	3.6	
441	Present, but less than mass 443	13.75	(69.9)3
442	40.0 - 100.0% of mass 198	91.5	
443	17.0 - 23.0% of mass 442	19.7	(21.5)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
BG-6	E12-12789-006	C2338.D	01/21/2013	18:41
BG-7	E12-12789-007	C2339.D	01/21/2013	18:57
BG-8	E12-12789-008	C2340.D	01/21/2013	19:13
BG-9	E12-12789-009	C2341.D	01/21/2013	19:29
BG-10	E12-12789-010	C2342.D	01/21/2013	19:44
.	E12-12786-001MS	C2343.D	01/21/2013	20:00
.	E12-12786-001MSD	C2344.D	01/21/2013	20:16
BG-1	E12-12740-001	C2345.D	01/21/2013	20:32
BG-2	E12-12740-002	C2346.D	01/21/2013	20:48
BG-3	E12-12740-003	C2347.D	01/21/2013	21:03
BG-4	E12-12740-004	C2348.D	01/21/2013	21:19
BG-5	E12-12740-005	C2349.D	01/21/2013	21:35
BG-6	E12-12740-006	C2350.D	01/21/2013	21:51
BG-7	E12-12740-007	C2351.D	01/21/2013	22:07
BG-8	E12-12740-008	C2352.D	01/21/2013	22:22
BG-9	E12-12740-009	C2353.D	01/21/2013	22:38
BG-10	E12-12740-010	C2354.D	01/21/2013	22:54
SB-7/1-1.5	E12-00167-002	C2355.D	01/21/2013	23:10

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS0213.M
Title : BNA CALIBRATION METHOD
Last Update : Fri Jan 04 15:27:42 2013
Response Via : Initial Calibration

Calibration Files
1 =C1872.D 10 =C1873.D 20 =C1874.D
40 =C1871.D 80 =C1875.D 120 =C1876.D =

		Compound	1	10	20	40	80	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	N-Nitrosodimethyl	0.548	0.770	0.778	0.730	0.783	0.835	0.741	13.54
3)	T	Pyridine	1.087	1.049	1.064	1.005	0.922	0.896	1.004	7.83
4)	S	2-Fluorophenol	1.660	1.244	1.253	1.306	1.286	1.268	1.336	12.00
5)	T	Benzaldehyde	0.935	0.817	1.059	0.692	0.943	0.864	0.885	14.15
6)	S	Phenol-d5	1.960	1.526	1.540	1.606	1.521	1.619	1.629	10.28
7)	MC	Phenol	1.520	1.547	1.503	1.401	1.577	1.454	1.500	4.26
8)	T	Aniline	0.647	0.737	0.711	0.520	0.625	0.685	0.654	11.83
9)	T	Bis(2-chloroethyl	0.999	0.956	0.944	0.794	0.850	0.918	0.910	8.27
10)	M	2-Chlorophenol	1.627	1.473	1.498	1.501	1.572	1.552	1.537	3.74
11)	T	1,3-Dichlorobenze	1.592	1.581	1.610	1.607	1.671	1.670	1.622	2.42
12)	MC	1,4-Dichlorobenze	1.736	1.562	1.629	1.429	1.525	1.646	1.588	6.71
13)	T	Benzyl alcohol	0.861	0.870	0.882	0.901	0.898	0.874	0.881	1.80
14)	T	1,2-Dichlorobenze	1.483	1.505	1.460	1.444	1.558	1.535	1.498	2.93
15)	T	2-Methylphenol	1.241	1.152	1.164	1.133	1.149	0.874	1.119	11.24
16)	T	Bis(2-chloroisopr	1.486	1.443	1.547	1.126	1.224	1.464	1.382	12.08
17)	T	4-Methylphenol	1.207	1.265	1.246	1.276	1.267	1.316	1.263	2.83
18)	MP	N-Nitrosodi-n-pro	0.923	0.882	0.920	0.756	0.906	0.832	0.870	7.49
19)	T	Acetophenone	1.893	1.797	1.782	1.786	1.725	1.732	1.786	3.38
20)	T	3-Methylphenol	1.207	1.265	1.246	1.276	1.267	1.316	1.263	2.83
21)	T	Hexachloroethane	0.592	0.532	0.546	0.558	0.573	0.582	0.564	4.02
22)	T	2,6-Dimethylpheno							0.000	-1.00
23)	I	Naphthalene-d8	----------ISTD----------							
24)	S	Nitrobenzene-d5	0.354	0.338	0.356	0.311	0.384	0.413	0.359	9.87
25)	T	Nitrobenzene	0.433	0.318	0.322	0.348	0.321	0.293	0.339	14.53
26)	T	Isophorone	0.654	0.647	0.671	0.676	0.605	0.592	0.641	5.42
27)	TC	2-Nitrophenol	0.165	0.182	0.191	0.199	0.204	0.202	0.191	7.87
28)	T	2,4-Dimethylpheno	0.349	0.356	0.354	0.308	0.358	0.360	0.348	5.67
29)	T	Bis(2-chloroethox	0.383	0.367	0.389	0.366	0.374	0.371	0.375	2.46
30)	T	Benzoic acid	0.115	0.118	0.122	0.133	0.161	0.124	0.129	13.17
31)	T	2,4-Dimethylanili	0.183	0.174	0.180	0.158	0.184	0.185	0.177	5.90
32)	TC	2,4-Dichloropheno	0.268	0.286	0.302	0.318	0.298	0.306	0.296	5.86
33)	M	1,2,4-Trichlorobe	0.346	0.349	0.365	0.327	0.377	0.363	0.355	4.97
34)	T	Naphthalene	1.113	1.080	1.091	1.034	1.078	1.022	1.070	3.24
35)	T	4-Chloroaniline	0.559	0.570	0.608	0.604	0.569	0.528	0.573	5.18
36)	T	4-Aminotoluene	0.533	0.598	0.616	0.508	0.579	0.572	0.568	7.14
37)	TC	Hexachlorobutadie	0.200	0.210	0.226	0.237	0.235	0.221	0.221	6.43
38)	T	Caprolactam	0.091	0.126	0.131	0.121	0.125	0.120	0.119	11.83
39)	T	2-Aminotoluene	0.533	0.598	0.616	0.508	0.579	0.572	0.568	7.14
40)	MC	4-Chloro-3-methyl	0.261	0.292	0.296	0.285	0.306	0.291	0.289	5.28
41)	T	2-Methylnaphthale	0.719	0.734	0.733	0.762	0.760	0.729	0.739	2.33
42)	T	2,5-Dimethylpheno							0.000	-1.00
43)	I	Acenaphthene-d10	----------ISTD----------							
44)	TP	Hexachlorocyclope	0.207	0.196	0.227	0.260	0.246	0.217	0.226	10.78
45)	TC	2,4,6-Trichloroph	0.366	0.359	0.376	0.374	0.402	0.411	0.382	5.39
46)	T	2,4,5-Trichloroph	0.385	0.390	0.409	0.414	0.442	0.440	0.413	5.80
47)	S	2-Fluorobiphenyl	1.491	1.332	1.383	1.416	1.345	1.301	1.378	4.97
48)	T	1,1'-Biphenyl	1.577	1.429	1.434	1.289	1.427	1.522	1.446	6.80
49)	T	2-Chloronaphthale	1.208	1.092	1.166	1.110	1.166	1.120	1.144	3.81
50)	T	2-Nitroaniline	0.253	0.241	0.267	0.253	0.286	0.289	0.265	7.24
51)	T	Dimethyl phthalat	1.213	1.184	1.272	1.131	1.284	1.212	1.216	4.64

52)	T	2,6-Dinitrotoluen	0.176	0.227	0.244	0.247	0.279	0.229	0.234	14.47
53)	T	Acenaphthylene	1.770	1.707	1.795	1.707	1.811	1.735	1.754	2.55
54)	T	3-Nitroaniline	0.220	0.252	0.284	0.308	0.308	0.312	0.280	13.35
55)	MC	Acenaphthene	1.170	1.119	1.172	1.082	1.150	1.126	1.136	3.04
56)	TP	2,4-Dinitrophenol	0.186	0.174	0.182	0.163	0.185	0.191	0.180	5.62
57)	MP	4-Nitrophenol	0.224	0.166	0.179	0.184	0.189	0.200	0.190	10.63
58)	M	2,4-Dinitrotoluen	0.223	0.260	0.307	0.305	0.339	0.353	0.298	16.33
59)	T	Dibenzofuran	1.656	1.579	1.642	1.668	1.565	1.596	1.618	2.66
60)	T	Diethyl phthalate	1.166	1.159	1.209	1.130	1.203	1.173	1.173	2.50
61)	T	Fluorene	1.249	1.245	1.310	1.191	1.327	1.273	1.266	3.86
62)	T	4-Chlorophenyl ph	0.656	0.621	0.658	0.638	0.657	0.682	0.652	3.14
63)	T	4-Nitroaniline	0.238	0.259	0.286	0.298	0.303	0.296	0.280	9.15
64)		1,2,4,5-Tetrachlo	0.636	0.597	0.619	0.643	0.680	0.660	0.639	4.58
65)	T	2,3,4,6-Tetrachlo	0.283	0.299	0.315	0.349	0.364	0.351	0.327	9.98
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.073	0.069	0.067	0.076	0.089	0.085	0.077	11.61
68)	TC	N-Nitrosodiphenyl	0.520	0.554	0.588	0.627	0.602	0.605	0.583	6.70
69)	T	1,2-Diphenylhydra	0.698	0.781	0.841	0.824	0.821	0.782	0.791	6.53
70)	S	2,4,6-Tribromophe	0.264	0.195	0.211	0.216	0.207	0.213	0.218	10.89
71)	T	4-Bromophenyl phe	0.254	0.268	0.282	0.304	0.279	0.297	0.281	6.62
72)	T	Hexachlorobenzene	0.345	0.332	0.341	0.359	0.352	0.361	0.348	3.21
73)	T	Atrazine	0.210	0.211	0.230	0.154	0.193	0.204	0.201	12.88
74)	MC	Pentachlorophenol	0.151	0.161	0.161	0.193	0.191	0.200	0.176	11.81
75)	T	Phenanthrene	1.256	1.092	1.128	1.242	1.156	1.171	1.174	5.46
76)	T	Anthracene	1.037	1.114	1.144	1.181	1.194	1.157	1.138	5.00
77)	T	Carbazole	0.946	0.946	1.051	1.000	1.026	0.998	0.994	4.25
78)	T	Di-n-butyl phthal	1.018	1.025	1.149	1.268	1.140	1.091	1.115	8.35
79)	TC	Fluoranthene	1.047	1.081	1.183	1.236	1.204	1.201	1.158	6.56
80)	T	Benzidine	0.605	0.549	0.695	0.553	0.707	0.725	0.639	12.49
81)		4-Aminoaniline							0.000	-1.00
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.096	1.117	1.160	1.099	1.068	1.092	1.106	2.82
84)	S	Terphenyl-d14	0.965	0.923	0.937	0.887	0.882	0.857	0.908	4.42
85)	T	3,3'-Dimethylbenz	0.564	0.606	0.770	0.604	0.716	0.710	0.662	12.30
86)	T	Butyl benzyl phth	0.440	0.408	0.425	0.431	0.421	0.420	0.424	2.55
87)	T	3,3'-Dichlorobenz	0.481	0.391	0.421	0.428	0.410	0.398	0.422	7.64
88)	T	Benzo[a]anthracen	1.111	1.026	1.071	1.085	1.080	1.112	1.081	2.92
89)	T	Chrysene	1.058	1.044	1.087	1.057	1.087	1.105	1.073	2.17
90)	T	Bis(2-ethylhexyl)	0.605	0.543	0.573	0.609	0.578	0.587	0.582	4.15
91)	T	3,3'-Dimethoxyben							0.000	-1.00
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	0.922	0.982	1.032	1.095	1.076	1.137	1.041	7.58
94)	T	Benzo[b]fluoranth	1.248	1.280	1.354	1.362	1.521	1.485	1.375	7.91
95)	T	Benzo[k]fluoranth	1.178	1.202	1.323	1.285	1.220	1.454	1.277	7.98
96)	TC	Benzo[a]pyrene	1.091	1.125	1.197	1.212	1.237	1.295	1.193	6.22
97)	T	Indeno[1,2,3-cd]p	1.692	1.512	1.554	1.617	1.669	1.755	1.633	5.54
98)	T	Dibenz[a,h]anthra	1.251	1.254	1.308	1.355	1.416	1.480	1.344	6.81
99)	T	Benzo[g,h,i]peryl	1.416	1.248	1.268	1.331	1.356	1.385	1.334	4.94

(#) = Out of Range

CS0213.M Fri Jan 04 15:27:48 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\01-04-13\
Data File : C1878.D
Acq On : 4 Jan 2013 13:40
Operator : EDM
Sample : ABN166.12,ICV040BNA1,S,30.0g,0.0.5
Misc : NA,01/03/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Jan 04 14:16:56 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 14:14:26 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00
2	T	N-Nitrosodimethylamine	0.741	0.794	-7.2	109	0.00
3	T	Pyridine	1.004	0.948	5.6	94	0.00
4	S	2-Fluorophenol	1.336	1.218	8.8	93	0.00
5	T	Benzaldehyde	0.885	0.952	-7.6	101	0.00
6	S	Phenol-d5	1.629	1.498	8.0	93	0.00
7	MC	Phenol	1.500	1.382	7.9	99	0.00
8	T	Aniline	0.654	0.566	13.5	109	0.00
9	T	Bis(2-chloroethyl) ether	0.910	0.845	7.1	106	0.00
10	M	2-Chlorophenol	1.537	1.473	4.2	98	0.00
11	T	1,3-Dichlorobenzene	1.622	1.535	5.4	96	0.00
12	MC	1,4-Dichlorobenzene	1.588	1.577	0.7	110	0.00
13	T	Benzyl alcohol	0.881	0.904	-2.6	100	0.00
14	T	1,2-Dichlorobenzene	1.498	1.455	2.9	101	0.00
15	T	2-Methylphenol	1.119	0.904	19.2	80	-0.04
16	T	Bis(2-chloroisopropyl) ethe	1.382	1.465	-6.0	130	0.00
17	T	4-Methylphenol	1.263	1.220	3.4	96	0.00
18	MP	N-Nitrosodi-n-propylamine	0.870	0.865	0.6	114	0.00
19	T	Acetophenone	1.786	1.779	0.4	100	0.00
20	T	3-Methylphenol	1.263	1.219	3.5	96	0.00
21	T	Hexachloroethane	0.564	0.532	5.7	95	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
24	S	Nitrobenzene-d5	0.359	0.355	1.1	117	0.00
25	T	Nitrobenzene	0.339	0.328	3.2	97	0.00
26	T	Isophorone	0.641	0.583	9.0	88	0.00
27	TC	2-Nitrophenol	0.191	0.202	-5.8	104	0.00
28	T	2,4-Dimethylphenol	0.348	0.357	-2.6	119	0.00
29	T	Bis(2-chloroethoxy) methane	0.375	0.362	3.5	101	0.00
30	T	Benzoic acid	0.129	0.110	14.7	85	0.00
31	T	2,4-Dimethylaniline	0.177	0.183	-3.4	119	0.00
32	TC	2,4-Dichlorophenol	0.296	0.314	-6.1	101	0.00
33	M	1,2,4-Trichlorobenzene	0.355	0.360	-1.4	113	0.00
34	T	Naphthalene	1.070	1.082	-1.1	107	0.00
35	T	4-Chloroaniline	0.573	0.562	1.9	95	0.00
36	T	4-Aminotoluene	0.568	0.555	2.3	112	0.00
37	TC	Hexachlorobutadiene	0.221	0.225	-1.8	97	0.00
38	T	Caprolactam	0.119	0.135	-13.4	114	0.00
39	T	2-Aminotoluene	0.568	0.555	2.3	112	0.00
40	MC	4-Chloro-3-methylphenol	0.289	0.302	-4.5	109	0.00
41	T	2-Methylnaphthalene	0.739	0.720	2.6	97	-0.01
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	98	-0.02
44	TP	Hexachlorocyclopentadiene	0.226	0.211	6.6	79	0.00
45	TC	2,4,6-Trichlorophenol	0.382	0.408	-6.8	107	0.00

46	T	2,4,5-Trichlorophenol	0.413	0.441	-6.8	104	-0.01
47	S	2-Fluorobiphenyl	1.378	1.415	-2.7	98	0.00
48	T	1,1'-Biphenyl	1.446	1.476	-2.1	112	-0.01
49	T	2-Chloronaphthalene	1.144	1.183	-3.4	104	-0.01
50	T	2-Nitroaniline	0.265	0.285	-7.5	111	-0.01
51	T	Dimethyl phthalate	1.216	1.294	-6.4	112	-0.01
52	T	2,6-Dinitrotoluene	0.234	0.280	-19.7	111	-0.01
53	T	Acenaphthylene	1.754	1.809	-3.1	104	-0.01
54	T	3-Nitroaniline	0.280	0.312	-11.4	99	-0.01
55	MC	Acenaphthene	1.136	1.187	-4.5	107	-0.02
56	TP	2,4-Dinitrophenol	0.180	0.188	-4.4	113	0.00
57	MP	4-Nitrophenol	0.190	0.204	-7.4	108	-0.01
58	M	2,4-Dinitrotoluene	0.298	0.343	-15.1	110	-0.02
59	T	Dibenzofuran	1.618	1.600	1.1	94	-0.02
60	T	Diethyl phthalate	1.173	1.240	-5.7	107	-0.02
61	T	Fluorene	1.266	1.336	-5.5	110	-0.02
62	T	4-Chlorophenyl phenyl ether	0.652	0.671	-2.9	103	-0.02
63	T	4-Nitroaniline	0.280	0.310	-10.7	102	-0.02
64		1,2,4,5-Tetrachlorobenzene	0.639	0.668	-4.5	102	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.327	0.347	-6.1	97	-0.02
66	I	Phenanthrene-d10	1.000	1.000	0.0	107	-0.02
67	T	4,6-Dinitro-2-methylphenol	0.077	0.085	-10.4	120	-0.02
68	TC	N-Nitrosodiphenylamine	0.583	0.590	-1.2	100	-0.02
69	T	1,2-Diphenylhydrazine	0.791	0.808	-2.1	104	-0.02
70	S	2,4,6-Tribromophenol	0.218	0.227	-4.1	112	-0.02
71	T	4-Bromophenyl phenyl ether	0.281	0.282	-0.4	99	-0.02
72	T	Hexachlorobenzene	0.348	0.348	0.0	103	-0.02
73	T	Atrazine	0.201	0.228	-13.4	130	-0.03
74	MC	Pentachlorophenol	0.176	0.177	-0.6	98	-0.02
75	T	Phenanthrene	1.174	1.092	7.0	94	-0.03
76	T	Anthracene	1.138	1.137	0.1	103	-0.02
77	T	Carbazole	0.994	0.962	3.2	103	-0.03
78	T	Di-n-butyl phthalate	1.115	1.102	1.2	93	-0.03
79	TC	Fluoranthene	1.158	1.122	3.1	97	-0.03
80	T	Benzidine	0.639	0.614	3.9	98	-0.03
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	99	-0.03
83	M	Pyrene	1.106	1.147	-3.7	104	-0.03
84	S	Terphenyl-d14	0.908	0.928	-2.2	104	-0.04
85	T	3,3'-Dimethylbenzidine	0.662	0.707	-6.8	96	-0.03
86	T	Butyl benzyl phthalate	0.424	0.433	-2.1	100	-0.04
87	T	3,3'-Dichlorobenzidine	0.422	0.454	-7.6	105	-0.02
88	T	Benzo[a]anthracene	1.081	1.093	-1.1	100	-0.03
89	T	Chrysene	1.073	1.045	2.6	98	-0.03
90	T	Bis(2-ethylhexyl) phthalate	0.582	0.589	-1.2	96	-0.03
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	100	-0.03
93	TC	Di-n-octyl phthalate	1.041	1.017	2.3	93	-0.03
94	T	Benzo[b]fluoranthene	1.375	1.320	4.0	97	-0.03
95	T	Benzo[k]fluoranthene	1.277	1.306	-2.3	101	-0.03
96	TC	Benzo[a]pyrene	1.193	1.197	-0.3	98	-0.03
97	T	Indeno[1,2,3-cd]pyrene	1.633	1.646	-0.8	101	-0.03
98	T	Dibenz[a,h]anthracene	1.344	1.368	-1.8	101	-0.03
99	T	Benzo[g,h,i]perylene	1.334	1.290	3.3	97	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0213.M Fri Jan 04 15:36:43 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\01-18-13\
Data File : C2269.D
Acq On : 18 Jan 2013 12:38
Operator : EDM
Sample : ABN166.12,CCV040BNA1,S,30.0g,0.0.5
Misc : NA,01/18/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Jan 18 13:03:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.00
2	T	N-Nitrosodimethylamine	0.741	0.700	5.5	104	0.00
3	T	Pyridine	1.004	0.889	11.5	96	0.00
4	S	2-Fluorophenol	1.336	1.261	5.6	104	0.00
5	T	Benzaldehyde	0.885	0.919	-3.8	107	0.00
6	S	Phenol-d5	1.629	1.551	4.8	104	0.00
7	MC	Phenol	1.500	1.387	7.5	107	0.00
8	T	Aniline	0.654	0.553	15.4	115	0.00
9	T	Bis(2-chloroethyl) ether	0.910	0.839	7.8	114	0.00
10	M	2-Chlorophenol	1.537	1.439	6.4	104	0.00
11	T	1,3-Dichlorobenzene	1.622	1.543	4.9	104	0.00
12	MC	1,4-Dichlorobenzene	1.588	1.595	-0.4	121	0.00
13	T	Benzyl alcohol	0.881	0.874	0.8	105	0.00
14	T	1,2-Dichlorobenzene	1.498	1.448	3.3	108	0.00
15	T	2-Methylphenol	1.119	1.067	4.6	102	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.382	1.341	3.0	129	0.00
17	T	4-Methylphenol	1.263	1.234	2.3	104	0.00
18	MP	N-Nitrosodi-n-propylamine	0.870	0.849	2.4	121	0.00
19	T	Acetophenone	1.786	1.744	2.4	106	0.00
20	T	3-Methylphenol	1.263	1.234	2.3	104	0.00
21	T	Hexachloroethane	0.564	0.537	4.8	104	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00
24	S	Nitrobenzene-d5	0.359	0.373	-3.9	131	0.00
25	T	Nitrobenzene	0.339	0.311	8.3	98	0.00
26	T	Isophorone	0.641	0.643	-0.3	104	0.00
27	TC	2-Nitrophenol	0.191	0.198	-3.7	108	0.00
28	T	2,4-Dimethylphenol	0.348	0.333	4.3	118	0.00
29	T	Bis(2-chloroethoxy) methane	0.375	0.350	6.7	105	0.00
30	T	Benzoic acid	0.129	0.134	-3.9	110	0.01
31	T	2,4-Dimethylaniline	0.177	0.172	2.8	119	0.00
32	TC	2,4-Dichlorophenol	0.296	0.317	-7.1	109	0.01
33	M	1,2,4-Trichlorobenzene	0.355	0.361	-1.7	121	0.00
34	T	Naphthalene	1.070	1.088	-1.7	115	0.00
35	T	4-Chloroaniline	0.573	0.579	-1.0	105	0.01
36	T	4-Aminotoluene	0.568	0.520	8.5	112	0.00
37	TC	Hexachlorobutadiene	0.221	0.247	-11.8	114	0.00
38	T	Caprolactam	0.119	0.110	7.6	99	0.02
39	T	2-Aminotoluene	0.568	0.520	8.5	112	0.00
40	MC	4-Chloro-3-methylphenol	0.289	0.291	-0.7	112	0.02
41	T	2-Methylnaphthalene	0.739	0.698	5.5	100	0.01
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	109	0.03
44	TP	Hexachlorocyclopentadiene	0.226	0.186	17.7	78	0.02
45	TC	2,4,6-Trichlorophenol	0.382	0.389	-1.8	113	0.02
46	T	2,4,5-Trichlorophenol	0.413	0.432	-4.6	114	0.02

47	S	2-Fluorobiphenyl	1.378	1.417	-2.8	109	0.02
48	T	1,1'-Biphenyl	1.446	1.440	0.4	122	0.03
49	T	2-Chloronaphthalene	1.144	1.108	3.1	109	0.02
50	T	2-Nitroaniline	0.265	0.241	9.1	104	0.03
51	T	Dimethyl phthalate	1.216	1.214	0.2	117	0.03
52	T	2,6-Dinitrotoluene	0.234	0.261	-11.5	115	0.03
53	T	Acenaphthylene	1.754	1.694	3.4	108	0.03
54	T	3-Nitroaniline	0.280	0.288	-2.9	102	0.04
55	MC	Acenaphthene	1.136	1.096	3.5	110	0.03
56	TP	2,4-Dinitrophenol	0.180	0.183	-1.7	122	0.00
57	MP	4-Nitrophenol	0.190	0.154	18.9	91	0.05
58	M	2,4-Dinitrotoluene	0.298	0.296	0.7	106	0.04
59	T	Dibenzofuran	1.618	1.579	2.4	103	0.04
60	T	Diethyl phthalate	1.173	1.143	2.6	110	0.04
61	T	Fluorene	1.266	1.277	-0.9	117	0.04
62	T	4-Chlorophenyl phenyl ether	0.652	0.678	-4.0	116	0.05
63	T	4-Nitroaniline	0.280	0.276	1.4	101	0.05
64		1,2,4,5-Tetrachlorobenzene	0.639	0.679	-6.3	115	0.02
65	T	2,3,4,6-Tetrachlorophenol	0.327	0.325	0.6	102	0.04
66	I	Phenanthrene-d10	1.000	1.000	0.0	115	0.07
67	T	4,6-Dinitro-2-methylphenol	0.077	0.088	-14.3	134	0.05
68	TC	N-Nitrosodiphenylamine	0.583	0.579	0.7	107	0.05
69	T	1,2-Diphenylhydrazine	0.791	0.823	-4.0	115	0.05
70	S	2,4,6-Tribromophenol	0.218	0.212	2.8	113	0.05
71	T	4-Bromophenyl phenyl ether	0.281	0.292	-3.9	111	0.05
72	T	Hexachlorobenzene	0.348	0.350	-0.6	113	0.06
73	T	Atrazine	0.201	0.229	-13.9	155	0.01
74	MC	Pentachlorophenol	0.176	0.159	9.7	95	0.07
75	T	Phenanthrene	1.174	1.122	4.4	104	0.07
76	T	Anthracene	1.138	1.135	0.3	111	0.07
77	T	Carbazole	0.994	0.986	0.8	114	0.08
78	T	Di-n-butyl phthalate	1.115	1.108	0.6	101	0.08
79	TC	Fluoranthene	1.158	1.044	9.8	97	0.11
80	T	Benzidine	0.639	0.683	-6.9	129	0.03
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	108	0.10
83	M	Pyrene	1.106	0.989	10.6	97	0.13
84	S	Terphenyl-d14	0.908	0.779	14.2	95	0.13
85	T	3,3'-Dimethylbenzidine	0.662	0.658	0.6	113	0.04
86	T	Butyl benzyl phthalate	0.424	0.416	1.9	104	0.10
87	T	3,3'-Dichlorobenzidine	0.422	0.421	0.2	106	0.10
88	T	Benzo[a]anthracene	1.081	1.078	0.3	107	0.10
89	T	Chrysene	1.073	1.065	0.7	109	0.10
90	T	Bis(2-ethylhexyl) phthalate	0.582	0.579	0.5	102	0.09
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	101	0.11
93	TC	Di-n-octyl phthalate	1.041	1.061	-1.9	98	0.09
94	T	Benzo[b]fluoranthene	1.375	1.309	4.8	97	0.11
95	T	Benzo[k]fluoranthene	1.277	1.348	-5.6	106	0.11
96	TC	Benzo[a]pyrene	1.193	1.184	0.8	98	0.11
97	T	Indeno[1,2,3-cd]pyrene	1.633	1.621	0.7	101	0.14
98	T	Dibenz[a,h]anthracene	1.344	1.362	-1.3	101	0.13
99	T	Benzo[g,h,i]perylene	1.334	1.315	1.4	100	0.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0213.M Fri Jan 18 13:31:28 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2315.D
Acq On : 21 Jan 2013 12:17
Operator : EDM
Sample : ABN166.12,CCV040BNA1,S,30.0g,0.0.5
Misc : NA,01/21/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Jan 21 12:30:21 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2	T	N-Nitrosodimethylamine	0.741	0.727	1.9	97	0.00
3	T	Pyridine	1.004	0.919	8.5	89	0.00
4	S	2-Fluorophenol	1.336	1.230	7.9	91	0.00
5	T	Benzaldehyde	0.885	0.912	-3.1	95	0.00
6	S	Phenol-d5	1.629	1.584	2.8	96	0.00
7	MC	Phenol	1.500	1.471	1.9	102	0.00
8	T	Aniline	0.654	0.536	18.0	100	0.00
9	T	Bis(2-chloroethyl) ether	0.910	0.795	12.6	97	0.00
10	M	2-Chlorophenol	1.537	1.478	3.8	95	0.00
11	T	1,3-Dichlorobenzene	1.622	1.540	5.1	93	0.00
12	MC	1,4-Dichlorobenzene	1.588	1.620	-2.0	110	0.00
13	T	Benzyl alcohol	0.881	0.900	-2.2	97	0.00
14	T	1,2-Dichlorobenzene	1.498	1.466	2.1	98	0.00
15	T	2-Methylphenol	1.119	1.115	0.4	95	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.382	1.278	7.5	110	0.00
17	T	4-Methylphenol	1.263	1.255	0.6	95	0.00
18	MP	N-Nitrosodi-n-propylamine	0.870	0.921	-5.9	118	0.00
19	T	Acetophenone	1.786	1.843	-3.2	100	0.00
20	T	3-Methylphenol	1.263	1.255	0.6	95	0.00
21	T	Hexachloroethane	0.564	0.548	2.8	95	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00
24	S	Nitrobenzene-d5	0.359	0.345	3.9	118	0.00
25	T	Nitrobenzene	0.339	0.316	6.8	96	0.00
26	T	Isophorone	0.641	0.635	0.9	100	0.00
27	TC	2-Nitrophenol	0.191	0.194	-1.6	103	0.00
28	T	2,4-Dimethylphenol	0.348	0.334	4.0	115	0.00
29	T	Bis(2-chloroethoxy) methane	0.375	0.336	10.4	97	0.00
30	T	Benzoic acid	0.129	0.144	-11.6	114	0.01
31	T	2,4-Dimethylaniline	0.177	0.169	4.5	114	0.00
32	TC	2,4-Dichlorophenol	0.296	0.315	-6.4	105	0.00
33	M	1,2,4-Trichlorobenzene	0.355	0.372	-4.8	120	0.00
34	T	Naphthalene	1.070	1.055	1.4	108	0.00
35	T	4-Chloroaniline	0.573	0.583	-1.7	102	0.00
36	T	4-Aminotoluene	0.568	0.507	10.7	106	0.00
37	TC	Hexachlorobutadiene	0.221	0.245	-10.9	110	0.00
38	T	Caprolactam	0.119	0.123	-3.4	107	0.00
39	T	2-Aminotoluene	0.568	0.507	10.7	106	0.00
40	MC	4-Chloro-3-methylphenol	0.289	0.320	-10.7	119	0.00
41	T	2-Methylnaphthalene	0.739	0.757	-2.4	105	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	120	0.00
44	TP	Hexachlorocyclopentadiene	0.226	0.182	19.5	84	0.00
45	TC	2,4,6-Trichlorophenol	0.382	0.383	-0.3	123	0.00

46	T	2,4,5-Trichlorophenol	0.413	0.429	-3.9	125	0.00
47	S	2-Fluorobiphenyl	1.378	1.288	6.5	109	0.00
48	T	1,1'-Biphenyl	1.446	1.340	7.3	125	0.00
49	T	2-Chloronaphthalene	1.144	1.073	6.2	116	0.00
50	T	2-Nitroaniline	0.265	0.237	10.6	113	0.00
51	T	Dimethyl phthalate	1.216	1.249	-2.7	133	0.00
52	T	2,6-Dinitrotoluene	0.234	0.255	-9.0	124	0.00
53	T	Acenaphthylene	1.754	1.655	5.6	117	0.00
54	T	3-Nitroaniline	0.280	0.308	-10.0	120	0.00
55	MC	Acenaphthene	1.136	1.123	1.1	125	0.00
56	TP	2,4-Dinitrophenol	0.180	0.161	10.6	119	0.00
57	MP	4-Nitrophenol	0.190	0.165	13.2	108	0.00
58	M	2,4-Dinitrotoluene	0.298	0.318	-6.7	125	0.00
59	T	Dibenzofuran	1.618	1.597	1.3	115	0.00
60	T	Diethyl phthalate	1.173	1.185	-1.0	126	-0.01
61	T	Fluorene	1.266	1.323	-4.5	134	-0.01
62	T	4-Chlorophenyl phenyl ether	0.652	0.697	-6.9	131	0.00
63	T	4-Nitroaniline	0.280	0.311	-11.1	125	0.00
64		1,2,4,5-Tetrachlorobenzene	0.639	0.613	4.1	115	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.327	0.359	-9.8	124	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	142	0.00
67	T	4,6-Dinitro-2-methylphenol	0.077	0.089	-15.6	167	0.00
68	TC	N-Nitrosodiphenylamine	0.583	0.543	6.9	123	0.00
69	T	1,2-Diphenylhydrazine	0.791	0.715	9.6	123	-0.01
70	S	2,4,6-Tribromophenol	0.218	0.210	3.7	137	0.00
71	T	4-Bromophenyl phenyl ether	0.281	0.277	1.4	129	-0.01
72	T	Hexachlorobenzene	0.348	0.346	0.6	136	0.00
73	T	Atrazine	0.201	0.226	-12.4	136	-0.02
74	MC	Pentachlorophenol	0.176	0.162	8.0	119	0.00
75	T	Phenanthrene	1.174	1.082	7.8	123	-0.01
76	T	Anthracene	1.138	1.081	5.0	130	0.00
77	T	Carbazole	0.994	0.999	-0.5	142	0.00
78	T	Di-n-butyl phthalate	1.115	1.131	-1.4	126	-0.02
79	TC	Fluoranthene	1.158	1.185	-2.3	136	0.00
80	T	Benzidine	0.639	0.659	-3.1	111	-0.01
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	122	0.00
83	M	Pyrene	1.106	1.210	-9.4	134	0.00
84	S	Terphenyl-d14	0.908	0.956	-5.3	132	-0.01
85	T	3,3'-Dimethylbenzidine	0.662	0.633	4.4	95	0.00
86	T	Butyl benzyl phthalate	0.424	0.450	-6.1	127	-0.02
87	T	3,3'-Dichlorobenzidine	0.422	0.420	0.5	120	0.00
88	T	Benzo[a]anthracene	1.081	1.095	-1.3	123	0.00
89	T	Chrysene	1.073	1.047	2.4	121	0.00
90	T	Bis(2-ethylhexyl) phthalate	0.582	0.614	-5.5	123	-0.01
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	86	0.02
93	TC	Di-n-octyl phthalate	1.041	1.248	-19.9	98	0.00
94	T	Benzo[b]fluoranthene	1.375	1.363	0.9	86	0.02
95	T	Benzo[k]fluoranthene	1.277	1.375	-7.7	92	0.02
96	TC	Benzo[a]pyrene	1.193	1.189	0.3	85	0.02
97	T	Indeno[1,2,3-cd]pyrene	1.633	1.813	-11.0	97	0.06
98	T	Dibenz[a,h]anthracene	1.344	1.501	-11.7	96	0.05
99	T	Benzo[g,h,i]perylene	1.334	1.471	-10.3	95	0.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0213.M Mon Jan 21 14:31:08 2013 RPT1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C1871.D

Date Analyzed: 01/04/2013

Instrument ID: MSDC

Time Analyzed: 11:41

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	186358	2.57	682700	3.12	427303	3.94
	UPPER LIMIT	372716	3.07	1365400	3.62	854606	4.44
	LOWER LIMIT	93179	2.07	341350	2.62	213652	3.44
	LAB SAMPLE ID						
01	ICC001BNA1	141549	2.56	543881	3.11	310618	3.92
02	ICC010BNA1	138094	2.57	530472	3.12	331579	3.93
03	ICC020BNA1	130389	2.56	494173	3.11	309254	3.92
04	ICC080BNA1	129031	2.56	499794	3.12	308101	3.93
05	ICC120BNA1	130522	2.57	523577	3.12	312619	3.92
06	ICV040BNA1	186523	2.57	699761	3.11	418306	3.92
07	ICC120BNA2	136139	2.56	528738	3.11	322420	3.93
08	ICC080BNA2	129139	2.57	504321	3.11	303457	3.92
09	ICC040BNA2	123058	2.57	540948	3.11	319142	3.91
10	ICC020BNA2	151773	2.57	566322	3.11	339236	3.92
11	ICC010BNA2	125272	2.56	514365	3.11	302587	3.91
12	ICC001BNA2	137362	2.57	551610	3.11	332570	3.92
13	ICV040BNA2	137280	2.57	539513	3.11	334858	3.92
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C1871.D

Date Analyzed: 01/04/2013

Instrument ID: MSDC

Time Analyzed: 11:41

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	627147	4.70	643970	6.50	544198	8.00
	UPPER LIMIT	1254294	5.20	1287940	7.00	1088396	8.50
	LOWER LIMIT	313574	4.20	321985	6.00	272099	7.50
	LAB SAMPLE ID						
01	ICC001BNA1	512370	4.68	477609	6.47	422409	7.98
02	ICC010BNA1	532165	4.70	499362	6.49	412696	8.00
03	ICC020BNA1	496170	4.68	487094	6.46	400961	7.97
04	ICC080BNA1	490137	4.69	508490	6.48	428949	7.99
05	ICC120BNA1	483985	4.67	495953	6.46	415707	7.96
06	ICV040BNA1	668115	4.68	640253	6.48	542328	7.97
07	ICC120BNA2	550305	4.69	511808	6.48	467391	7.98
08	ICC080BNA2	516648	4.66	499108	6.45	456184	7.94
09	ICC040BNA2	548921	4.66	531692	6.45	484980	7.94
10	ICC020BNA2	577565	4.65	545055	6.44	348096	7.94
11	ICC010BNA2	519395	4.66	493657	6.44	435873	7.94
12	ICC001BNA2	549592	4.66	494580	6.45	461216	7.96
13	ICV040BNA2	552878	4.67	530464	6.45	476625	7.95
14							
15							
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2269.D

Date Analyzed: 01/18/2013

Instrument ID: MSDC

Time Analyzed: 12:38

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	201370	2.57	745560	3.12	465399	3.97
	UPPER LIMIT	402740	3.07	1491120	3.62	930798	4.47
	LOWER LIMIT	100685	2.07	372780	2.62	232700	3.47
	LAB SAMPLE ID						
01	CCV040BNA2	150317	2.56	581339	3.11	373132	3.94
02	LCSS130116-02	102130	2.56	437375	3.11	355947	3.93
03	E13-00029-002MS	164626	2.56	673293	3.11	478649	3.92
04	E13-00029-002MSD	199413	2.56	753646	3.11	487758	3.93
05	E13-00117-001	103968	2.56	603267	3.11	537793	3.93
06	E13-00386-001	379373	2.56	1120018	3.11	758457	3.93
07	BLKS130117-04	243660	2.56	906831	3.11	619065	3.94
08	E12-12094-003	242886	2.56	925846	3.11	684446	3.93
09	LCSS130117-04	217099	2.56	886224	3.11	601852	3.93
10	E12-12094-003MS	196815	2.56	1381955	3.12	904354	3.95
11	E12-12094-003MSD	161431	2.56	1269932	3.12	868432	3.94
12	E13-00475-001	163613	2.56	681515	3.10	504263	3.92
13	E13-00475-002	103556	2.56	451032	3.10	334309	3.92
14	E13-00475-003	186363	2.56	752795	3.11	492516	3.92
15	E13-00475-004	101623	2.56	431940	3.10	331974	3.91
16	E13-00475-005	101054	2.56	430508	3.10	337827	3.92
17	E13-00475-006	100957	2.56	408905	3.10	259467	3.93
18	E13-00176-002	194166	2.56	837423	3.11	604530	3.93
19	BLKS130117-03	166987	2.56	712441	3.10	537783	3.92
20	LCSS130117-03	215974	2.56	877047	3.11	599583	3.91
21	E13-00437-002	215409	2.56	857889	3.10	589111	3.92
22	E13-00437-005	164189	2.56	698128	3.10	510401	3.92

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2269.D

Date Analyzed: 01/18/2013

Instrument ID: MSDC

Time Analyzed: 12:38

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	723365	4.77	694483	6.60	548518	8.11
	UPPER LIMIT	1446730	5.27	1388966	7.10	1097036	8.61
	LOWER LIMIT	361683	4.27	347242	6.10	274259	7.61
	LAB SAMPLE ID						
01	CCV040BNA2	653668	4.71	670051	6.52	525960	8.04
02	LCSS130116-02	882832	4.69	1369705	6.49	902678	8.01
03	E13-00029-002MS	925929	4.68	1084888	6.48	627187	7.99
04	E13-00029-002MSD	832471	4.70	819462	6.51	422172	8.02
05	E13-00117-001	1162596	4.70	1329978	6.51	952375	8.02
06	E13-00386-001	1320619	4.69	1158898	6.50	564027	8.00
07	BLKS130117-04	1067536	4.72	1138066	6.53	668948	8.05
08	E12-12094-003	1266207	4.70	1279408	6.50	676958	8.02
09	LCSS130117-04	1097602	4.71	1007077	6.52	450247	8.03
10	E12-12094-003MS	1360904	4.73	437606	6.52	279775	8.02
11	E12-12094-003MSD	1152073	4.71	602782	6.50	338509	8.01
12	E13-00475-001	954593	4.66	977344	6.46	585564	7.98
13	E13-00475-002	752691	4.69	948779	6.49	504720	8.01
14	E13-00475-003	845381	4.69	739139	6.48	464441	8.00
15	E13-00475-004	706875	4.65	805798	6.45	483994	7.98
16	E13-00475-005	764955	4.68	1032097	6.48	594447	7.99
17	E13-00475-006	613173	4.69	825721	6.50	466065	8.01
18	E13-00176-002	1099390	4.69	1055319	6.48	614426	8.00
19	BLKS130117-03	1048818	4.66	891351	6.45	535961	7.97
20	LCSS130117-03	1074312	4.66	907267	6.46	545790	7.96
21	E13-00437-002	1014566	4.68	734000	6.47	476429	7.99
22	E13-00437-005	968406	4.67	935045	6.47	539776	7.97

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2269.D

Date Analyzed: 01/18/2013

Instrument ID: MSDC

Time Analyzed: 12:38

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	201370	2.57	745560	3.12	465399	3.97
	UPPER LIMIT	402740	3.07	1491120	3.62	930798	4.47
	LOWER LIMIT	100685	2.07	372780	2.62	232700	3.47
	LAB SAMPLE ID						
01	E13-00437-007	111899	2.56	540743	3.10	433486	3.91
02	E13-00437-009	163079	2.56	687244	3.1	474590	3.91
03	E13-00437-012	212111	2.56	867580	3.1	617802	3.91
04	E13-00437-014	289849	2.56	1149928	3.1	788654	3.91
05	E13-00437-015	102668	2.56	376841	3.1	289095	3.91
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IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2269.D

Date Analyzed: 01/18/2013

Instrument ID: MSDC

Time Analyzed: 12:38

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	723365	4.77	694483	6.60	548518	8.11
	UPPER LIMIT	1446730	5.27	1388966	7.10	1097036	8.61
	LOWER LIMIT	361683	4.27	347242	6.10	274259	7.61
	LAB SAMPLE ID						
01	E13-00437-007	867338	4.66	948477	6.46	566148	7.97
02	E13-00437-009	922202	4.65	819945	6.44	476411	7.95
03	E13-00437-012	1094817	4.66	840163	6.45	533543	7.96
04	E13-00437-014	1244349	4.66	844828	6.45	558243	7.97
05	E13-00437-015	586734	4.64	488160	6.44	275044	7.95
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2315.D

Date Analyzed: 01/21/2013

Instrument ID: MSDC

Time Analyzed: 12:17

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	180735	2.56	724180	3.12	513997	3.93
	UPPER LIMIT	361470	3.06	1448360	3.62	1027994	4.43
	LOWER LIMIT	90368	2.06	362090	2.62	256999	3.43
	LAB SAMPLE ID						
01	CCV040BNA2	133829	2.56	523970	3.11	341447	3.92
02	BLKS130118-02	283064	2.56	849127	3.10	555680	3.92
03	E12-00548-001	335055	2.56	1280354	3.10	892345	3.92
04	LCSS130118-02	184880	2.56	794335	3.11	603499	3.93
05	E12-00167-002	102030	2.56	525670	3.10	513308	3.93
06	BLKS130110-05	261432	2.56	927898	3.11	595167	3.92
07	LCSS130110-05	331083	2.56	972383	3.10	668144	3.91
08	E12-12786-001	247207	2.56	909997	3.11	574158	3.94
09	E12-12786-002	194196	2.56	844663	3.11	556328	3.94
10	E12-12786-003	198378	2.56	899022	3.11	604191	3.93
11	E12-12786-004	183116	2.56	808288	3.10	607659	3.91
12	E12-12786-005	199357	2.56	832888	3.10	597555	3.92
13	E12-12786-006	159637	2.56	778927	3.10	576554	3.90
14	E12-12786-007	172472	2.56	795965	3.10	573468	3.91
15	E12-12786-008	164021	2.56	770413	3.10	561037	3.91
16	E12-12786-009	163162	2.56	729171	3.10	530056	3.91
17	E12-12786-010	144511	2.56	678410	3.10	500924	3.91
18	E12-12789-001	193454	2.56	817300	3.10	597319	3.92
19	E12-12789-002	209153	2.56	898661	3.10	605689	3.91
20	E12-12789-003	182308	2.56	821204	3.10	568376	3.90
21	E12-12789-004	177515	2.56	781483	3.10	597941	3.91
22	E12-12789-005	137968	2.56	618360	3.10	478408	3.91

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2315.D

Date Analyzed: 01/21/2013

Instrument ID: MSDC

Time Analyzed: 12:17

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	887801	4.70	786032	6.50	470029	8.02
	UPPER LIMIT	1775602	5.20	1572064	7.00	940058	8.52
	LOWER LIMIT	443901	4.20	393016	6.00	235015	7.52
	LAB SAMPLE ID						
01	CCV040BNA2	583549	4.68	583477	6.48	446451	7.99
02	BLKS130118-02	976186	4.68	923818	6.48	486602	7.99
03	E12-00548-001	1569630	4.67	922267	6.46	496139	7.98
04	LCSS130118-02	1114425	4.69	1194279	6.50	610623	8.01
05	E12-00167-002	1460181	4.70	1397136	6.54	800982	8.07
06	BLKS130110-05	1024399	4.68	1053748	6.48	568043	8.00
07	LCSS130110-05	1067187	4.65	902894	6.45	444450	7.97
08	E12-12786-001	925549	4.71	805594	6.52	441176	8.03
09	E12-12786-002	1129365	4.72	1066742	6.53	528068	8.05
10	E12-12786-003	1033293	4.71	825062	6.52	456823	8.02
11	E12-12786-004	1121727	4.66	902480	6.45	477415	7.98
12	E12-12786-005	1104963	4.68	837485	6.48	467486	7.99
13	E12-12786-006	1080090	4.64	965734	6.44	571175	7.96
14	E12-12786-007	1046554	4.65	919266	6.45	525579	7.97
15	E12-12786-008	1025661	4.64	904879	6.44	512358	7.96
16	E12-12786-009	968165	4.64	812262	6.44	462323	7.96
17	E12-12786-010	936762	4.65	854371	6.45	478346	7.97
18	E12-12789-001	1024007	4.67	832092	6.46	468699	7.99
19	E12-12789-002	1007646	4.65	820149	6.45	499635	7.97
20	E12-12789-003	1001824	4.64	893772	6.44	564528	7.93
21	E12-12789-004	1013079	4.65	849040	6.45	474105	7.97
22	E12-12789-005	833625	4.65	777880	6.45	397078	7.97

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2315.D

Date Analyzed: 01/21/2013

Instrument ID: MSDC

Time Analyzed: 12:17

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	180735	2.56	724180	3.12	513997	3.93
	UPPER LIMIT	361470	3.06	1448360	3.62	1027994	4.43
	LOWER LIMIT	90368	2.06	362090	2.62	256999	3.43
	LAB SAMPLE ID						
01	E12-12789-006	135370	2.56	643656	3.10	472284	3.9
02	E12-12789-007	154554	2.56	707090	3.1	538749	3.91
03	E12-12789-008	93151	2.56	475993	3.1	401468	3.91
04	E12-12789-009	166897	2.56	715386	3.1	532883	3.91
05	E12-12789-010	137492	2.56	635703	3.1	485872	3.92
06	E12-12786-001MS	172587	2.56	663878	3.11	519241	3.94
07	E12-12786-001MSD	101565	2.56	367961	3.11	302966	3.94
08	E12-12740-001	215937	2.56	965026	3.1	764733	3.92
09	E12-12740-002	238236	2.56	1020595	3.1	807027	3.91
10	E12-12740-003	222802	2.56	977920	3.1	714689	3.91
11	E12-12740-004	225376	2.56	984088	3.1	780399	3.91
12	E12-12740-005	233007	2.56	1056342	3.1	784956	3.91
13	E12-12740-006	246091	2.56	996737	3.1	740436	3.92
14	E12-12740-007	203387	2.56	864136	3.1	722273	3.92
15	E12-12740-008	189172	2.56	909531	3.1	685611	3.92
16	E12-12740-009	236091	2.56	1029062	3.1	760347	3.92
17	E12-12740-010	155813	2.56	769458	3.1	617896	3.91
18	E12-00167-002	131754	2.56	632903	3.1	515542	3.91
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C2315.D

Date Analyzed: 01/21/2013

Instrument ID: MSDC

Time Analyzed: 12:17

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	887801	4.70	786032	6.50	470029	8.02
	UPPER LIMIT	1775602	5.20	1572064	7.00	940058	8.52
	LOWER LIMIT	443901	4.20	393016	6.00	235015	7.52
	LAB SAMPLE ID						
01	E12-12789-006	881348	4.64	842473	6.44	461081	7.96
02	E12-12789-007	973831	4.66	914230	6.45	456108	7.98
03	E12-12789-008	841103	4.66	854076	6.45	432543	7.98
04	E12-12789-009	874596	4.65	850914	6.45	359887	7.97
05	E12-12789-010	840726	4.67	793311	6.47	355151	7.99
06	E12-12786-001MS	902464	4.71	787521	6.53	324103	8.05
07	E12-12786-001MSD	642056	4.72	799602	6.53	388644	8.05
08	E12-12740-001	1285279	4.67	1150561	6.47	493728	7.99
09	E12-12740-002	1466225	4.66	1319105	6.45	589468	7.98
10	E12-12740-003	1251927	4.66	1193587	6.46	519873	7.97
11	E12-12740-004	1421017	4.65	1311730	6.45	575562	7.98
12	E12-12740-005	1275196	4.66	1175113	6.46	488866	7.98
13	E12-12740-006	1286642	4.67	1158313	6.46	479754	7.98
14	E12-12740-007	1330979	4.67	1215978	6.47	485389	7.99
15	E12-12740-008	1197100	4.68	972213	6.48	478348	8
16	E12-12740-009	1303932	4.67	1141463	6.47	473233	7.99
17	E12-12740-010	1172878	4.66	1080342	6.46	461507	7.97
18	E12-00167-002	1305211	4.65	1367395	6.48	379687	8.06
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On : 21 Jan 2013 23:10
Operator : EDM
Sample : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc : 130118-02,01/18/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 09:05:33 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.56	152	131754	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	632903	40.00	UG	-0.01
43) Acenaphthene-d10	3.91	164	515542	40.00	UG	-0.03
66) Phenanthrene-d10	4.65	188	1305211	40.00	UG	-0.05
82) Chrysene-d12	6.48	240	1367395m	40.00	UG	-0.02
92) Perylene-d12	8.06	264	379687m	40.00	UG	0.06

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 108		Recovery = 0.00%#			
24) Nitrobenzene-d5	2.79	82	88651m	15.60	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 31.20%			
47) 2-Fluorobiphenyl	3.56	172	315852m	17.78	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 35.56%			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 37 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	5.56	244	584107	18.81	UG	-0.06
Spiked Amount 50.000	Range 15 - 122		Recovery = 37.62%			

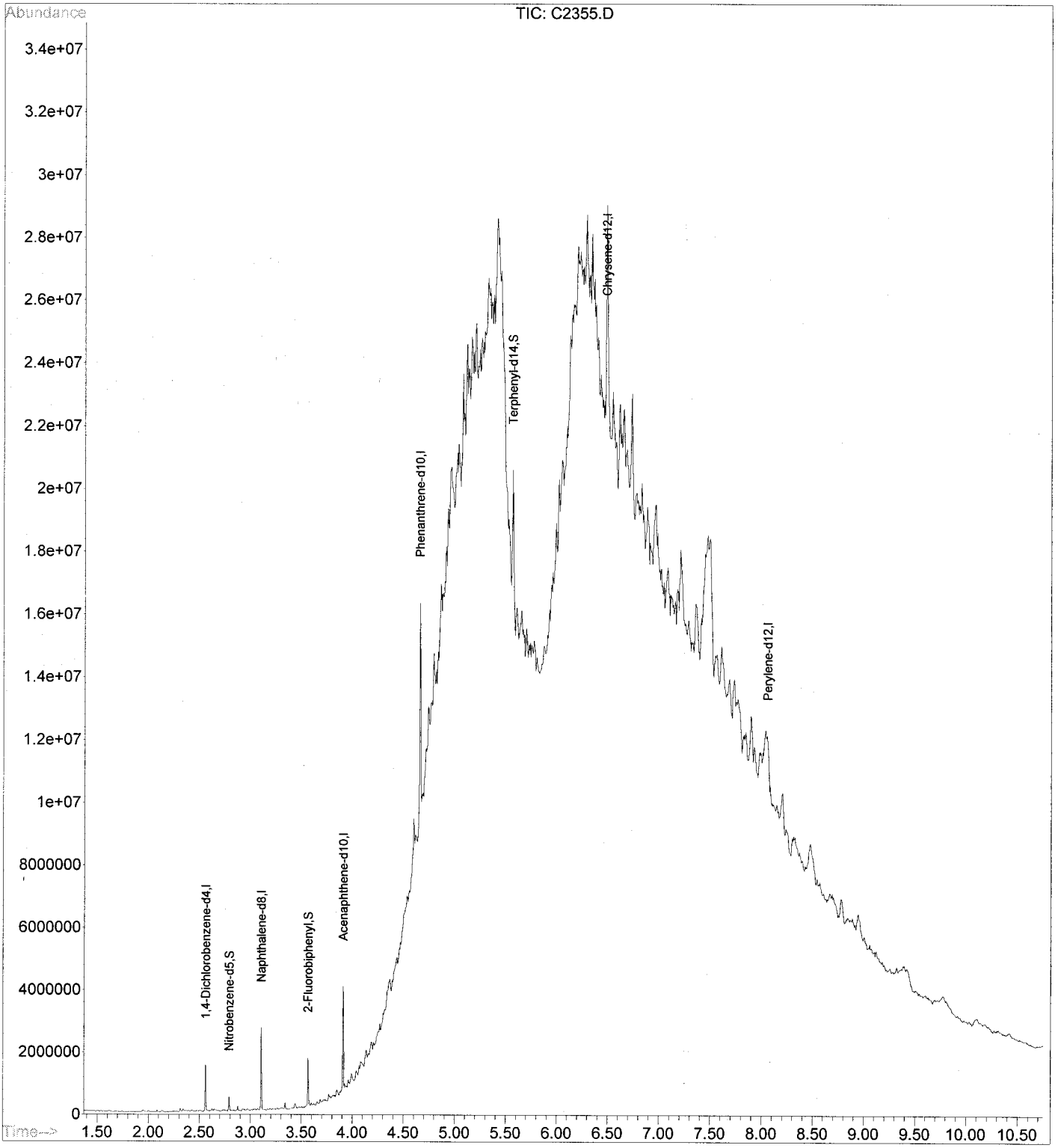
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On : 21 Jan 2013 23:10
Operator : EDM
Sample : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc : 130118-02,01/18/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 09:05:33 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On : 21 Jan 2013 23:10
Operator : EDM
Sample : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc : 130118-02,01/18/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\CS0213.M
Title : BNA CALIBRATION METHOD

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.560	222	224	226	rBV	1474309	688027	9.38%	3.840%
2	3.105	324	326	329	rBV	2618973	1182827	16.13%	6.602%
3	3.564	410	412	415	rBV	1515765	800770	10.92%	4.470%
4	3.906	474	476	478	rBV	3307201	1977181	26.96%	11.036%
5	4.039	498	501	504	rBV4	288743	341769	4.66%	1.908%
6	4.082	507	509	515	rVV6	265330	466439	6.36%	2.603%
7	4.136	515	519	521	rBV4	534731	651415	8.88%	3.636%
8	4.654	614	616	619	rBV	6830341	4473532	61.00%	24.969%
9	6.481	956	958	966	rVB	7449622	7334233	100.00%	40.936%

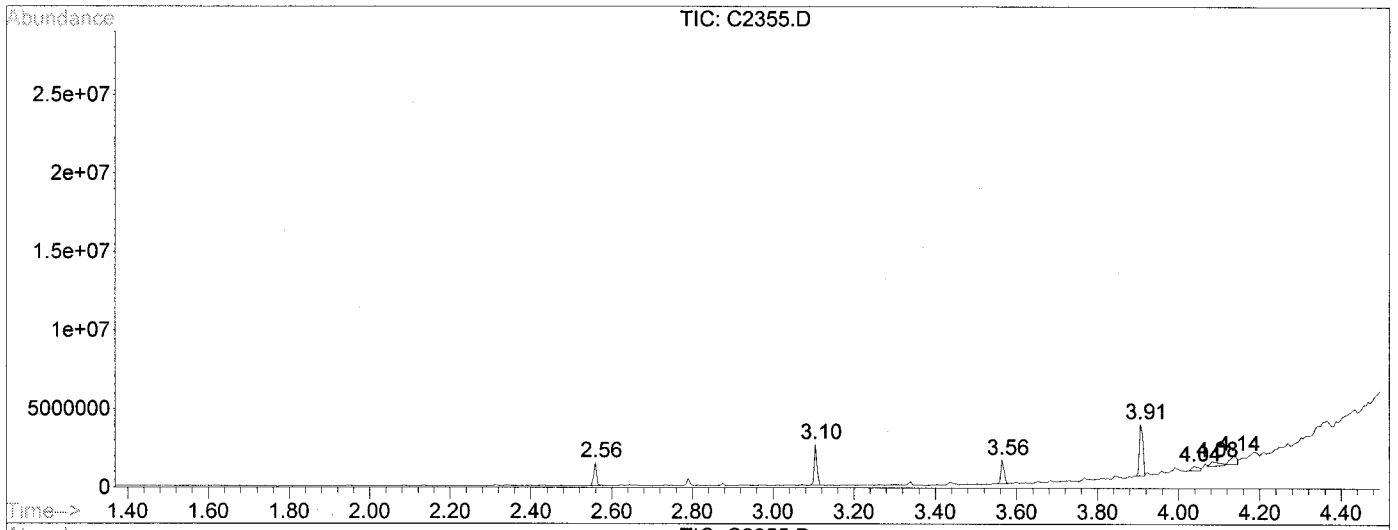
Sum of corrected areas: 17916193

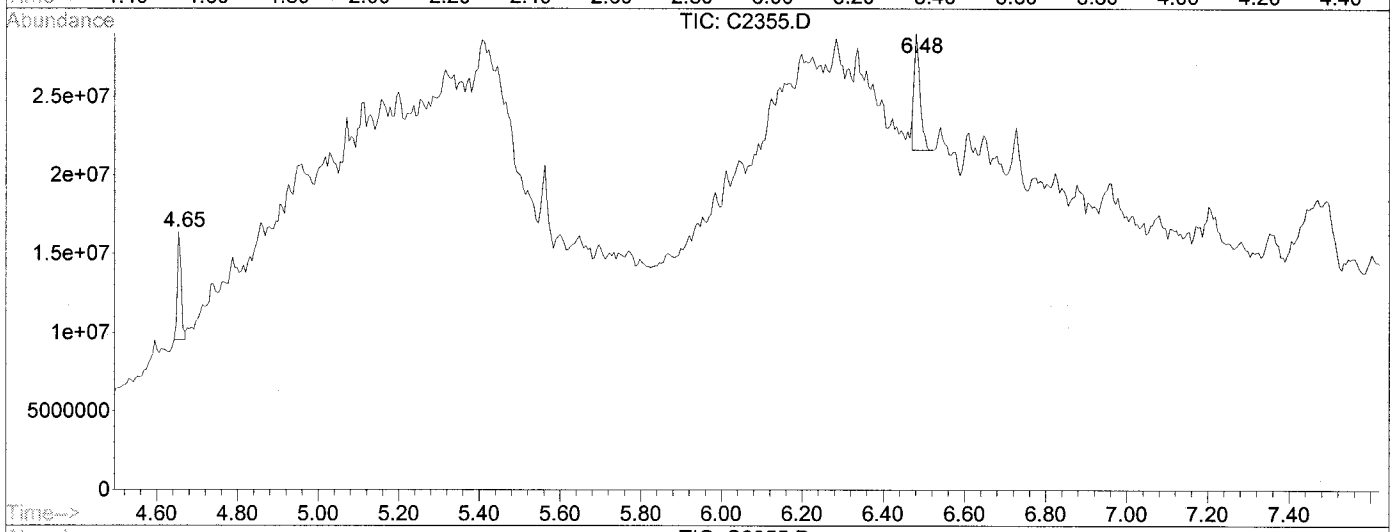
LSC Report - Integrated Chromatogram

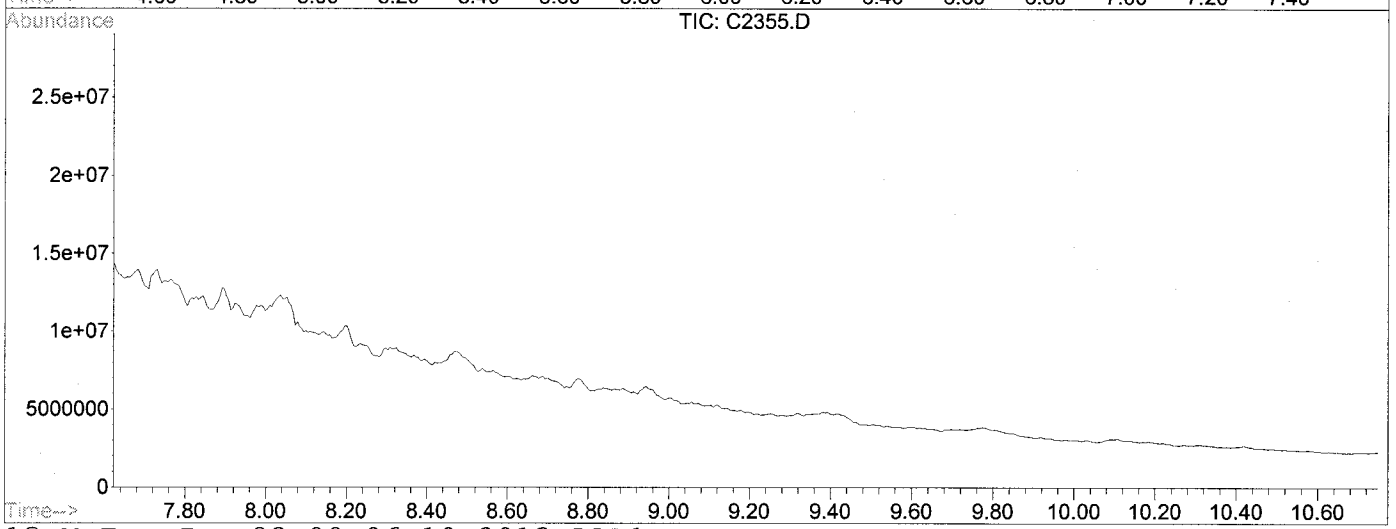
Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On : 21 Jan 2013 23:10
Operator : EDM
Sample : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc : 130118-02,01/18/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On : 21 Jan 2013 23:10
Operator : EDM
Sample : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc : 130118-02,01/18/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD

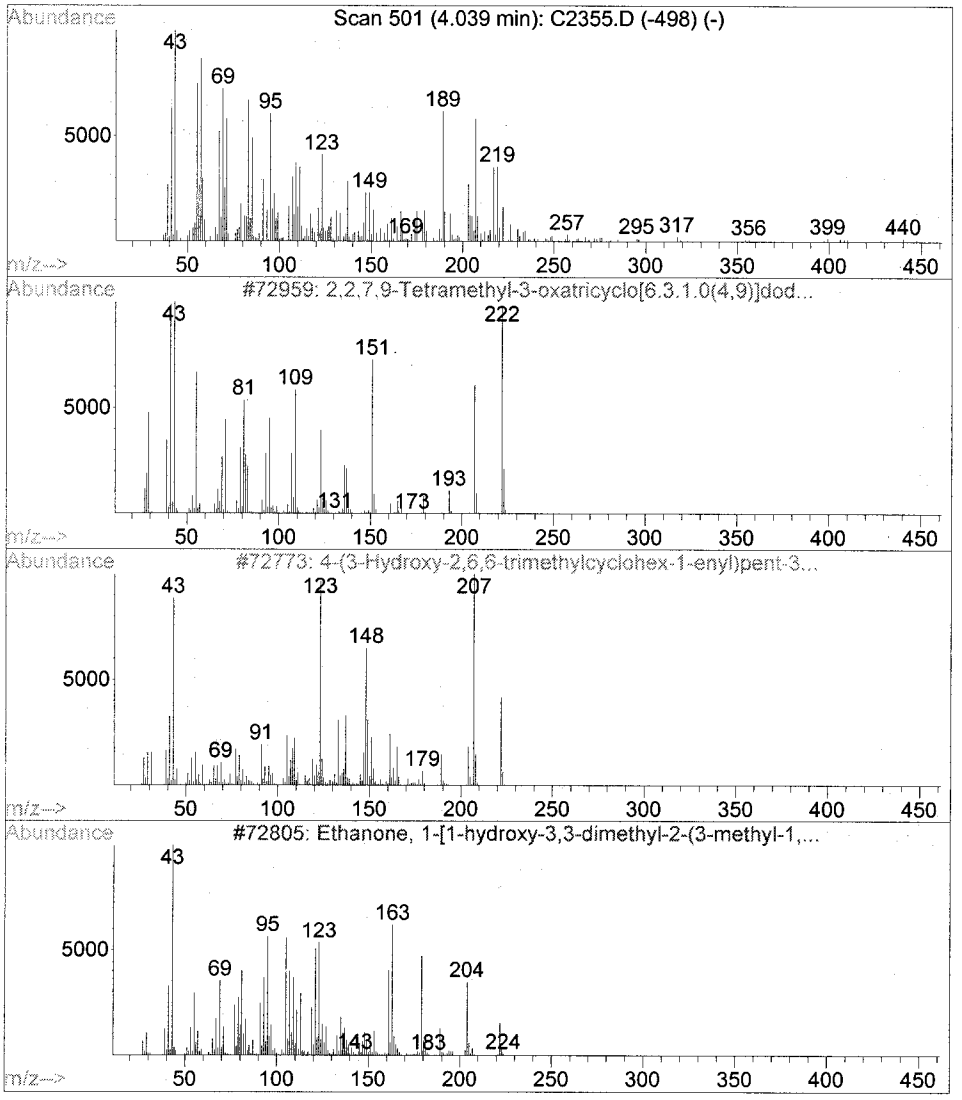
TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

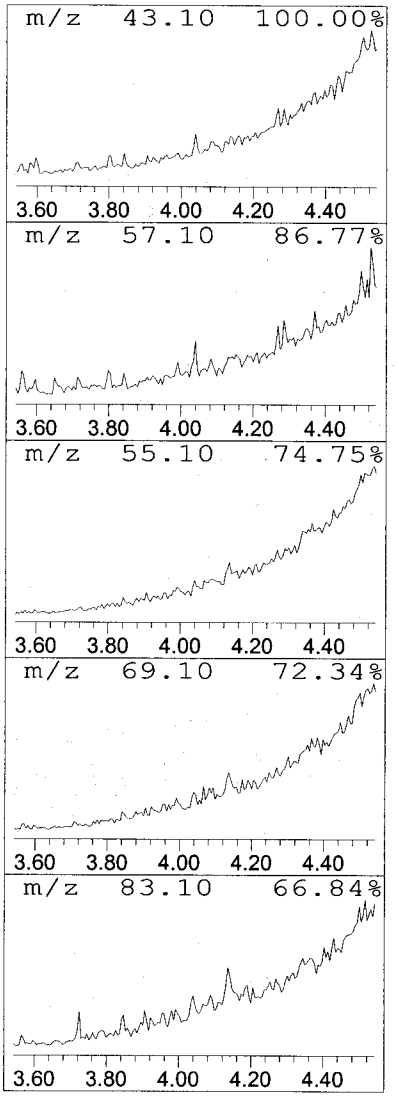
****

Peak Number 1 Unknown SV Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.04	6.91 UG	341769	Acenaphthene-d10	3.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2,7,9-Tetramethyl-3-oxatricycl...	222	C15H26O	1000189-38-8	35
2	4-(3-Hydroxy-2,6,6-trimethylcycl...	222	C14H22O2	097306-57-5	25
3	Ethanone, 1-[1-hydroxy-3,3-dimet...	222	C14H22O2	088725-75-1	22
4	5H-Benzo[b]pyran-8-ol, 2,3,5,5,8...	222	C14H22O2	097306-66-6	22
5	Benz[b]-1,4-oxazepine-4(5H)-thio...	207	C11H13NOS	1000258-63-4	18





Library Search Compound Report

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Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On    : 21 Jan 2013  23:10
Operator  : EDM
Sample    : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc      : 130118-02,01/18/13,01/04/13,1
ALS Vial  : 3   Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title  : BNA CALIBRATION METHOD

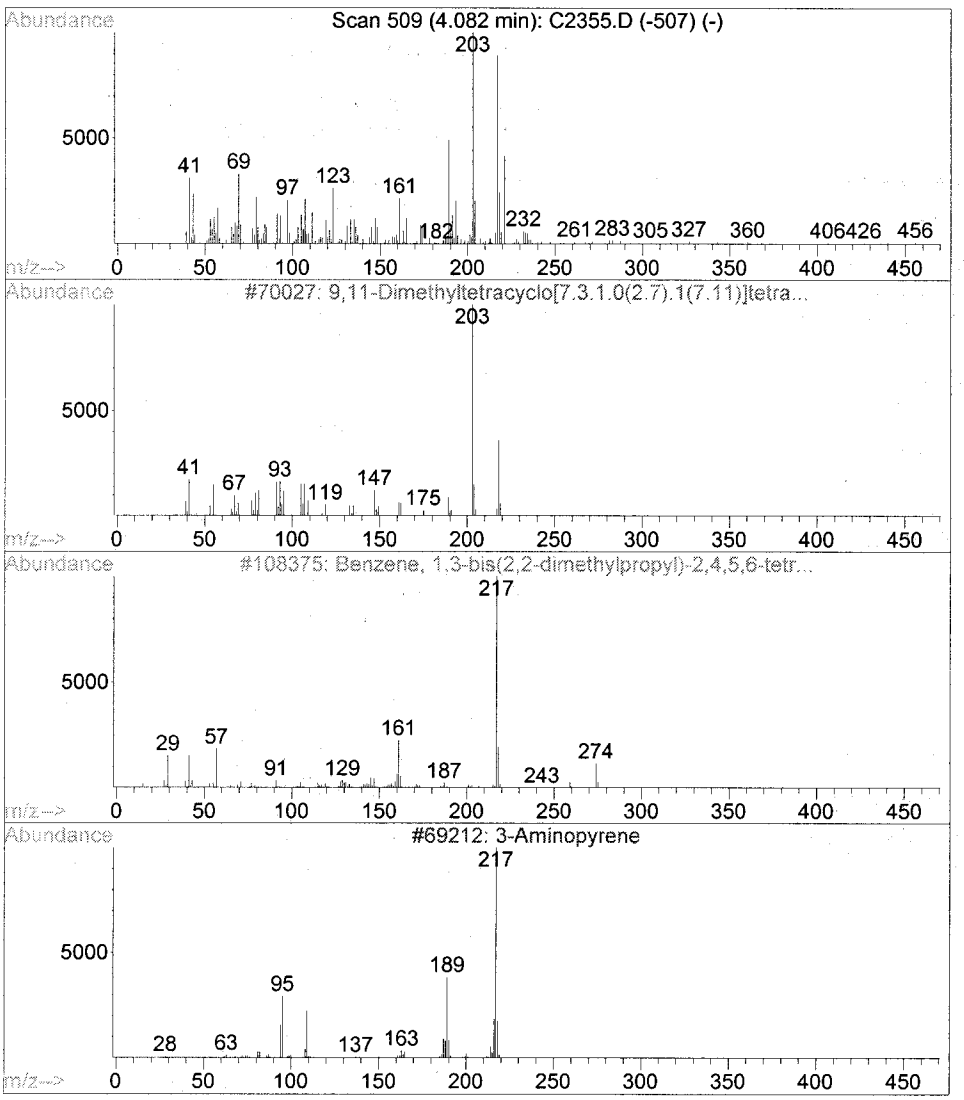
TIC Library    : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P
```

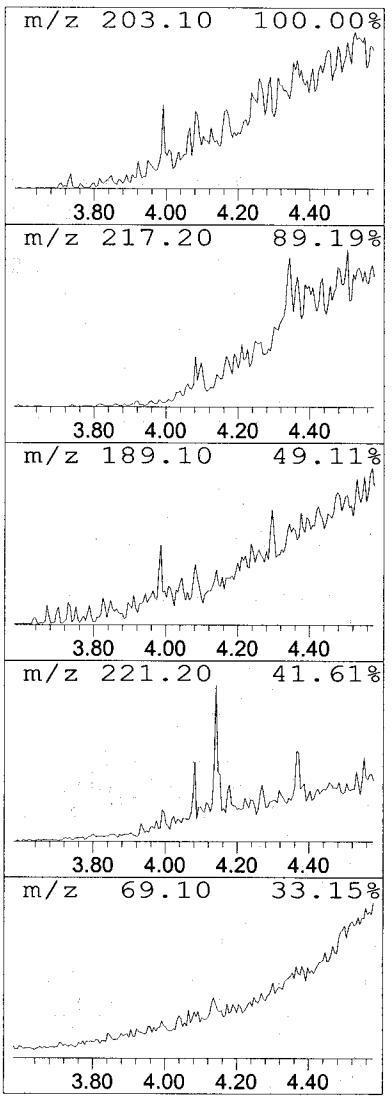
****

Peak Number 2 Unknown SV — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.08	9.44 UG	466439	Acenaphthene-d10	3.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,11-Dimethyltetracyclo[7.3.1.0(...	218	C16H26	053263-99-3	30
2	Benzene, 1,3-bis(2,2-dimethylpro...	274	C20H34	033781-73-6	22
3	3-Aminopyrene	217	C16H11N	001606-67-3	22
4	Allyl ionone 4	232	C16H24O	1000284-93-0	18
5	Disiloxane, hexaethyl-	246	C12H30OSi2	000994-49-0	16





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2355.D
Acq On : 21 Jan 2013 23:10
Operator : EDM
Sample : SB-7/1-1.5,E12-00167-002,S,15.6g,8.20,0.5
Misc : 130118-02,01/18/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD

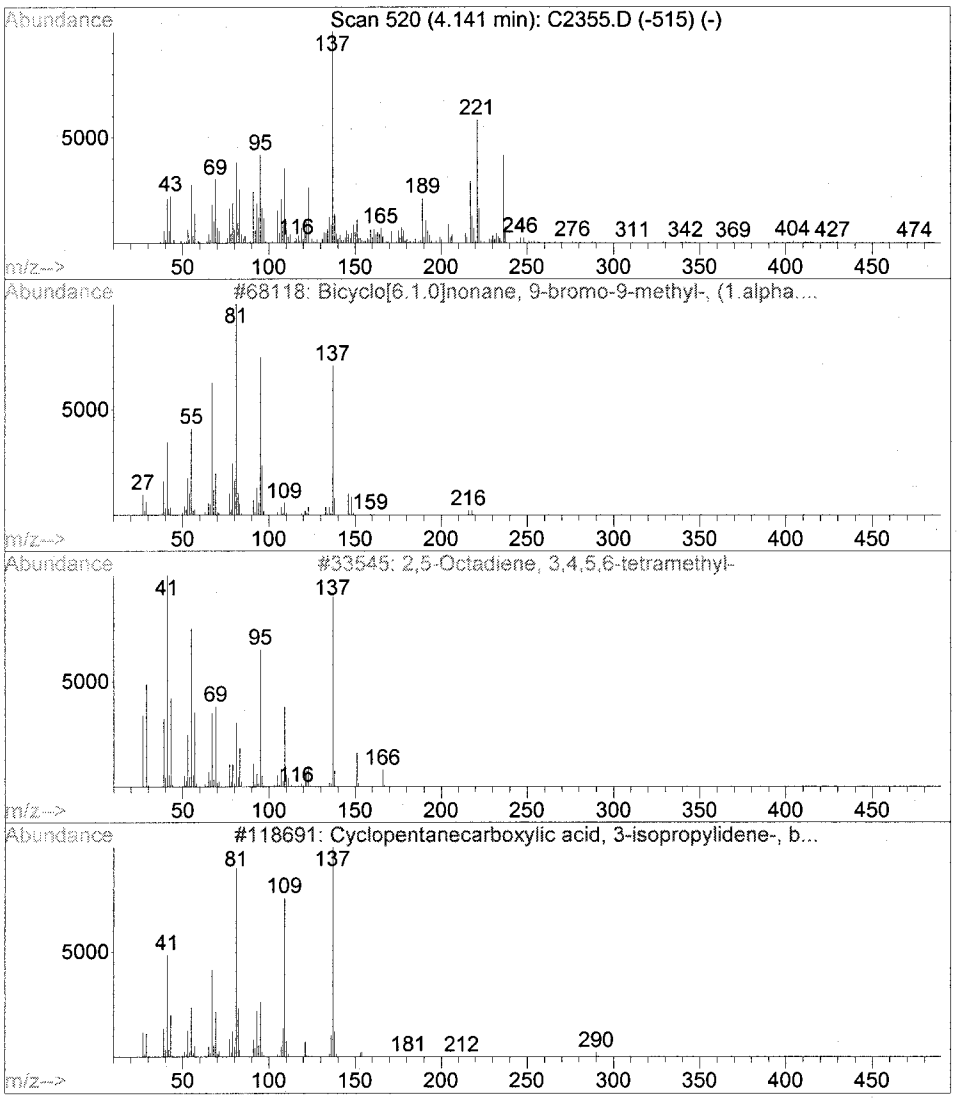
TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

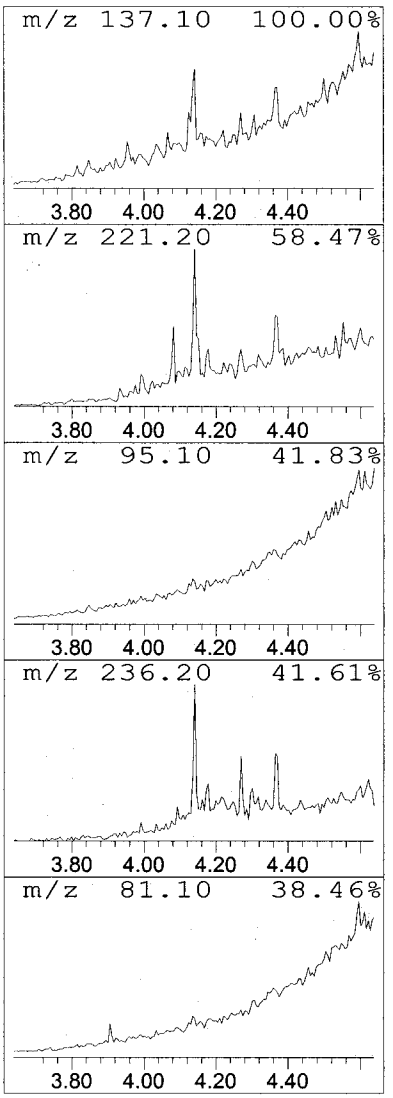
****

Peak Number 3 Unknown SV Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.14	13.18 UG	651415	Acenaphthene-d10	3.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[6.1.0]nonane, 9-bromo-9-...	216	C10H17Br	059474-03-2	38
2	2,5-Octadiene, 3,4,5,6-tetramethyl-	166	C12H22	247797-85-9	35
3	Cyclopentanecarboxylic acid, 3-i...	290	C19H30O2	1000151-83-4	30
4	Naphthalene, 1-[1-(3-cyclohexylp...	416	C30H56	055319-78-3	30
5	Triethyl 3-phosphonopropanoate	238	C9H19O5P	003699-67-0	30





INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130117-04
Client ID: .
Date Received: NA
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
Data file: C2276.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.023
Pyridine	ND		0.033	0.011
Benzaldehyde	ND		0.033	0.013
Phenol	ND		0.033	0.015
Aniline	ND		0.033	0.026
Bis(2-chloroethyl) ether	ND		0.033	0.023
2-Chlorophenol	ND		0.033	0.014
1,3-Dichlorobenzene	ND		0.033	0.015
1,4-Dichlorobenzene	ND		0.033	0.013
Benzyl alcohol	ND		0.033	0.021
1,2-Dichlorobenzene	ND		0.033	0.013
2-Methylphenol	ND		0.033	0.027
Bis(2-chloroisopropyl) ether	ND		0.033	0.012
4-Methylphenol **	ND		0.033	0.019
N-Nitrosodi-n-propylamine	ND		0.033	0.022
Acetophenone	ND		0.033	0.011
3-Methylphenol	ND		0.033	0.013
Hexachloroethane	ND		0.033	0.013
Nitrobenzene	ND		0.033	0.029
Isophorone	ND		0.033	0.022
2-Nitrophenol	ND		0.033	0.025
2,4-Dimethylphenol	ND		0.033	0.026
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.033
2,4-Dimethylaniline	ND		0.033	0.025
2,4-Dichlorophenol	ND		0.033	0.033
1,2,4-Trichlorobenzene	ND		0.033	0.026
Naphthalene	ND		0.033	0.025
4-Chloroaniline	ND		0.033	0.031
4-Aminotoluene	ND		0.033	0.028
Hexachlorobutadiene	ND		0.033	0.032
Caprolactam	ND		0.033	0.021
2-Aminotoluene	ND		0.033	0.028
4-Chloro-3-methylphenol	ND		0.033	0.030
2-Methylnaphthalene	ND		0.033	0.027
Hexachlorocyclopentadiene	ND		0.033	0.011
2,4,6-Trichlorophenol	ND		0.033	0.011
2,4,5-Trichlorophenol	ND		0.033	0.013
1,1'-Biphenyl	ND		0.033	0.010
2-Chloronaphthalene	ND		0.033	0.031
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.010

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130117-04
Client ID: .
Date Received: NA
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
Data file: C2276.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.019
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.010
Acenaphthene	ND		0.033	0.027
2,4-Dinitrophenol	ND		0.033	0.013
4-Nitrophenol	ND		0.033	0.025
2,4-Dinitrotoluene	ND		0.033	0.029
Dibenzofuran	ND		0.033	0.011
Diethyl phthalate	ND		0.033	0.025
Fluorene	ND		0.033	0.018
4-Chlorophenyl phenyl ether	ND		0.033	0.015
4-Nitroaniline	ND		0.033	0.021
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.010
2,3,4,6-Tetrachlorophenol	ND		0.033	0.014
4,6-Dinitro-2-methylphenol	ND		0.033	0.019
N-Nitrosodiphenylamine	ND		0.033	0.014
1,2-Diphenylhydrazine	ND		0.033	0.031
4-Bromophenyl phenyl ether	ND		0.033	0.019
Hexachlorobenzene	ND		0.033	0.024
Atrazine	ND		0.033	0.023
Pentachlorophenol	ND		0.033	0.014
Phenanthrene	ND		0.033	0.022
Anthracene	ND		0.033	0.032
Carbazole	ND		0.033	0.019
Di-n-butyl phthalate	ND		0.033	0.024
Fluoranthene	ND		0.033	0.013
Benzidine	ND		0.033	0.031
Pyrene	ND		0.033	0.025
3,3'-Dimethylbenzidine	ND		0.033	0.011
Butyl benzyl phthalate	ND		0.033	0.021
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.032
Chrysene	ND		0.033	0.023
Bis(2-ethylhexyl) phthalate	ND		0.033	0.016
Di-n-octyl phthalate	ND		0.033	0.013
Benzo[b]fluoranthene	ND		0.033	0.017
Benzo[k]fluoranthene	ND		0.033	0.012
Benzo[a]pyrene	ND		0.033	0.018
Indeno[1,2,3-cd]pyrene	ND		0.033	0.017
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.011

Total Target Compounds (83): 0

** - represents the total of 3+4-Methylphenol

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS130117-04
Client ID: .
Date Received: NA
Date Extracted: 01/17/2013
Date Analyzed: 01/18/2013
Data file: C2276.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130118-02
Client ID: .
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2317.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.023
Pyridine	ND		0.033	0.011
Benzaldehyde	ND		0.033	0.013
Phenol	ND		0.033	0.015
Aniline	ND		0.033	0.026
Bis(2-chloroethyl) ether	ND		0.033	0.023
2-Chlorophenol	ND		0.033	0.014
1,3-Dichlorobenzene	ND		0.033	0.015
1,4-Dichlorobenzene	ND		0.033	0.013
Benzyl alcohol	ND		0.033	0.021
1,2-Dichlorobenzene	ND		0.033	0.013
2-Methylphenol	ND		0.033	0.027
Bis(2-chloroisopropyl) ether	ND		0.033	0.012
4-Methylphenol **	ND		0.033	0.019
N-Nitrosodi-n-propylamine	ND		0.033	0.022
Acetophenone	ND		0.033	0.011
3-Methylphenol	ND		0.033	0.013
Hexachloroethane	ND		0.033	0.013
Nitrobenzene	ND		0.033	0.029
Isophorone	ND		0.033	0.022
2-Nitrophenol	ND		0.033	0.025
2,4-Dimethylphenol	ND		0.033	0.026
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.033
2,4-Dimethylaniline	ND		0.033	0.025
2,4-Dichlorophenol	ND		0.033	0.033
1,2,4-Trichlorobenzene	ND		0.033	0.026
Naphthalene	ND		0.033	0.025
4-Chloroaniline	ND		0.033	0.031
4-Aminotoluene	ND		0.033	0.028
Hexachlorobutadiene	ND		0.033	0.032
Caprolactam	ND		0.033	0.021
2-Aminotoluene	ND		0.033	0.028
4-Chloro-3-methylphenol	ND		0.033	0.030
2-Methylnaphthalene	ND		0.033	0.027
Hexachlorocyclopentadiene	ND		0.033	0.011
2,4,6-Trichlorophenol	ND		0.033	0.011
2,4,5-Trichlorophenol	ND		0.033	0.013
1,1'-Biphenyl	ND		0.033	0.010
2-Chloronaphthalene	ND		0.033	0.031
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.010

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130118-02
Client ID: .
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2317.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.019
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.010
Acenaphthene	ND		0.033	0.027
2,4-Dinitrophenol	ND		0.033	0.013
4-Nitrophenol	ND		0.033	0.025
2,4-Dinitrotoluene	ND		0.033	0.029
Dibenzofuran	ND		0.033	0.011
Diethyl phthalate	ND		0.033	0.025
Fluorene	ND		0.033	0.018
4-Chlorophenyl phenyl ether	ND		0.033	0.015
4-Nitroaniline	ND		0.033	0.021
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.010
2,3,4,6-Tetrachlorophenol	ND		0.033	0.014
4,6-Dinitro-2-methylphenol	ND		0.033	0.019
N-Nitrosodiphenylamine	ND		0.033	0.014
1,2-Diphenylhydrazine	ND		0.033	0.031
4-Bromophenyl phenyl ether	ND		0.033	0.019
Hexachlorobenzene	ND		0.033	0.024
Atrazine	ND		0.033	0.023
Pentachlorophenol	ND		0.033	0.014
Phenanthrene	ND		0.033	0.022
Anthracene	ND		0.033	0.032
Carbazole	ND		0.033	0.019
Di-n-butyl phthalate	ND		0.033	0.024
Fluoranthene	ND		0.033	0.013
Benzidine	ND		0.033	0.031
Pyrene	ND		0.033	0.025
3,3'-Dimethylbenzidine	ND		0.033	0.011
Butyl benzyl phthalate	ND		0.033	0.021
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.032
Chrysene	ND		0.033	0.023
Bis(2-ethylhexyl) phthalate	ND		0.033	0.016
Di-n-octyl phthalate	ND		0.033	0.013
Benzo[b]fluoranthene	ND		0.033	0.017
Benzo[k]fluoranthene	ND		0.033	0.012
Benzo[a]pyrene	ND		0.033	0.018
Indeno[1,2,3-cd]pyrene	ND		0.033	0.017
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.011

Total Target Compounds (83): 0

** - represents the total of 3+4-Methylphenol

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS130118-02
Client ID: .
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2317.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130118-02
Client ID: .
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2317.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.023
Pyridine	ND		0.033	0.011
Benzaldehyde	ND		0.033	0.013
Phenol	ND		0.033	0.015
Aniline	ND		0.033	0.026
Bis(2-chloroethyl) ether	ND		0.033	0.023
2-Chlorophenol	ND		0.033	0.014
1,3-Dichlorobenzene	ND		0.033	0.015
1,4-Dichlorobenzene	ND		0.033	0.013
Benzyl alcohol	ND		0.033	0.021
1,2-Dichlorobenzene	ND		0.033	0.013
2-Methylphenol	ND		0.033	0.027
Bis(2-chloroisopropyl) ether	ND		0.033	0.012
4-Methylphenol **	ND		0.033	0.019
N-Nitrosodi-n-propylamine	ND		0.033	0.022
Acetophenone	ND		0.033	0.011
3-Methylphenol	ND		0.033	0.013
Hexachloroethane	ND		0.033	0.013
Nitrobenzene	ND		0.033	0.029
Isophorone	ND		0.033	0.022
2-Nitrophenol	ND		0.033	0.025
2,4-Dimethylphenol	ND		0.033	0.026
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.033
2,4-Dimethylaniline	ND		0.033	0.025
2,4-Dichlorophenol	ND		0.033	0.033
1,2,4-Trichlorobenzene	ND		0.033	0.026
Naphthalene	ND		0.033	0.025
4-Chloroaniline	ND		0.033	0.031
4-Aminotoluene	ND		0.033	0.028
Hexachlorobutadiene	ND		0.033	0.032
Caprolactam	ND		0.033	0.021
2-Aminotoluene	ND		0.033	0.028
4-Chloro-3-methylphenol	ND		0.033	0.030
2-Methylnaphthalene	ND		0.033	0.027
Hexachlorocyclopentadiene	ND		0.033	0.011
2,4,6-Trichlorophenol	ND		0.033	0.011
2,4,5-Trichlorophenol	ND		0.033	0.013
1,1'-Biphenyl	ND		0.033	0.010
2-Chloronaphthalene	ND		0.033	0.031
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.010

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130118-02
Client ID: .
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2317.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.019
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.010
Acenaphthene	ND		0.033	0.027
2,4-Dinitrophenol	ND		0.033	0.013
4-Nitrophenol	ND		0.033	0.025
2,4-Dinitrotoluene	ND		0.033	0.029
Dibenzofuran	ND		0.033	0.011
Diethyl phthalate	ND		0.033	0.025
Fluorene	ND		0.033	0.018
4-Chlorophenyl phenyl ether	ND		0.033	0.015
4-Nitroaniline	ND		0.033	0.021
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.010
2,3,4,6-Tetrachlorophenol	ND		0.033	0.014
4,6-Dinitro-2-methylphenol	ND		0.033	0.019
N-Nitrosodiphenylamine	ND		0.033	0.014
1,2-Diphenylhydrazine	ND		0.033	0.031
4-Bromophenyl phenyl ether	ND		0.033	0.019
Hexachlorobenzene	ND		0.033	0.024
Atrazine	ND		0.033	0.023
Pentachlorophenol	ND		0.033	0.014
Phenanthrene	ND		0.033	0.022
Anthracene	ND		0.033	0.032
Carbazole	ND		0.033	0.019
Di-n-butyl phthalate	ND		0.033	0.024
Fluoranthene	ND		0.033	0.013
Benzidine	ND		0.033	0.031
Pyrene	ND		0.033	0.025
3,3'-Dimethylbenzidine	ND		0.033	0.011
Butyl benzyl phthalate	ND		0.033	0.021
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.032
Chrysene	ND		0.033	0.023
Bis(2-ethylhexyl) phthalate	ND		0.033	0.016
Di-n-octyl phthalate	ND		0.033	0.013
Benzo[b]fluoranthene	ND		0.033	0.017
Benzo[k]fluoranthene	ND		0.033	0.012
Benzo[a]pyrene	ND		0.033	0.018
Indeno[1,2,3-cd]pyrene	ND		0.033	0.017
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.011

Total Target Compounds (83): 0

** - represents the total of 3+4-Methylphenol

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS130118-02
Client ID: .
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/21/2013
Data file: C2317.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-18-13\
Data File : C2276.D
Acq On : 18 Jan 2013 14:28
Operator : EDM
Sample : .,BLKS130117-04,S,15.00g,0,0.5
Misc : 130117-04,01/17/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 18 14:40:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.56	152	243660	40.00	UG	0.00
23) Naphthalene-d8	3.11	136	906831	40.00	UG	0.00
43) Acenaphthene-d10	3.94	164	619065	40.00	UG	0.00
66) Phenanthrene-d10	4.72	188	1067536	40.00	UG	0.02
82) Chrysene-d12	6.53	240	1138066	40.00	UG	0.03
92) Perylene-d12	8.05	264	668948	40.00	UG	0.05

System Monitoring Compounds						
4) 2-Fluorophenol	2.04	112	318770	39.17	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 39.17%			
6) Phenol-d5	2.38	99	372663	37.57	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 37.57%			
24) Nitrobenzene-d5	2.79	82	165010	20.26	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 40.52%			
47) 2-Fluorobiphenyl	3.59	172	524719	24.60	UG	0.00
Spiked Amount 50.000	Range 33 - 91		Recovery = 49.20%			
70) 2,4,6-Tribromophenol	4.35	330	242313	41.70	UG	0.02
Spiked Amount 100.000	Range 37 - 115		Recovery = 41.70%			
84) Terphenyl-d14	5.66	244	469025	18.15	UG	0.04
Spiked Amount 50.000	Range 15 - 122		Recovery = 36.30%			

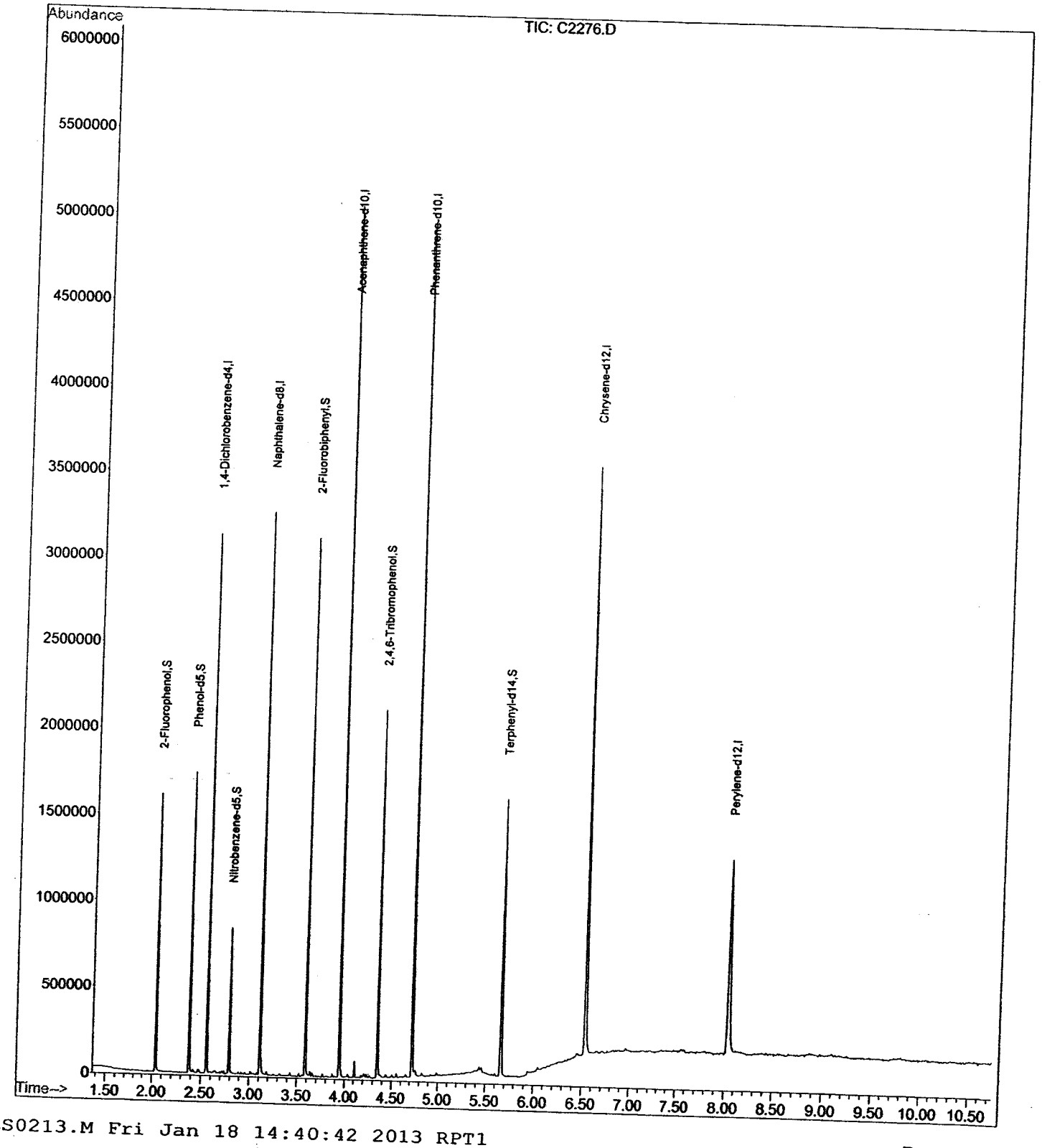
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-18-13\
Data File : C2276.D
Acq On : 18 Jan 2013 14:28
Operator : EDM
Sample : .,BLKS130117-04,S,15.00g,0,0.5
Misc : 130117-04,01/17/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 18 14:40:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration



CS0213.M Fri Jan 18 14:40:42 2013 RPT1

Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\01-18-13\
Data File : C2276.D
Acq On : 18 Jan 2013 14:28
Operator : EDM
Sample : .,BLKS130117-04,S,15.00g,0,0.5
Misc : 130117-04,01/17/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS0213.M Fri Jan 18 14:40:44 2013 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2317.D
Acq On : 21 Jan 2013 12:49
Operator : EDM
Sample : .,BLKS130118-02,S,15.00g,0,0.5
Misc : 130118-02,01/18/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 21 14:38:41 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.56	152	283064	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	849127	40.00	UG	-0.01
43) Acenaphthene-d10	3.92	164	555680	40.00	UG	-0.02
66) Phenanthrene-d10	4.68	188	976186	40.00	UG	-0.03
82) Chrysene-d12	6.48	240	923818	40.00	UG	-0.03
92) Perylene-d12	7.99	264	486602	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.04	112	421262	44.56	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 44.56%			
6) Phenol-d5	2.38	99	515919	44.77	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 44.77%			
24) Nitrobenzene-d5	2.79	82	209150m	27.43	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 54.86%			
47) 2-Fluorobiphenyl	3.57	172	480772	25.11	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 50.22%			
70) 2,4,6-Tribromophenol	4.31	330	231277	43.53	UG	-0.02
Spiked Amount 100.000	Range 37 - 115		Recovery = 43.53%			
84) Terphenyl-d14	5.58	244	424002	20.21	UG	-0.04
Spiked Amount 50.000	Range 15 - 122		Recovery = 40.42%			

Target Compounds Qvalue

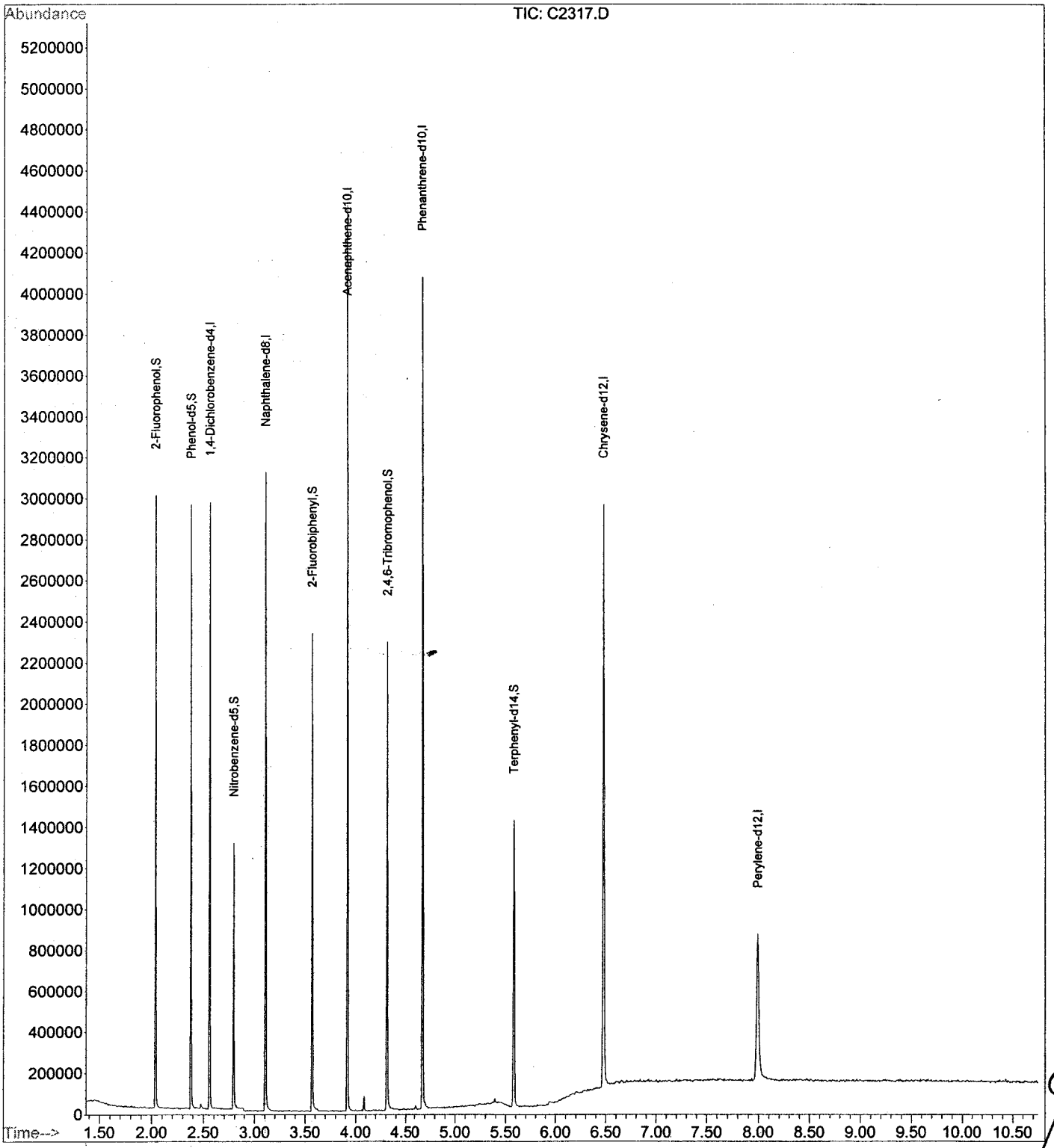
(#) = qualifier out of range (m) = manual integration (+) = signals summed

EDM.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2317.D
Acq On : 21 Jan 2013 12:49
Operator : EDM
Sample : .,BLKS130118-02,S,15.00g,0,0.5
Misc : 130118-02,01/18/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 21 14:38:41 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Fri Jan 04 15:27:42 2013
Response via : Initial Calibration



CS0213.M Mon Jan 21 14:38:57 2013 RPT1

Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\01-21-13\
Data File : C2317.D
Acq On : 21 Jan 2013 12:49
Operator : EDM
Sample : .,BLKS130118-02,S,15.00g,0,0.5
Misc : 130118-02,01/18/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0213.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS0213.M Mon Jan 21 14:38:58 2013 RPT1

gdm.

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/18/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS130118-06	SOIL	122		87		109		100	
SB-7/1-1.5	00167-002	SOIL	67		68		64		82	
SW-9	00327-025	SOIL	82		89		83		86	
PCB	00327-025MS	SOIL	88		80		86		86	
PCB	00327-025MSD	SOIL	91		76		90		82	
PCB	LCSS130118-06	SOIL	101		91		97		126	
WASTE_CLAS	00457-001	SOIL	54		94		53		96	
S-10	00327-008	SOIL	65		83		61		94	
S-11	00327-009	SOIL	90		76		90		89	
S-12	00327-010	SOIL	78		80		74		95	
S-13	00327-011	SOIL	57		77		49		92	
S-14	00327-012	SOIL	100		73		96		89	
S-15	00327-013	SOIL	111		87		104		91	
S-16	00327-014	SOIL	76		88		70		95	
S-18	00327-015	SOIL	75		78		72		93	
BS-19	00327-016	SOIL	106		78		104		89	
SW-1	00327-017	SOIL	56		73		48		85	
SW-2	00327-018	SOIL	103		75		101		91	
SW-3	00327-019	SOIL	111		83		105		88	
SW-4	00327-020	SOIL	105		79		104		91	
SW-5	00327-021	SOIL	72		77		70		88	
SW-6	00327-022	SOIL	101		79		100		94	
SW-7	00327-023	SOIL	60		79		53		93	
SW-8	00327-024	SOIL	64		76		59		88	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: LCSS130118-06

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	471.0	94	40 - 140
Aroclor-1260	500.0	0.0	387.3	77	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

SOIL PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 00327-025

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	400.3	80	40 - 140
Aroclor-1260	500.0	0.0	430.6	86	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	416.1	83	4	50	40 - 140
Aroclor-1260	0.0	496.2	99	14	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: R6911.D

Instrument ID: GC-R

Date Extracted: 01/18/2013

Matrix: SOIL

Date Analyzed: 01/18/2013

Time Analyzed: 15:37

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
SB-7/1-1.5	00167-002	01/18/2013	15:54
SW-9	00327-025	01/18/2013	16:12
PCB	00327-025MS	01/18/2013	16:29
PCB	00327-025MSD	01/18/2013	16:47
PCB	LCSS130118-06	01/18/2013	17:04
WASTE_CLAS	00457-001	01/18/2013	17:56
S-10	00327-008	01/18/2013	18:14
S-11	00327-009	01/18/2013	18:31
S-12	00327-010	01/18/2013	18:49
S-13	00327-011	01/18/2013	19:06
S-14	00327-012	01/18/2013	19:23
S-15	00327-013	01/18/2013	19:41
S-16	00327-014	01/18/2013	19:58
S-18	00327-015	01/18/2013	20:16
BS-19	00327-016	01/18/2013	20:33
SW-1	00327-017	01/18/2013	20:51
SW-2	00327-018	01/18/2013	21:08
SW-3	00327-019	01/18/2013	21:25
SW-4	00327-020	01/18/2013	21:43
SW-5	00327-021	01/18/2013	22:00
SW-6	00327-022	01/18/2013	22:18
SW-7	00327-023	01/18/2013	22:35
SW-8	00327-024	01/18/2013	22:53

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/15/2013

Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R6843.D R6841.D R6840.D R6839.D R6838.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.89	3.89	3.89	3.89	3.89	3.89	3.82	3.96
Aroclor-1016 {2}	4.78	4.78	4.78	4.78	4.78	4.78	4.71	4.85
Aroclor-1016 {3}	5.36	5.37	5.37	5.37	5.37	5.37	5.30	5.44
Aroclor-1016 {4}	5.89	5.89	5.89	5.89	5.89	5.89	5.82	5.96
Aroclor-1016 {5}	6.31	6.31	6.31	6.31	6.31	6.31	6.24	6.38
Aroclor-1221			2.67				2.60	2.74
Aroclor-1221 {2}			3.67				3.60	3.74
Aroclor-1221 {3}			3.81				3.74	3.88
Aroclor-1221 {4}			3.89				3.82	3.96
Aroclor-1221 {5}			4.53				4.46	4.60
Aroclor-1232			3.89				3.82	3.96
Aroclor-1232 {2}			4.78				4.71	4.85
Aroclor-1232 {3}			5.49				5.42	5.56
Aroclor-1232 {4}			6.10				6.03	6.17
Aroclor-1232 {5}			6.31				6.24	6.38
Aroclor-1242			4.78				4.71	4.85
Aroclor-1242 {2}			5.77				5.70	5.84
Aroclor-1242 {3}			6.10				6.03	6.17
Aroclor-1242 {4}			6.83				6.76	6.90
Aroclor-1242 {5}			7.12				7.05	7.19
Aroclor-1248			5.21				5.13	5.29
Aroclor-1248 {2}			5.76				5.68	5.84
Aroclor-1248 {3}			6.10				6.02	6.18
Aroclor-1248 {4}			6.83				6.75	6.91
Aroclor-1248 {5}			7.12				7.04	7.20
Aroclor-1254			7.23				7.15	7.31
Aroclor-1254 {2}			7.68				7.60	7.76
Aroclor-1254 {3}			7.85				7.76	7.94
Aroclor-1254 {4}			8.31				8.22	8.40
Aroclor-1254 {5}			9.16				9.07	9.25
Aroclor-1260	9.17	9.17	9.16	9.16	9.16	9.16	8.26	10.06
Aroclor-1260 {2}	9.85	9.84	9.84	9.84	9.84	9.84	8.94	10.74
Aroclor-1260 {3}	10.33	10.33	10.32	10.32	10.32	10.33	9.43	11.23
Aroclor-1260 {4}	10.83	10.83	10.82	10.82	10.82	10.82	9.92	11.72
Aroclor-1260 {5}	11.90	11.90	11.89	11.89	11.89	11.89	10.99	12.79

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/15/2013

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R6843.D R6841.D R6840.D R6839.D R6838.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	5248168	4169853	4609197	4546303	4011211	4516946	10.62
Aroclor-1016 {2}	7159398	5680975	6106726	5828381	5364764	6028049	11.39
Aroclor-1016 {3}	8182960	7288566	8408524	8439167	7515342	7966912	6.67
Aroclor-1016 {4}	4958884	3995963	4291105	4263386	3808974	4263663	10.24
Aroclor-1016 {5}	7282009	6233339	6871381	6962300	6337098	6737225	6.55
Aroclor-1221			1748306				
Aroclor-1221 {2}			2501085				
Aroclor-1221 {3}			1681782				
Aroclor-1221 {4}			5951407				
Aroclor-1221 {5}			868368				
Aroclor-1232			3965634				
Aroclor-1232 {2}			1898189				
Aroclor-1232 {3}			1930808				
Aroclor-1232 {4}			1807659				
Aroclor-1232 {5}			2942436				
Aroclor-1242			4161923				
Aroclor-1242 {2}			2611627				
Aroclor-1242 {3}			3508492				
Aroclor-1242 {4}			6012100				
Aroclor-1242 {5}			4900136				
Aroclor-1248			8412154				
Aroclor-1248 {2}			4826311				
Aroclor-1248 {3}			5240235				
Aroclor-1248 {4}			10677115				
Aroclor-1248 {5}			6553920				
Aroclor-1254			11738775				
Aroclor-1254 {2}			7365920				
Aroclor-1254 {3}			14231615				
Aroclor-1254 {4}			9329348				
Aroclor-1254 {5}			12810209				
Aroclor-1260	18344053	18656317	18300262	18487801	16608294	18079345	4.61
Aroclor-1260 {2}	9564316	8558564	8199507	8440667	7645089	8481629	8.25
Aroclor-1260 {3}	23234899	21847737	21219373	21272938	19258255	21366640	6.70
Aroclor-1260 {4}	9763674	9424634	10333829	10664341	10003525	10038000	4.81
Aroclor-1260 {5}	4121760	4327976	4534629	4226220	3997036	4241524	4.83
					Average %RSD		7.47

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/15/2013

Instrument ID: GC-R
GC Column (2nd): DB-1701P

Data File: R6843.C R6841.C R6840.C R6839.C R6838.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	4.25	4.24	4.24	4.24	4.24	4.24	4.17	4.31
Aroclor-1016 {2}	4.86	4.85	4.85	4.85	4.85	4.85	4.78	4.92
Aroclor-1016 {3}	5.64	5.62	5.63	5.62	5.63	5.63	5.56	5.70
Aroclor-1016 {4}	5.85	5.84	5.84	5.84	5.84	5.84	5.77	5.91
Aroclor-1016 {5}	6.03	6.02	6.02	6.02	6.02	6.02	5.95	6.09
Aroclor-1221			2.85				2.78	2.92
Aroclor-1221 {2}			3.91				3.84	3.98
Aroclor-1221 {3}			4.15				4.08	4.22
Aroclor-1221 {4}			4.24				4.17	4.31
Aroclor-1221 {5}			5.63				5.56	5.70
Aroclor-1232			4.24				4.17	4.31
Aroclor-1232 {2}			5.24				5.17	5.31
Aroclor-1232 {3}			5.84				5.77	5.91
Aroclor-1232 {4}			6.02				5.95	6.09
Aroclor-1232 {5}			6.62				6.55	6.69
Aroclor-1242			5.24				5.17	5.31
Aroclor-1242 {2}			6.02				5.95	6.09
Aroclor-1242 {3}			6.62				6.55	6.69
Aroclor-1242 {4}			6.78				6.71	6.85
Aroclor-1242 {5}			7.34				7.27	7.41
Aroclor-1248			5.63				5.55	5.71
Aroclor-1248 {2}			6.22				6.14	6.30
Aroclor-1248 {3}			6.62				6.54	6.70
Aroclor-1248 {4}			6.78				6.70	6.86
Aroclor-1248 {5}			7.14				7.06	7.22
Aroclor-1254			7.63				7.55	7.71
Aroclor-1254 {2}			8.23				8.15	8.31
Aroclor-1254 {3}			8.67				8.58	8.76
Aroclor-1254 {4}			8.86				8.77	8.95
Aroclor-1254 {5}			9.68				9.59	9.77
Aroclor-1260	8.68	8.67	8.67	8.67	8.67	8.67	7.77	9.57
Aroclor-1260 {2}	9.09	9.08	9.08	9.08	9.08	9.08	8.18	9.98
Aroclor-1260 {3}	10.29	10.28	10.28	10.28	10.27	10.28	9.38	11.18
Aroclor-1260 {4}	10.80	10.79	10.79	10.79	10.79	10.79	9.89	11.69
Aroclor-1260 {5}	11.40	11.39	11.38	11.38	11.38	11.39	10.49	12.29

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/15/2013

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R6843.C R6841.C R6840.C R6839.C R6838.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	7051054	5848303	5957205	6026235	5227370	6022034	10.90
Aroclor-1016 {2}	14387840	12694104	12057363	11837905	10514563	12298355	11.48
Aroclor-1016 {3}	31962172	29408410	26129217	26607717	24525647	27726632	10.64
Aroclor-1016 {4}	12210804	9730818	10684766	10642423	9739249	10601612	9.55
Aroclor-1016 {5}	9368278	9273442	8388502	8422100	7709619	8632388	8.00
Aroclor-1221			2433941				
Aroclor-1221 {2}			3193787				
Aroclor-1221 {3}			2191216				
Aroclor-1221 {4}			7682024				
Aroclor-1221 {5}			1624368				
Aroclor-1232			5369709				
Aroclor-1232 {2}			2090798				
Aroclor-1232 {3}			3614887				
Aroclor-1232 {4}			3079085				
Aroclor-1232 {5}			4262025				
Aroclor-1242			3292322				
Aroclor-1242 {2}			5370508				
Aroclor-1242 {3}			6915206				
Aroclor-1242 {4}			5816655				
Aroclor-1242 {5}			10208233				
Aroclor-1248			10617420				
Aroclor-1248 {2}			15615324				
Aroclor-1248 {3}			11254319				
Aroclor-1248 {4}			10139780				
Aroclor-1248 {5}			5107088				
Aroclor-1254			12974478				
Aroclor-1254 {2}			10062967				
Aroclor-1254 {3}			6203358				
Aroclor-1254 {4}			8210570				
Aroclor-1254 {5}			12214115				
Aroclor-1260	14255050	12357548	11842937	12291493	11529557	12455317	8.52
Aroclor-1260 {2}	13896984	12935490	12995623	13381859	12522176	13146426	3.94
Aroclor-1260 {3}	10364867	9551970	9474680	9968637	9621365	9796304	3.77
Aroclor-1260 {4}	25213873	20980653	20099265	20681679	19659738	21327042	10.47
Aroclor-1260 {5}	13442608	14454104	14142856	14913910	14388810	14268458	3.78
						Average %RSD	8.11

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/15/2013

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R6843.D R6841.D R6840.D R6839.D R6838.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.54				8.64	8.64
Aroclor-1262 {2}			10.33				9.43	9.43
Aroclor-1262 {3}			10.96				10.06	10.06
Aroclor-1262 {4}			11.06				10.06	10.06
Aroclor-1262 {5}			11.89				10.89	10.89
Aroclor-1268			10.96				9.96	9.96
Aroclor-1268 {2}			11.05				9.95	9.95
Aroclor-1268 {3}			11.52				10.42	10.42
Aroclor-1268 {4}			11.66				10.56	10.56
Aroclor-1268 {5}			12.50				11.40	11.40

GC Column (2nd): DB-1701P

Data File: R6843.C R6841.C R6840.C R6839.C R6838.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			10.27				9.37	9.37
Aroclor-1262 {2}			10.79				9.89	9.89
Aroclor-1262 {3}			11.29				10.39	10.39
Aroclor-1262 {4}			11.38				10.38	10.38
Aroclor-1262 {5}			11.99				10.99	10.99
Aroclor-1268			11.29				10.29	10.29
Aroclor-1268 {2}			11.37				10.27	10.27
Aroclor-1268 {3}			11.62				10.52	10.52
Aroclor-1268 {4}			11.77				10.67	10.67
Aroclor-1268 {5}			12.86				11.76	11.76

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/15/2013

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R6843.D R6841.D R6840.D R6839.D R6838.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			6505303				
Aroclor-1262 {2}			24527064				
Aroclor-1262 {3}			8713922				
Aroclor-1262 {4}			10930284				
Aroclor-1262 {5}			7458096				
Aroclor-1268			24607921				
Aroclor-1268 {2}			29079166				
Aroclor-1268 {3}			20866609				
Aroclor-1268 {4}			5963362				
Aroclor-1268 {5}			62181928				

GC Column (2nd): DB-1701P

Data File: R6843.C R6841.C R6840.C R6839.C R6838.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			9701315				
Aroclor-1262 {2}			21369118				
Aroclor-1262 {3}			6725369				
Aroclor-1262 {4}			14665940				
Aroclor-1262 {5}			2634351				
Aroclor-1268			21288672				
Aroclor-1268 {2}			23528532				
Aroclor-1268 {3}			17891106				
Aroclor-1268 {4}			4549906				
Aroclor-1268 {5}			56385389				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/18/2013 **Instrument ID:** GC-R

Data File: R6910.D **GC Column (1st):** DB-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.89	3.82	3.96	4516946	4958489	9.78
Aroclor-1016 {2}	4.78	4.71	4.85	6028049	6829507	13.30
Aroclor-1016 {3}	5.36	5.30	5.44	7966912	9036293	13.42
Aroclor-1016 {4}	5.89	5.82	5.96	4263663	4755488	11.54
Aroclor-1016 {5}	6.31	6.24	6.38	6737225	7329507	8.79
Aroclor-1260	9.16	8.26	10.06	18079345	20857611	15.37
Aroclor-1260 {2}	9.84	8.94	10.74	8481629	9308034	9.74
Aroclor-1260 {3}	10.32	9.43	11.23	21366640	24272617	13.60
Aroclor-1260 {4}	10.82	9.92	11.72	10038000	11854186	18.09
Aroclor-1260 {5}	11.89	10.99	12.79	4241524	4334062	2.18
					Average %D	11.58

Data File: R6910.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	4.24	4.17	4.31	6022034	6166183	2.39
Aroclor-1016 {2}	4.85	4.78	4.92	12298355	12372130	0.60
Aroclor-1016 {3}	5.62	5.56	5.70	27726632	27150773	2.08
Aroclor-1016 {4}	5.84	5.77	5.91	10601612	11663395	10.02
Aroclor-1016 {5}	6.01	5.95	6.09	8632388	8993328	4.18
Aroclor-1260	8.67	7.77	9.57	12455317	13305015	6.82
Aroclor-1260 {2}	9.08	8.18	9.98	13146426	14674834	11.63
Aroclor-1260 {3}	10.27	9.38	11.18	9796304	10372044	5.88
Aroclor-1260 {4}	10.78	9.89	11.69	21327042	20883342	2.08
Aroclor-1260 {5}	11.38	10.49	12.29	14268458	14723424	3.19
					Average %D	4.89

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/18/2013 **Instrument ID:** GC-R

Data File: R6937.D **GC Column (1st):** DB-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.89	3.82	3.96	4516946	4952836	9.65
Aroclor-1016 {2}	4.78	4.71	4.85	6028049	6852885	13.68
Aroclor-1016 {3}	5.37	5.30	5.44	7966912	9119608	14.47
Aroclor-1016 {4}	5.89	5.82	5.96	4263663	4506105	5.69
Aroclor-1016 {5}	6.31	6.24	6.38	6737225	7183651	6.63
Aroclor-1260	9.16	8.26	10.06	18079345	15574466	13.85
Aroclor-1260 {2}	9.84	8.94	10.74	8481629	7340373	13.46
Aroclor-1260 {3}	10.32	9.43	11.23	21366640	18366042	14.04
Aroclor-1260 {4}	10.82	9.92	11.72	10038000	9055676	9.79
Aroclor-1260 {5}	11.89	10.99	12.79	4241524	3675743	13.34
					Average %D	11.46

Data File: R6937.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	4.24	4.17	4.31	6022034	5812553	3.48
Aroclor-1016 {2}	4.85	4.78	4.92	12298355	11490982	6.56
Aroclor-1016 {3}	5.62	5.56	5.70	27726632	25212759	9.07
Aroclor-1016 {4}	5.84	5.77	5.91	10601612	10531945	0.66
Aroclor-1016 {5}	6.02	5.95	6.09	8632388	8182777	5.21
Aroclor-1260	8.67	7.77	9.57	12455317	10677777	14.27
Aroclor-1260 {2}	9.08	8.18	9.98	13146426	12471107	5.14
Aroclor-1260 {3}	10.27	9.38	11.18	9796304	9316334	4.90
Aroclor-1260 {4}	10.79	9.89	11.69	21327042	19752620	7.38
Aroclor-1260 {5}	11.38	10.49	12.29	14268458	15291998	7.17
					Average %D	6.38

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.38 **DCB 1** 12.99 **TCMX 2** 3.33 **DCB 2** 13.08

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS130118-06	01/18/2013	15:37	3.38		12.99		3.33		13.08	
SB-7/1-1.5	00167-002	01/18/2013	15:54	3.38		12.99		3.33		13.07	
SW-9	00327-025	01/18/2013	16:12	3.39		12.99		3.33		13.07	
PCB	00327-025MS	01/18/2013	16:29	3.39		12.98		3.33		13.07	
PCB	00327-025MSD	01/18/2013	16:47	3.39		12.99		3.33		13.07	
PCB	LCSS130118-06	01/18/2013	17:04	3.39		12.99		3.33		13.08	
WASTE_CLAS	00457-001	01/18/2013	17:56	3.39		12.99		3.33		13.07	
S-10	00327-008	01/18/2013	18:14	3.39		12.98		3.33		13.07	
S-11	00327-009	01/18/2013	18:31	3.39		12.99		3.33		13.07	
S-12	00327-010	01/18/2013	18:49	3.39		12.98		3.33		13.08	
S-13	00327-011	01/18/2013	19:06	3.39		12.99		3.33		13.07	
S-14	00327-012	01/18/2013	19:23	3.39		12.99		3.33		13.07	
S-15	00327-013	01/18/2013	19:41	3.39		12.99		3.33		13.08	
S-16	00327-014	01/18/2013	19:58	3.39		12.99		3.33		13.08	
S-18	00327-015	01/18/2013	20:16	3.39		12.99		3.33		13.07	
BS-19	00327-016	01/18/2013	20:33	3.39		12.99		3.33		13.07	
SW-1	00327-017	01/18/2013	20:51	3.39		12.99		3.34		13.07	
SW-2	00327-018	01/18/2013	21:08	3.39		12.99		3.33		13.08	
SW-3	00327-019	01/18/2013	21:25	3.39		12.99		3.33		13.07	
SW-4	00327-020	01/18/2013	21:43	3.39		12.99		3.33		13.08	
SW-5	00327-021	01/18/2013	22:00	3.39		12.99		3.33		13.08	
SW-6	00327-022	01/18/2013	22:18	3.39		12.99		3.33		13.08	
SW-7	00327-023	01/18/2013	22:35	3.39		12.99		3.33		13.08	
SW-8	00327-024	01/18/2013	22:53	3.39		12.98		3.33		13.07	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-18-13\
Data File : R6912.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Jan 2013 15:54
Operator : JS
Sample : SB-7/1-1.5,00167-002,S,5.00g,8.20,01/18/13,4
Misc : 130118-06,01/04/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 21 12:36:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0115.M
Quant Title :
QLast Update : Wed Jan 16 10:42:12 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.38	3.33	24293.0E6	32140.3E6	133.175	127.441
Spiked Amount 200.000			Recovery	=	66.59%	63.72%
2) S DCB	12.99	13.07	6805.6E6	7493.3E6	135.862m	164.577m
Spiked Amount 200.000			Recovery	=	67.93%	82.29%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

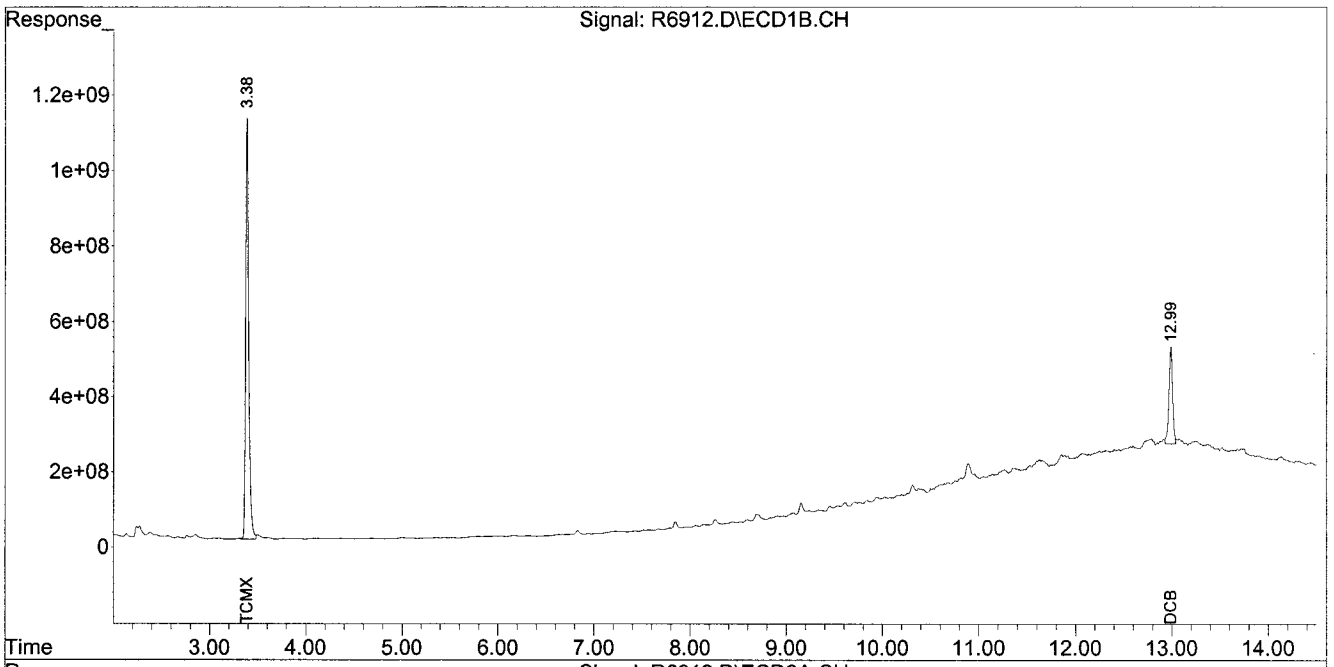
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

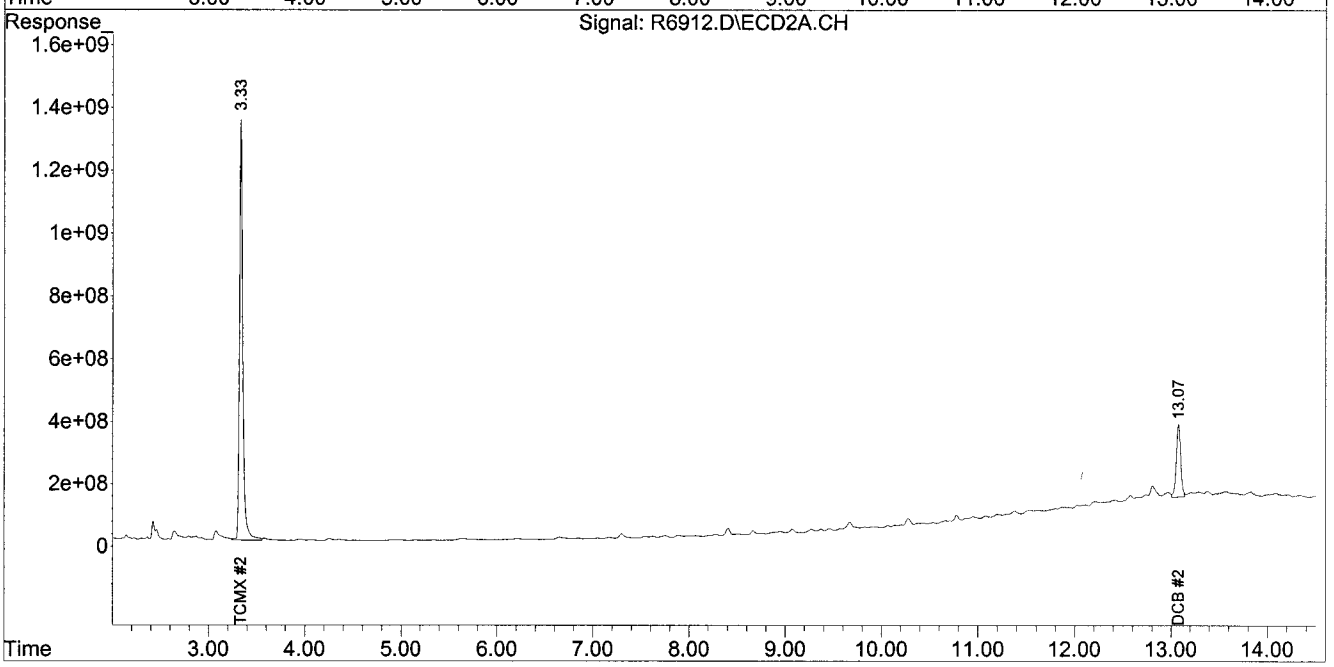
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-18-13\
Data File : R6912.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Jan 2013 15:54
Operator : JS
Sample : SB-7/1-1.5,00167-002,S,5.00g,8.20,01/18/13,4
Misc : 130118-06,01/04/13,01/04/13,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 21 12:36:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0115.M
Quant Title :
QLast Update : Wed Jan 16 10:42:12 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS130118-06
Client ID: PCB
Date Received: NA
Date Extracted: 01/18/2013
Date Analyzed: 01/18/2013
Data file: R6911.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-18-13\
Data File : R6911.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Jan 2013 15:37
Operator : JS
Sample : PCB,BLKS130118-06,S,5.00g,0,01/18/13,4
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 21 08:57:02 2013
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0115.M
Quant Title :
QLast Update : Wed Jan 16 10:42:12 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.38	3.33	44465.8E6	54710.8E6	243.763	216.936
Spiked Amount 200.000			Recovery	=	121.88%	108.47%
2) S DCB	12.99	13.08	8689.7E6	9084.9E6	173.475	199.533
Spiked Amount 200.000			Recovery	=	86.74%	99.77%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

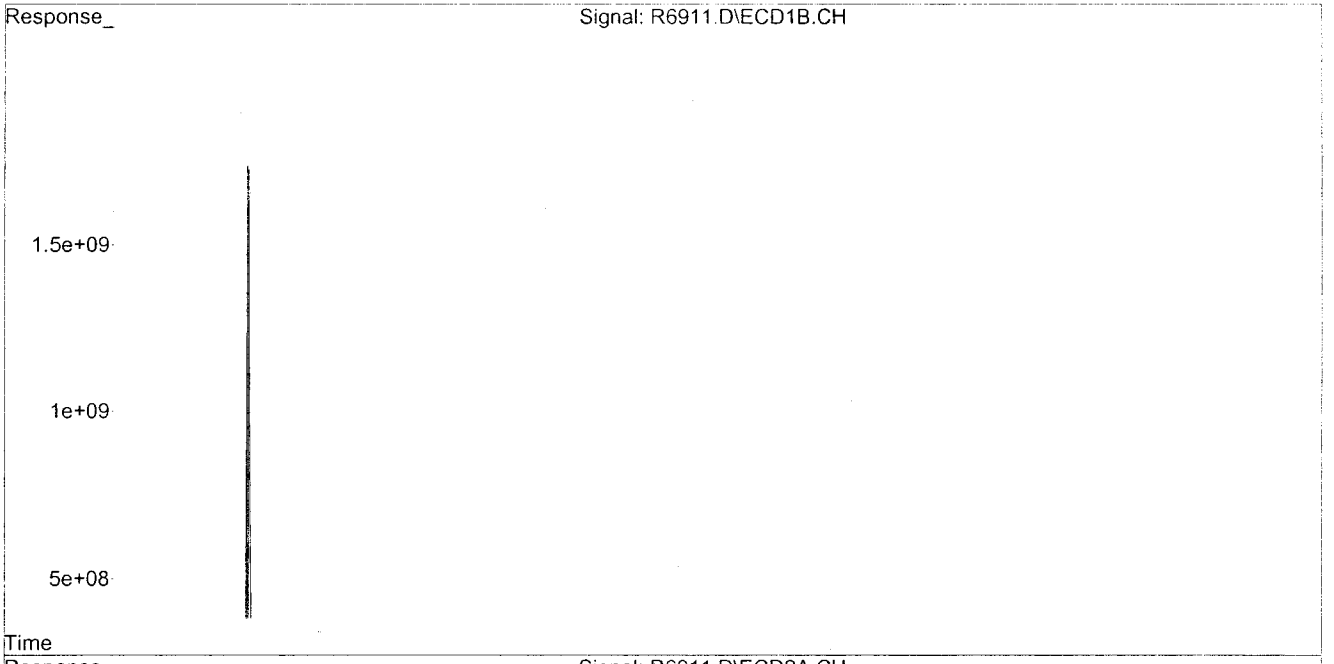
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

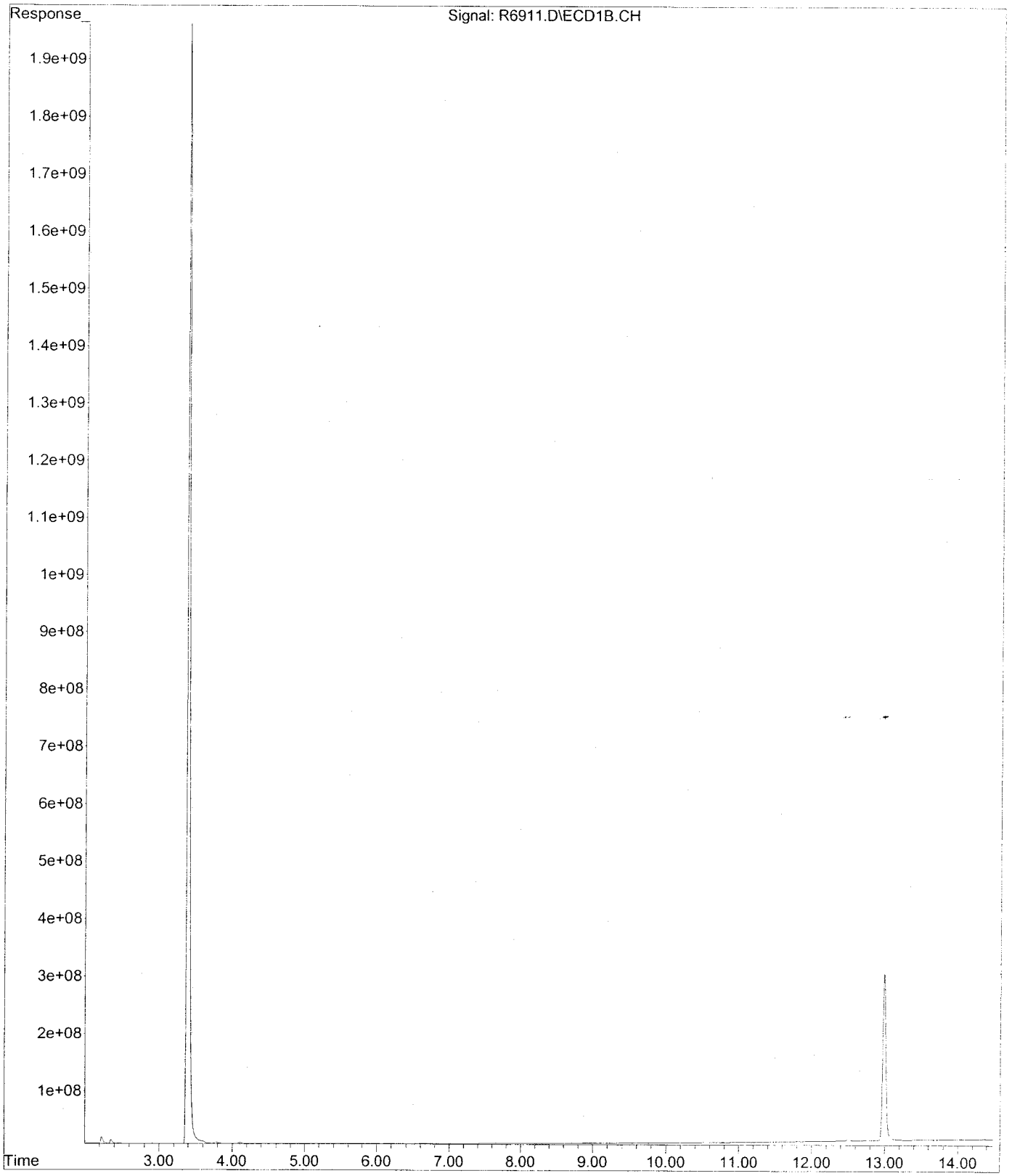
Data Path : C:\MSDCHEM\1\DATA\01-18-13\
Data File : R6911.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Jan 2013 15:37
Operator : JS
Sample : PCB,BLKS130118-06,S,5.00g,0,01/18/13,4
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 21 08:57:02 2013
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0115.M
Quant Title :
QLast Update : Wed Jan 16 10:42:12 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

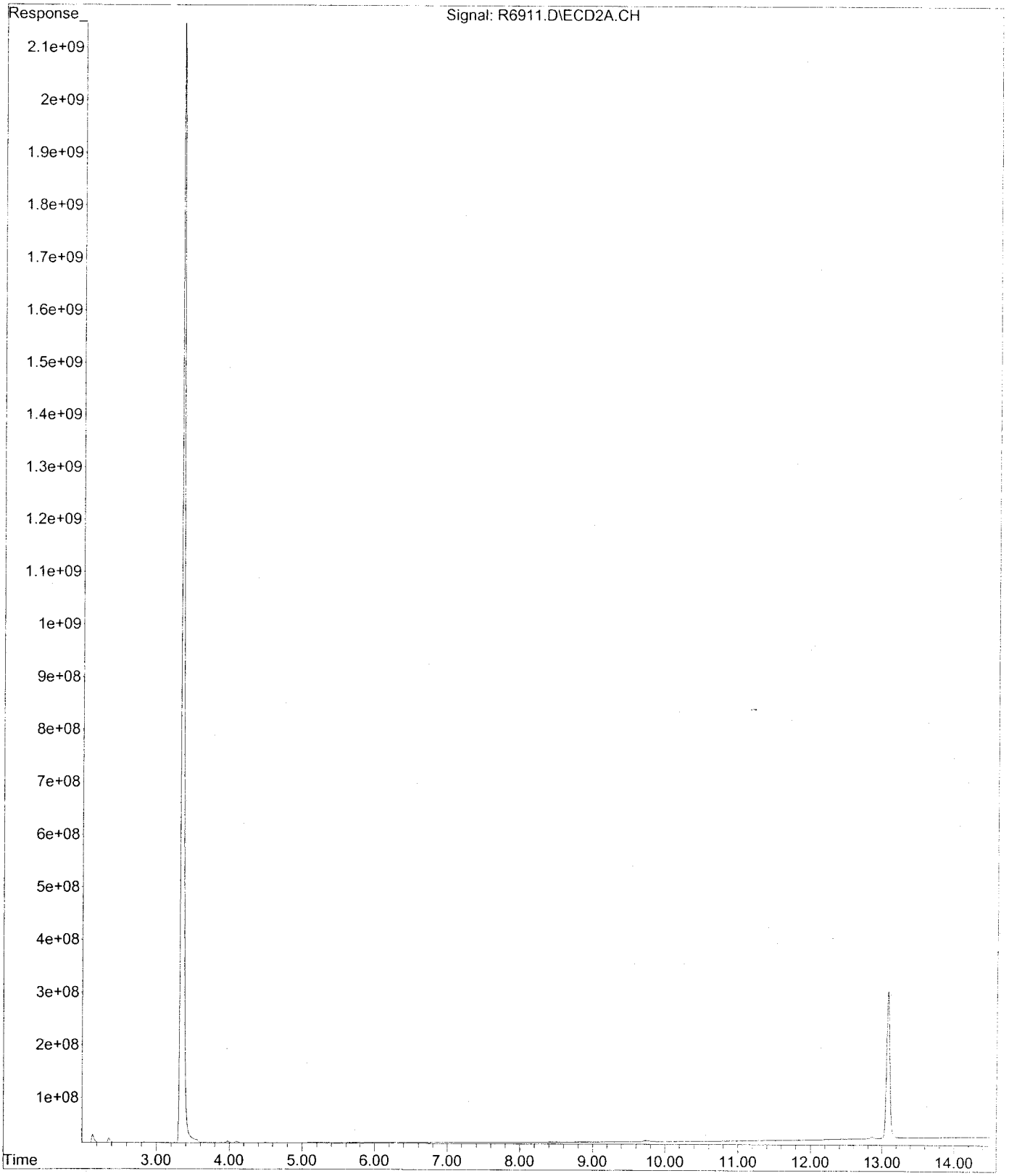
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File :C:\MSDCHEM\1\DATA\01-18-13\R6911.D
Operator : JS
Acquired : 18 Jan 2013 15:37 using AcqMethod RPCB0115.M
Instrument : GC_R
Sample Name: PCB,BLKS130118-06,S,5.00g,0,01/18/13,4
Misc Info : NA,NA,NA,1
Vial Number: 2



File :C:\MSDCHEM\1\DATA\01-18-13\R6911.D
Operator : JS
Acquired : 18 Jan 2013 15:37 using AcqMethod RPCB0115.M
Instrument : GC_R
Sample Name: PCB,BLKS130118-06,S,5.00g,0,01/18/13,4
Misc Info : NA,NA,NA,1
Vial Number: 2



EXTRACTABLE PETROLEUM HYDROCARBON

EXTRACTABLE PETROLEUM HYDROCARBON
QC SUMMARY

NJ-EPH-C40 SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/10/2013

Client ID	Lab Sample ID	Matrix	COD % rec	#	OTP % rec	#
NJ-EPH-C	BLKS130108-02	SOIL	74		107	
NJ-EPH-C	LCSS130108-02	SOIL	89		101	
NJ-EPH-C	LCSDS130108-02	SOIL	88		100	
B8/5.5-6	00084-005	SOIL	70		101	
B7/6	00137-001	SOIL	80		116	
SB-1/5.5	00167-001	SOIL	86		124	
SB-8/1-1	00167-003	SOIL	78		112	

Surrogate QC Limits	Soil	Aqueous
COD = 1-Chlorooctadecane	40-140	40-140
OTP = o-Terphenyl	40-140	40-140

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH ALIPHATIC LCS/LCSD ACCURACY REPORT

Lab ID: LCSDS130108-02
Client ID: NJ-EPH-C
Date Received: NA
Date Extracted: 01/08/2013
Date Analyzed: 01/10/2013
Data file: TB0488.D

GC Column: HP-5
Sample wt/vol: 10.0g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	Conc. LCSD	%Rec. LCSD	%RPD
n-Nonane (C9)	100	0.00	72	72	72	72	0
n-Decane (C10)	100	0.00	63	63	63	63	0
n-Dodecane (C12)	100	0.00	71	71	71	71	0
n-Tetradecane (C14)	100	0.00	77	77	76	76	1
n-Hexadecane (C16)	100	0.00	80	80	79	79	1
n-Octadecane (C18)	100	0.00	117	117	101	101	15
n-Eicosane (C20)	100	0.00	84	84	83	83	1
n-Heneicosane (C21)	100	0.00	128	128	138	138	8
n-Docosane (C22)	100	0.00	91	91	90	90	1
n-Tetracosane (C24)	100	0.00	82	82	81	81	1
n-Hexacosane (C26)	100	0.00	83	83	83	83	0
n-Octacosane (C28)	100	0.00	89	89	84	84	6
n-Triacontane (C30)	100	0.00	83	83	83	83	0
n-Dotriacontane (C32)	100	0.00	97	97	104	104	7
n-Tetratriacontane (C34)	100	0.00	85	85	85	85	0
n-Hexatriacontane (C36)	100	0.00	78	78	78	78	0
n-Octatriacontane (C38)	100	0.00	72	72	72	72	0
n-Tetracontane (40)	100	0.00	63	63	63	63	0
C9-C40*	3600	0.00	3188	89	3179	88	0

*Includes aromatic compounds

	Aqueous	Soil/Sediment
n-Nonane (C9) ACCURACY (%REC)	25-140	25-140
MS/MSD ACCURACY (%REC)	40-140	40-140
MS/MSD PRECISION (RPD)	25	25

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH ALIPHATIC MS ACCURACY REPORT

Lab ID: 12686-004MS
Client ID: NJ-EPH-C
Date Received: NA
Date Extracted: 12/31/2012
Date Analyzed: 01/05/2013
Data file: T2458.D

GC Column: HP-5
Sample wt/vol: 10.35g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS
n-Nonane (C9)	100	0.00	53	53
n-Decane (C10)	100	0.00	57	57
n-Dodecane (C12)	100	0.00	72	72
n-Tetradecane (C14)	100	0.00	76	76
n-Hexadecane (C16)	100	0.00	78	78
n-Octadecane (C18)	100	0.00	83	83
n-Eicosane (C20)	100	0.00	85	85
n-Heneicosane (C21)	100	0.00	40	40
n-Docosane (C22)	100	0.00	88	88
n-Tetracosane (C24)	100	0.00	92	92
n-Hexacosane (C26)	100	0.00	84	84
n-Octacosane (C28)	100	0.00	89	89
n-Triacontane (C30)	100	0.00	82	82
n-Dotriacontane (C32)	100	0.00	101	101
n-Tetratriacontane (C34)	100	0.00	82	82
n-Hexatriacontane (C36)	100	0.00	91	91
n-Octatriacontane (C38)	100	0.00	70	70
n-Tetracontane (40)	100	0.00	71	71
C9-C40*	3600	1608.62	4371	77

*Includes aromatic compounds

	Aqueous	Soil/Sediment
n-Nonane (C9) ACCURACY (%REC)	25-140	25-140
MS/MSD ACCURACY (%REC)	40-140	40-140
MS/MSD PRECISION (RPD)	25	25

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH DUPLICATE SAMPLE RESULTS SUMMARY

Client ID: AOC-2-2/
Date Received: 12/26/2012
Date Extracted: 12/31/2012
Lab ID: 12686-004
Sample wt/vol: 10.35g
Date Analyzed: 01/04/2013
Aliphatics Sample Data file: T2452.D
Dilution Factor: 1

GC Column: RTX-5
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 15.7
Lab ID: 12686-4D
Sample wt/vol: 10.35g
Date Analyzed: 01/05/2013
Aliphatics Sample Dup Data file: T2457.D
Dilution Factor: 1

Compound	Sample Conc.	Sample Dup Conc.	% RPD
C9-C28	ND	ND	NA
C28-C40	ND	ND	NA
C9-C40	ND	ND	NA

	Aqueous	Soil/Sediment
Sample/Sample Dup PRECISION (% RPD)	50	50

NA --- Not Applied

NJ-EPH-DRO METHOD BLANK SUMMARY

Lab File ID: T2446.D Instrument ID: GC-T

Date Extracted: 12/31/2012 Matrix: SOIL

Date Analyzed: 01/04/2013 Time Analyzed: 20:18

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
AOC-1-1/	12686-001	01/04/2013	21:25
AOC-1-2/	12686-002	01/04/2013	21:48
AOC-2-1/	12686-003	01/04/2013	22:11
AOC-2-2/	12686-004	01/04/2013	22:33
AOC-3-1/	12686-005	01/04/2013	22:56
AOC-3-2/	12686-006	01/04/2013	23:19
W22-1_(3	12611-005	01/04/2013	23:41
W22-4_(3	12611-010	01/05/2013	00:04
AOC-2-2/	12686-4D	01/05/2013	00:26
NJ-EPH-C	12686-004MS	01/05/2013	00:49
NJ-EPH-D	LCSS121231-12	01/08/2013	12:52
NJ-EPH-D	LCSDS121231-12	01/08/2013	15:07

NJ-EPH-C40 METHOD BLANK SUMMARY

Lab File ID:	TB0486.D	Instrument ID:	GC-T
Date Extracted:	01/08/2013	Matrix:	SOIL
Date Analyzed:	01/10/2013	Time Analyzed:	18:45

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
NJ-EPH-C	LCSS130108-02	01/10/2013	19:08
NJ-EPH-C	LCSDS130108-02	01/10/2013	19:30
B8/5.5-6	00084-005	01/10/2013	19:53
B7/6	00137-001	01/10/2013	20:16
SB-1/5.5	00167-001	01/10/2013	20:39
SB-8/1-1	00167-003	01/10/2013	21:02

NJ-EPH-C40 RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-T **Column:** RTX-5

Surrogate RT from initial calibration :

COD 7.11 **OTP** 6.40

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	COD RT	#	OTP RT	#
NJ-EPH-C	BLKS130108-02	01/10/2013	18:45	7.11		6.40	
NJ-EPH-C	LCSS130108-02	01/10/2013	19:08	7.11		6.40	
NJ-EPH-C	LCSDS130108-02	01/10/2013	19:30	7.11		6.40	
B8/5.5-6	00084-005	01/10/2013	19:53	7.11		6.40	
B7/6	00137-001	01/10/2013	20:16	7.11		6.40	
SB-1/5.5	00167-001	01/10/2013	20:39	7.11		6.40	
SB-8/1-1	00167-003	01/10/2013	21:02	7.11		6.40	

Surrogate QC Limits

COD = 1-Chlorooctadecane (± 0.10 Minutes)

OTP = o-Terphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

EXTRACTABLE PETROLEUM HYDROCARBON SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0491.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 20:39
Operator : MJ
Sample : SB-1/5.5,00167-001,S,10.43g,5.70,01/08/13,1
Misc : 130108-02,01/04/13,01/04/13,1
ALS Vial : 58 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:29:04 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	7.11	18845266	85.979 ng
Spiked Amount 100.000		Recovery =	85.98%
23) S o-Terphenyl	6.40	32390894	124.348 ng
Spiked Amount 100.000		Recovery =	124.35%
Target Compounds			

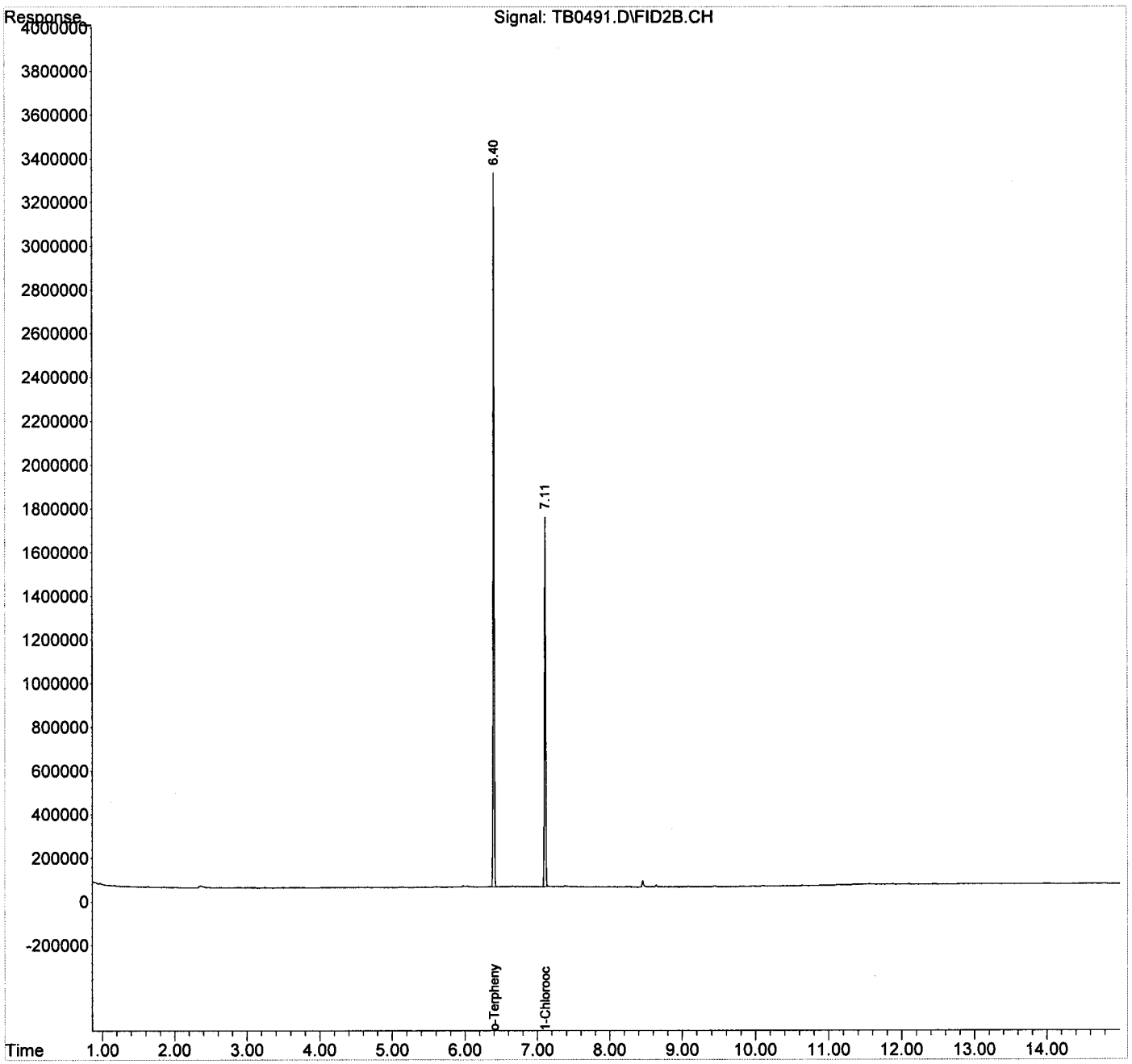
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0491.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 20:39
Operator : MJ
Sample : SB-1/5.5,00167-001,S,10.43g,5.70,01/08/13,1
Misc : 130108-02,01/04/13,01/04/13,1
ALS Vial : 58 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:29:04 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0492.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 21:02
Operator : MJ
Sample : SB-8/1-1,00167-003,S,10.07g,12.9,01/08/13,1
Misc : 130108-02,01/04/13,01/04/13,1
ALS Vial : 59 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:30:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	7.11	16993024	77.528 ng
Spiked Amount 100.000		Recovery =	77.53%
23) S o-Terphenyl	6.40	29141973	111.875 ng
Spiked Amount 100.000		Recovery =	111.87%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

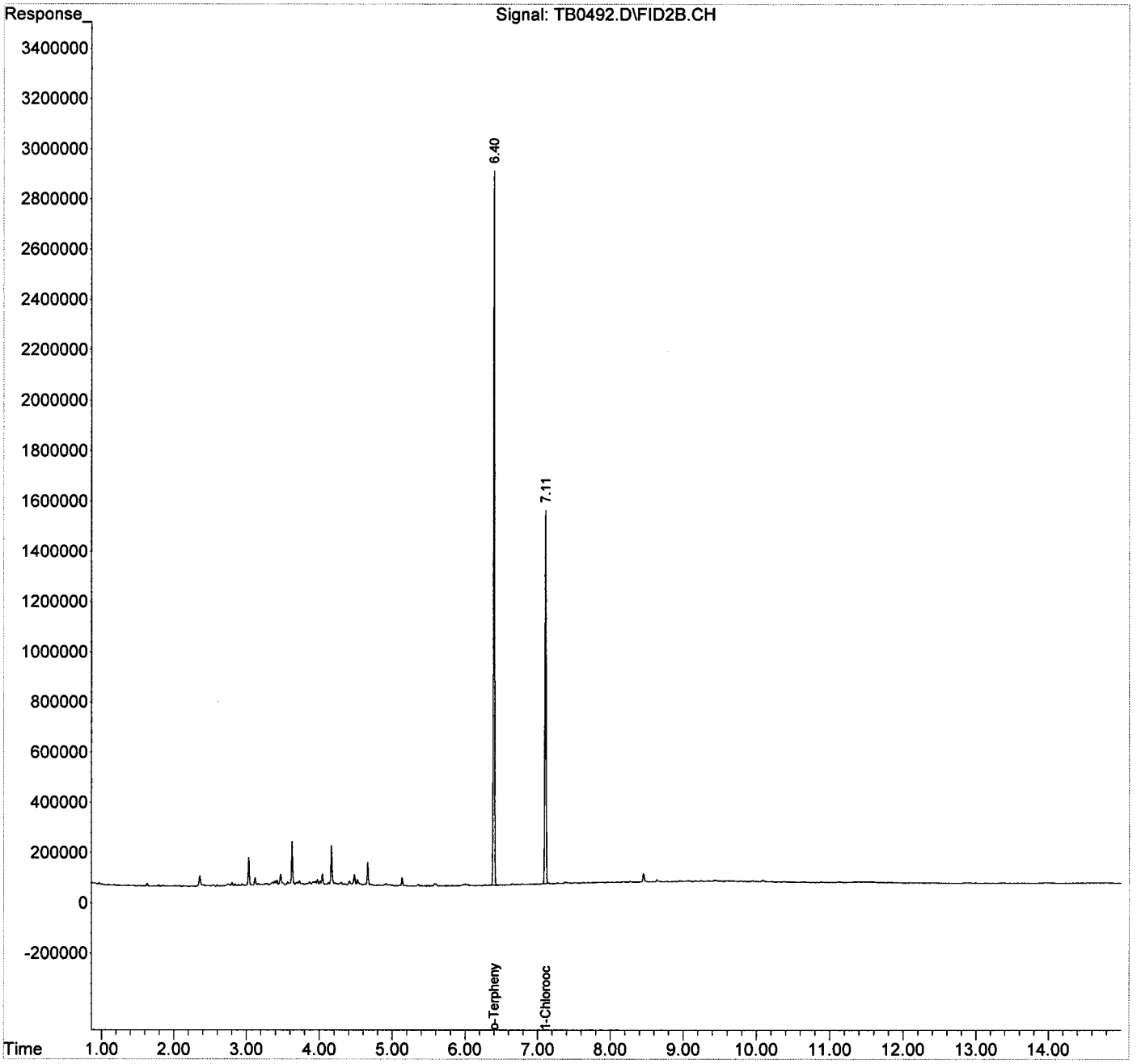
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0492.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 21:02
Operator : MJ
Sample : SB-8/1-1,00167-003,S,10.07g,12.9,01/08/13,1
Misc : 130108-02,01/04/13,01/04/13,1
ALS Vial : 59 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:30:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EXTRACTABLE PETROLEUM HYDROCARBON STANDARDS

NJ-EPH-DRO INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/06/2013

Instrument ID: GC-T
GC Column : RTX-5

Data File: TB0478.D TB0477.D TB0476.D TB0475.D TB0474.D

Compound	RT OF STANDARDS 20	100	250	500	1000	MEAN RT	RT WI NDOW FROM	TO
n-Nonane (C9)	0.97	0.97	0.98	0.98	0.99	0.98	0.87	1.09
n-Decane (C10)	1.63	1.64	1.64	1.65	1.66	1.64	1.51	1.77
n-Dodecane (C12)	3.04	3.04	3.05	3.05	3.06	3.05	2.94	3.16
n-Tetradecane (C14)	4.17	4.17	4.18	4.18	4.19	4.18	4.07	4.29
n-Hexadecane (C16)	5.14	5.14	5.15	5.15	5.16	5.15	5.04	5.26
n-Octadecane (C18)	6.00	6.01	6.01	6.02	6.03	6.02	5.91	6.13
n-Eicosane (C20)	6.79	6.79	6.80	6.81	6.82	6.80	6.69	6.91
n-Heneicosane (C21)	7.16	7.16	7.16	7.17	7.18	7.17	7.06	7.28
n-Docosane (C22)	7.51	7.51	7.52	7.52	7.54	7.52	7.41	7.63
n-Tetracosane (C24)	8.17	8.17	8.18	8.19	8.20	8.18	8.07	8.29
n-Hexacosane (C26)	8.78	8.78	8.79	8.80	8.81	8.79	8.68	8.90
n_Octacosane (C28)	9.34	9.35	9.35	9.36	9.37	9.35	9.24	9.46
n-Triacontane (C30)	9.84	9.84	9.85	9.86	9.87	9.85	9.74	9.96
n-Dotriacontane (C32)	10.29	10.29	10.30	10.31	10.32	10.30	10.19	10.41
n-Tetratriacontane (C34)	10.70	10.70	10.71	10.72	10.73	10.71	10.60	10.82
n-Hexatriacontane (C36)	11.08	11.09	11.09	11.10	11.11	11.09	10.98	11.20
n-Octatriacontane (C38)	11.44	11.44	11.45	11.46	11.47	11.45	11.34	11.56
n-Tetracontane (40)	11.85	11.86	11.87	11.88	11.89	11.87	11.76	11.98
C9-C28	5.21	5.21	5.21	5.21	5.21	5.21	5.10	5.32
C28-C40	10.78	10.78	10.78	10.78	10.78	10.78	10.67	10.89
C9-C40	6.30	6.30	6.30	6.30	6.30	6.30	6.19	6.41

NJ-EPH-DRO INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/06/2013

Instrument ID: GC-T
GC Column : RTX-5

Data File: TB0478.D TB0477.D TB0476.D TB0475.D TB0474.D

Compound	CALIBRATION FACTORS 20	100	250	500	1000	MEAN	%RSD
n-Nonane (C9)	299122	335307	349808	301728	286183	314430	8.54
n-Decane (C10)	274759	327813	339412	294513	279343	303168	9.58
n-Dodecane (C12)	271100	325091	334904	292414	276188	299939	9.59
n-Tetradecane (C14)	268284	323845	331115	290811	273335	297478	9.66
n-Hexadecane (C16)	266635	321706	325804	288104	269784	294407	9.53
n-Octadecane (C18)	261346	316458	317698	283029	264492	288605	9.45
n-Eicosane (C20)	258299	313363	309968	278348	260262	284048	9.30
n-Heneicosane (C21)	201129	240771	238483	214731	200807	219184	8.90
n-Docosane (C22)	254208	307327	305055	275028	259083	280140	8.93
n-Tetracosane (C24)	242952	298791	296112	270221	255635	272742	9.00
n-Hexacosane (C26)	230866	286663	285688	261073	245130	261884	9.40
n_Octacosane (C28)	221883	277259	278416	250822	237738	253223	9.75
n-Triacontane (C30)	221046	273433	276922	249623	241053	252415	9.21
n-Dotriacontane (C32)	222290	270612	276021	248963	241606	251898	8.70
n-Tetratriacontane (C34)	220209	267479	273778	246337	235162	248593	8.95
n-Hexatriacontane (C36)	220808	271590	277162	244977	234937	249895	9.61
n-Octatriacontane (C38)	213452	263373	266206	238139	231636	242561	9.17
n-Tetracontane (40)	201074	251167	256653	232231	225663	233358	9.49
C9-C28	271762	309375	310816	275890	259347	285438	8.17
C28-C40	256640	275275	275873	246410	237140	258268	6.68
C9-C40	273876	299814	299545	266195	250318	277949	7.76

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0474.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 17:50
Operator : MJ
Sample : ALI_L5_IAS_4490,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 52 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:23:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.18	200807226	916.157 ng
Spiked Amount	100.000		Recovery	= 916.16%
23) S	o-Terphenyl	6.43	238393992	915.188 ng
Spiked Amount	100.000		Recovery	= 915.19%
Target Compounds				
2) T	n-Nonane (C9)	0.99	286182944	910.165 ng
3) T	n-Decane (C10)	1.66	279343036	921.413 ng
4) T	n-Dodecane (C12)	3.06	276187542	920.811 ng
5) T	n-Tetradecane (C14)	4.19	273334801	918.841 ng
6) T	n-Hexadecane (C16)	5.16	269784215	916.366 ng
7) T	n-Octadecane (C18)	6.03	264491532	916.449 ng
8) T	n-Eicosane (C20)	6.82	260262294	916.262 ng
9) T	n-Heneicosane (C21)	7.18	200807226	916.157 ng
10) T	n-Docosane (C22)	7.54	259082811	924.833 ng
11) T	n-Tetracosane (C24)	8.20	255635149	937.278 ng
12) T	n-Hexacosane (C26)	8.81	245129850	936.025 ng
13) T	n-Octacosane (C28)	9.37	237737815	938.846 ng
14) T	n-Triacontane (C30)	9.87	241052731	954.985 ng
15) T	n-Dotriacontane (C32)	10.32	241606294	959.142 ng
16) T	n-Tetratriacontane (C34)	10.73	235162286	945.973 ng
17) T	n-Hexatriacontane (C36)	11.11	234936814	940.143 ng
18) T	n-Octatriacontane (C38)	11.47	231635855	954.958 ng
19) T	n-Tetracontane (40)	11.89	225663232	967.027 ng
20) H	C9-C28	5.21	3112165489	10907.613 ng
21) H	C28-C40	10.78	1422840814	5520.243 ng
22) H	C9-C40	6.30	4505720095	16167.740 ng

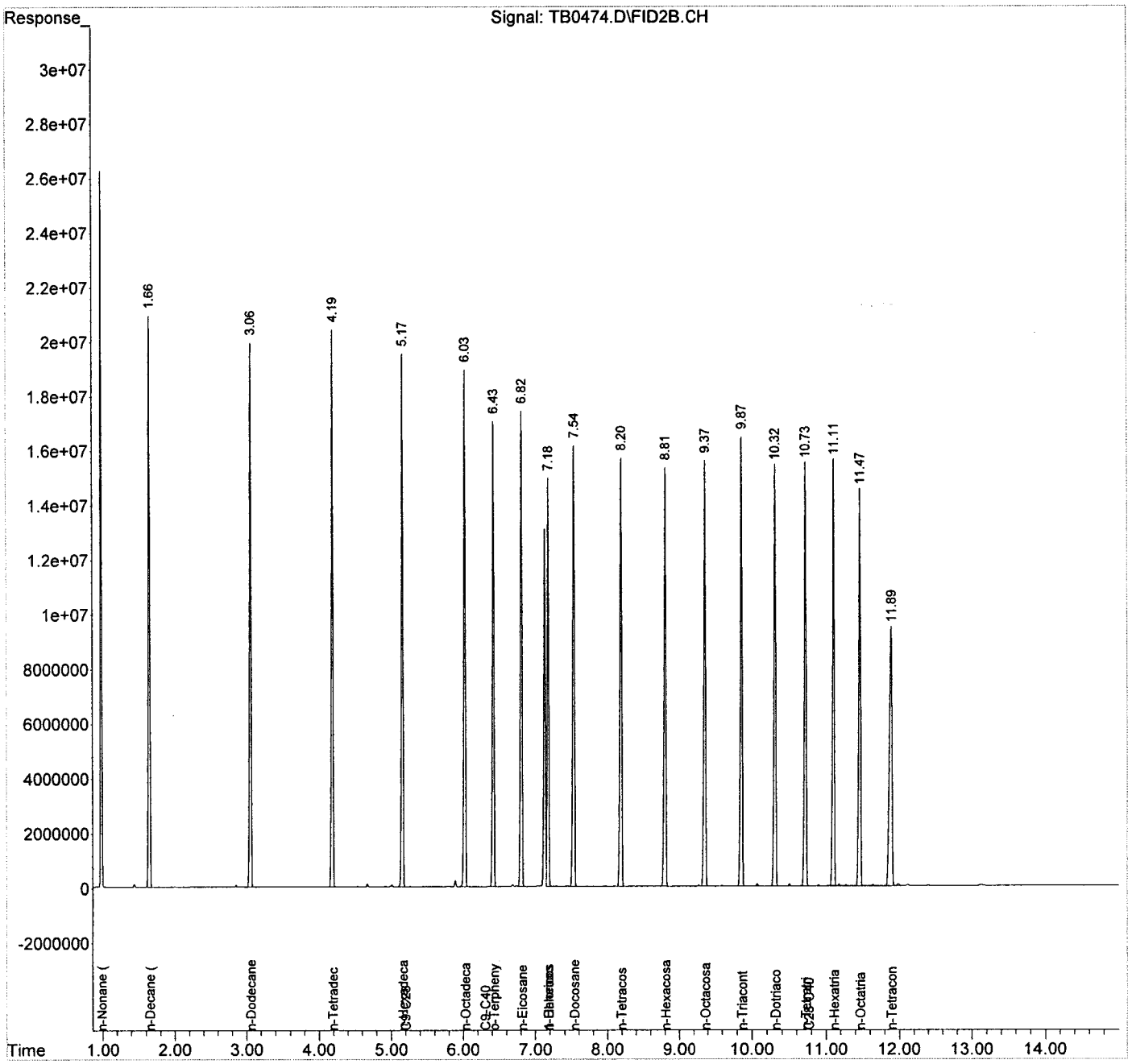
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0474.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 17:50
Operator : MJ
Sample : ALI_L5_IAS_4490,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 52 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:23:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0475.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 18:12
Operator : MJ
Sample : ALI_L4_IAS_4491,500_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:12:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.17	107365719	489.842 ng
Spiked Amount	100.000		Recovery	= 489.84%
23) S	o-Terphenyl	6.42	126986326	487.497 ng
Spiked Amount	100.000		Recovery	= 487.50%
Target Compounds				
2) T	n-Nonane (C9)	0.98	150864014	479.802 ng
3) T	n-Decane (C10)	1.65	147256628	485.726 ng
4) T	n-Dodecane (C12)	3.05	146207015	487.455 ng
5) T	n-Tetradecane (C14)	4.18	145405422	488.794 ng
6) T	n-Hexadecane (C16)	5.15	144051763	489.295 ng
7) T	n-Octadecane (C18)	6.02	141514697	490.341 ng
8) T	n-Eicosane (C20)	6.81	139173980	489.966 ng
9) T	n-Heneicosane (C21)	7.17	107365719	489.842 ng
10) T	n-Docosane (C22)	7.52	137514159	490.876 ng
11) T	n-Tetracosane (C24)	8.19	135110569	495.378 ng
12) T	n-Hexacosane (C26)	8.80	130536253	498.451 ng
13) T	n-Octacosane (C28)	9.36	125410822	495.257 ng
14) T	n-Triacontane (C30)	9.86	124811393	494.468 ng
15) T	n-Dotriacontane (C32)	10.31	124481423	494.173 ng
16) T	n-Tetratriacontane (C34)	10.72	123168658	495.463 ng
17) T	n-Hexatriacontane (C36)	11.10	122488433	490.160 ng
18) T	n-Octatriacontane (C38)	11.46	119069721	490.885 ng
19) T	n-Tetracontane (40)	11.88	116115724	497.587 ng
20) H	C9-C28	5.21	1655338562	5801.682 ng
21) H	C28-C40	10.78	739231354	2868.020 ng
22) H	C9-C40	6.30	2395752787	8596.608 ng

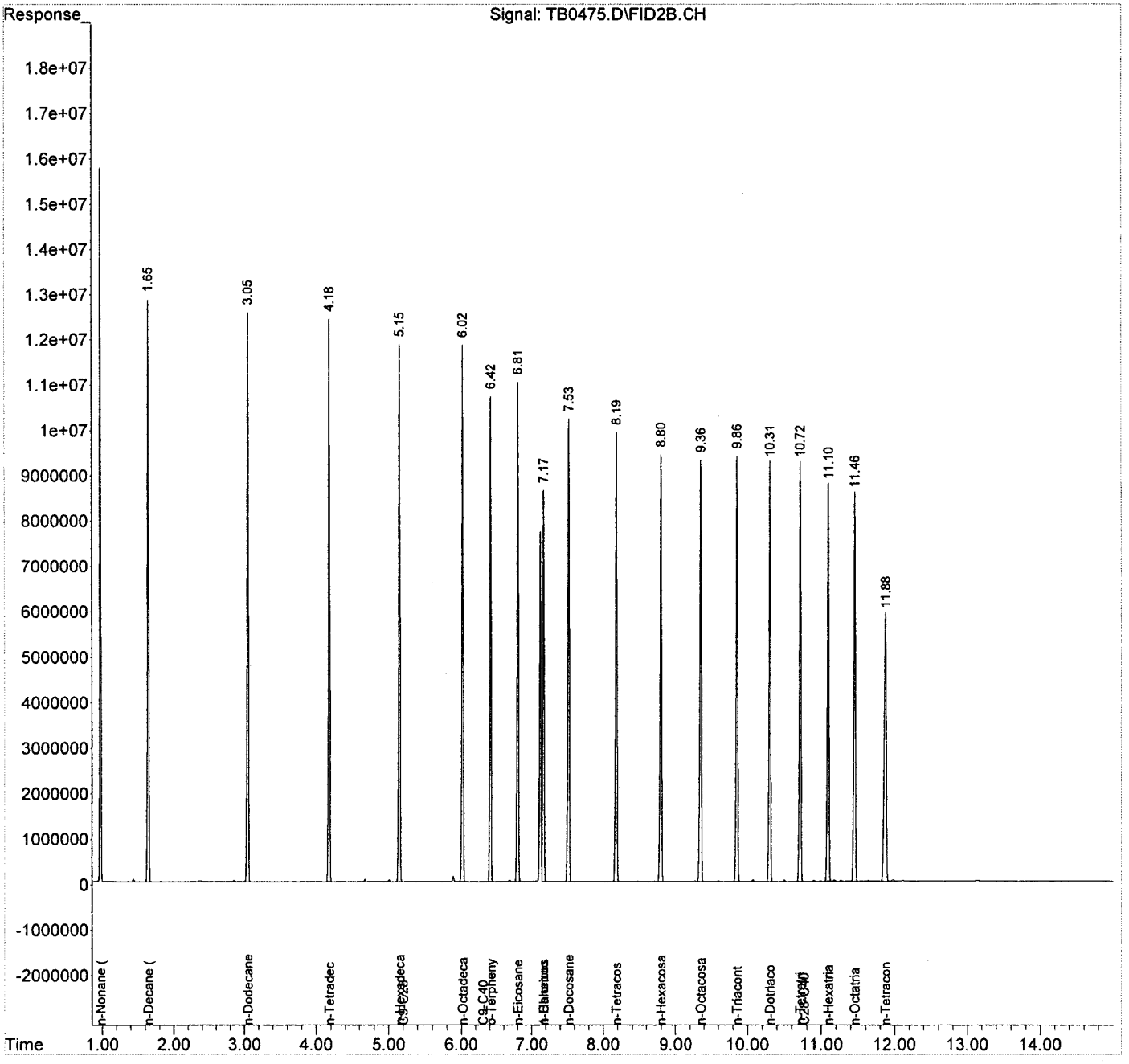
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0475.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 18:12
Operator : MJ
Sample : ALI_L4_IAS_4491,500_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:12:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0476.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 18:35
Operator : MJ
Sample : ALI_L3_IAS_4492,250_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:12:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.16	59620748	272.012 ng
Spiked Amount	100.000		Recovery	= 272.01%
23) S	o-Terphenyl	6.41	71914974	276.079 ng
Spiked Amount	100.000		Recovery	= 276.08%
Target Compounds				
2) T	n-Nonane (C9)	0.98	87452017	278.129 ng
3) T	n-Decane (C10)	1.64	84853027	279.888 ng
4) T	n-Dodecane (C12)	3.05	83725919	279.143 ng
5) T	n-Tetradecane (C14)	4.18	82778655	278.268 ng
6) T	n-Hexadecane (C16)	5.15	81450985	276.662 ng
7) T	n-Octadecane (C18)	6.01	79424553	275.202 ng
8) T	n-Eicosane (C20)	6.80	77492061	272.813 ng
9) T	n-Heneicosane (C21)	7.16	59620748	272.012 ng
10) T	n-Docosane (C22)	7.52	76263792	272.234 ng
11) T	n-Tetracosane (C24)	8.18	74027950	271.421 ng
12) T	n-Hexacosane (C26)	8.79	71422110	272.724 ng
13) T	n-Octacosane (C28)	9.35	69604057	274.872 ng
14) T	n-Triacontane (C30)	9.85	69230472	274.272 ng
15) T	n-Dotriacontane (C32)	10.30	69005139	273.940 ng
16) T	n-Tetratriacontane (C34)	10.71	68444499	275.327 ng
17) T	n-Hexatriacontane (C36)	11.09	69290498	277.279 ng
18) T	n-Octatriacontane (C38)	11.45	66551465	274.370 ng
19) T	n-Tetracontane (40)	11.87	64163272	274.957 ng
20) H	C9-C28	5.21	932449131	3268.076 ng
21) H	C28-C40	10.78	413809066	1605.469 ng
22) H	C9-C40	6.30	1347950974	4836.812 ng

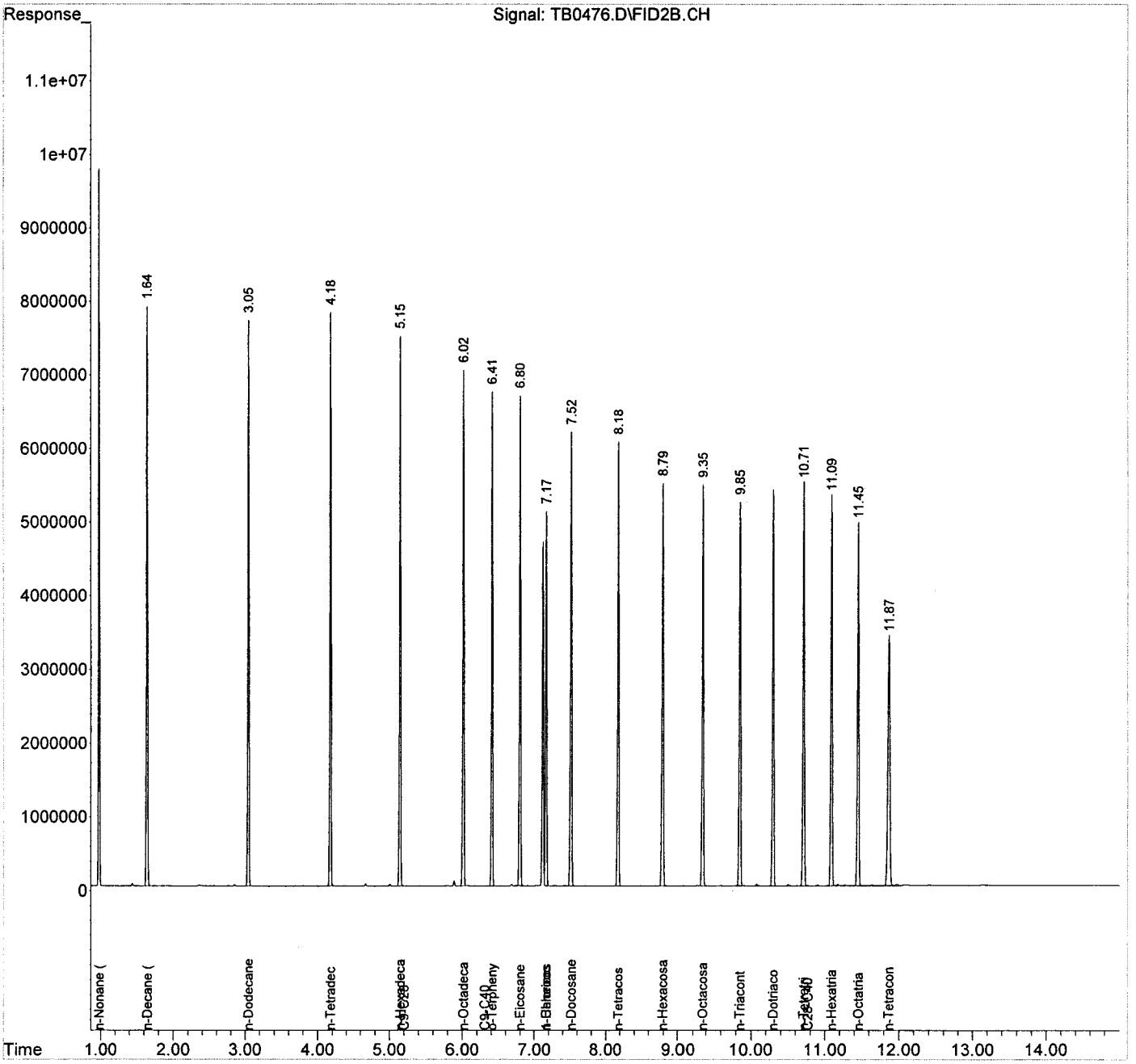
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0476.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 18:35
Operator : MJ
Sample : ALI_L3_IAS_4492,250_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:12:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0477.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 18:58
Operator : MJ
Sample : ALI_L2_IAS_4493,100_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:08:53 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:07:32 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.16	24077119	109.849 ng
Spiked Amount	100.000		Recovery	= 109.85%
23) S	o-Terphenyl	6.40	28442304	109.189 ng
Spiked Amount	100.000		Recovery	= 109.19%
Target Compounds				
2) T	n-Nonane (C9)	0.97	33530726	106.640 ng
3) T	n-Decane (C10)	1.64	32781332	108.129 ng
4) T	n-Dodecane (C12)	3.04	32509100	108.386 ng
5) T	n-Tetradecane (C14)	4.17	32384462	108.863 ng
6) T	n-Hexadecane (C16)	5.14	32170640	109.273 ng
7) T	n-Octadecane (C18)	6.01	31645761	109.651 ng
8) T	n-Eicosane (C20)	6.79	31336287	110.320 ng
9) T	n-Heneicosane (C21)	7.16	24077119	109.849 ng
10) T	n-Docosane (C22)	7.51	30732668	109.705 ng
11) T	n-Tetracosane (C24)	8.17	29879068	109.551 ng
12) T	n-Hexacosane (C26)	8.78	28666304	109.462 ng
13) T	n-Octacosane (C28)	9.35	27725904	109.492 ng
14) T	n-Triacontane (C30)	9.84	27343337	108.327 ng
15) T	n-Dotriacontane (C32)	10.29	27061199	107.429 ng
16) T	n-Tetratriacontane (C34)	10.70	26747859	107.597 ng
17) T	n-Hexatriacontane (C36)	11.09	27159011	108.682 ng
18) T	n-Octatriacontane (C38)	11.44	26337285	108.580 ng
19) T	n-Tetracontane (40)	11.86	25116739	107.632 ng
20) H	C9-C28	5.21	371250368	1301.170 ng
21) H	C28-C40	10.78	165165082	640.796 ng
22) H	C9-C40	6.30	539665524	1936.466 ng

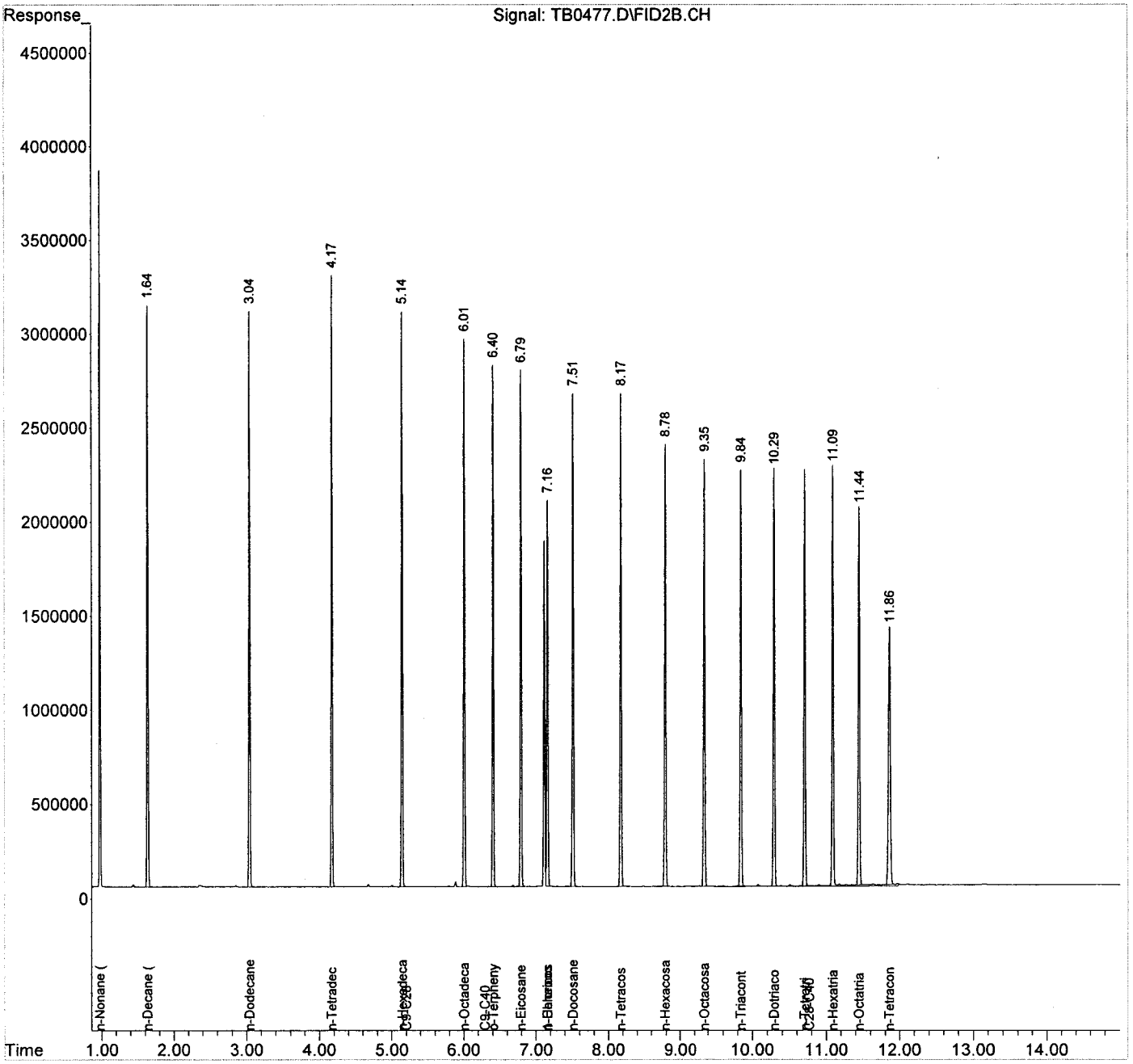
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0477.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 18:58
Operator : MJ
Sample : ALI_L2_IAS_4493,100_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:08:53 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:07:32 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0478.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 19:20
Operator : MJ
Sample : ALI_L1_IAS_4494,20_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:13:04 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.16	4022571	18.352 ng
Spiked Amount	100.000		Recovery =	18.35%
23) S	o-Terphenyl	6.40	4759658	18.272 ng
Spiked Amount	100.000		Recovery =	18.27%
Target Compounds				
2) T	n-Nonane (C9)	0.97	5982438	19.026 ng
3) T	n-Decane (C10)	1.63	5495172	18.126 ng
4) T	n-Dodecane (C12)	3.04	5422005	18.077 ng
5) T	n-Tetradecane (C14)	4.17	5365684	18.037 ng
6) T	n-Hexadecane (C16)	5.14	5332691	18.113 ng
7) T	n-Octadecane (C18)	6.00	5226925	18.111 ng
8) T	n-Eicosane (C20)	6.79	5165975	18.187 ng
9) T	n-Heneicosane (C21)	7.16	4022571	18.352 ng
10) T	n-Docosane (C22)	7.51	5084163	18.149 ng
11) T	n-Tetracosane (C24)	8.17	4859040	17.816 ng
12) T	n-Hexacosane (C26)	8.78	4617313	17.631 ng
13) T	n-Octacosane (C28)	9.34	4437653	17.525 ng
14) T	n-Triacontane (C30)	9.84	4420915	17.514 ng
15) T	n-Dotriacontane (C32)	10.29	4445794	17.649 ng
16) T	n-Tetratriacontane (C34)	10.70	4404187	17.716 ng
17) T	n-Hexatriacontane (C36)	11.08	4416168	17.672 ng
18) T	n-Octatriacontane (C38)	11.44	4269038	17.600 ng
19) T	n-Tetracontane (40)	11.85	4021470	17.233 ng
20) H	C9-C28	5.21	65222902	228.595 ng
21) H	C28-C40	10.78	30796856	119.484 ng
22) H	C9-C40	6.30	98595238	353.786 ng

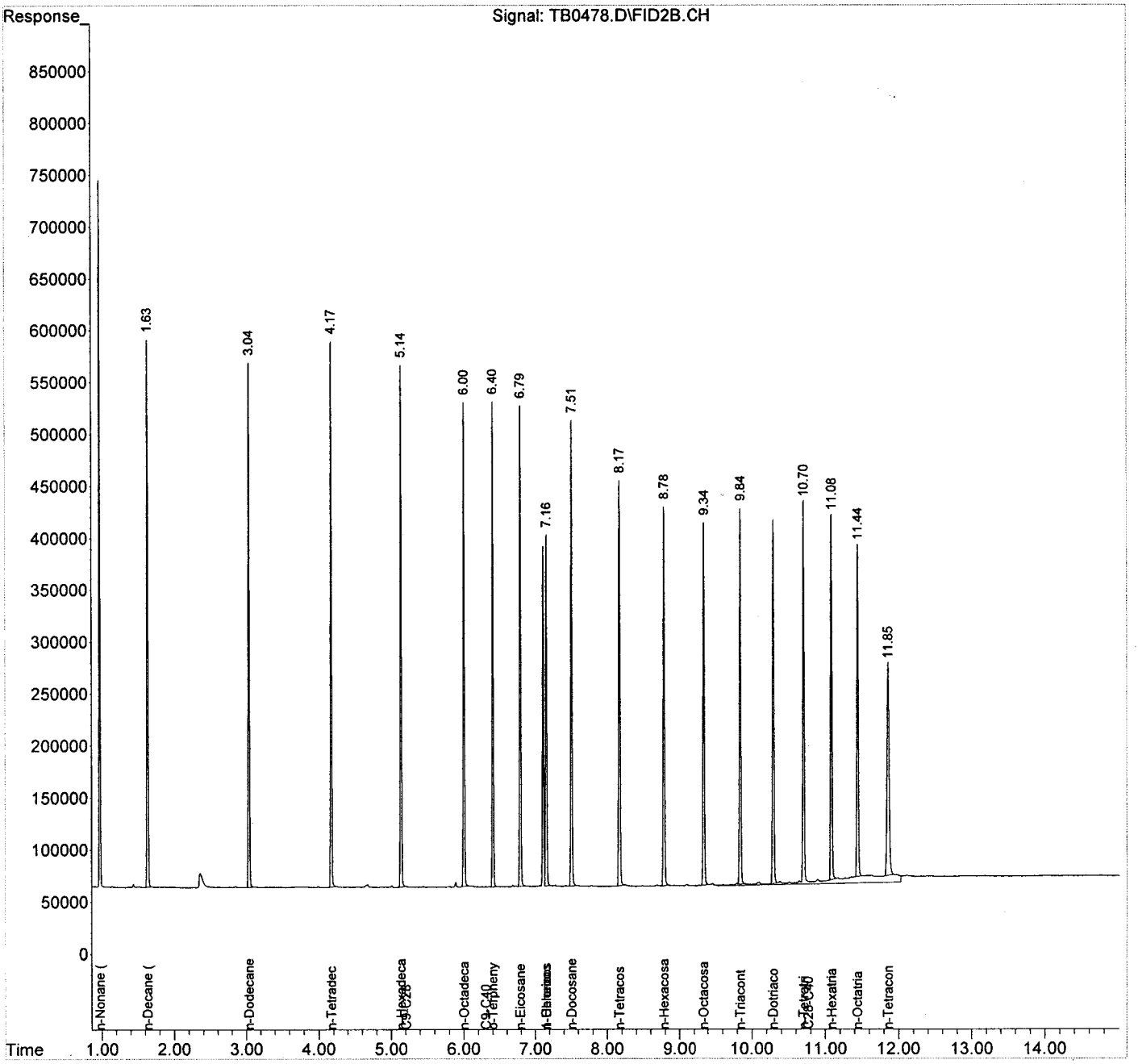
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0478.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 19:20
Operator : MJ
Sample : ALI_L1_IAS_4494,20_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:13:04 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0479.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 19:43
Operator : MJ
Sample : ALI_C_IAS_4492,250_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:13:25 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.16	60883993	277.775 ng
Spiked Amount	100.000		Recovery	= 277.77%
23) S	o-Terphenyl	6.41	73007049	280.272 ng
Spiked Amount	100.000		Recovery	= 280.27%
Target Compounds				
2) T	n-Nonane (C9)	0.98	86406162	274.803 ng
3) T	n-Decane (C10)	1.64	83939983	276.876 ng
4) T	n-Dodecane (C12)	3.05	83352095	277.897 ng
5) T	n-Tetradecane (C14)	4.18	82929013	278.774 ng
6) T	n-Hexadecane (C16)	5.15	82139244	278.999 ng
7) T	n-Octadecane (C18)	6.01	80648364	279.442 ng
8) T	n-Eicosane (C20)	6.80	79063419	278.345 ng
9) T	n-Heneicosane (C21)	7.16	60883993	277.775 ng
10) T	n-Docosane (C22)	7.52	77975232	278.344 ng
11) T	n-Tetracosane (C24)	8.18	75768291	277.802 ng
12) T	n-Hexacosane (C26)	8.79	73020948	278.829 ng
13) T	n-Octacosane (C28)	9.35	70551929	278.615 ng
14) T	n-Triacontane (C30)	9.85	69806556	276.554 ng
15) T	n-Dotriacontane (C32)	10.30	69271036	274.996 ng
16) T	n-Tetratriacontane (C34)	10.71	68574487	275.850 ng
17) T	n-Hexatriacontane (C36)	11.09	69381644	277.643 ng
18) T	n-Octatriacontane (C38)	11.45	66657082	274.805 ng
19) T	n-Tetracontane (40)	11.87	64237891	275.276 ng
20) H	C9-C28	5.21	940779435	3297.273 ng
21) H	C28-C40	10.78	415066402	1610.347 ng
22) H	C9-C40	6.30	1357335349	4870.486 ng

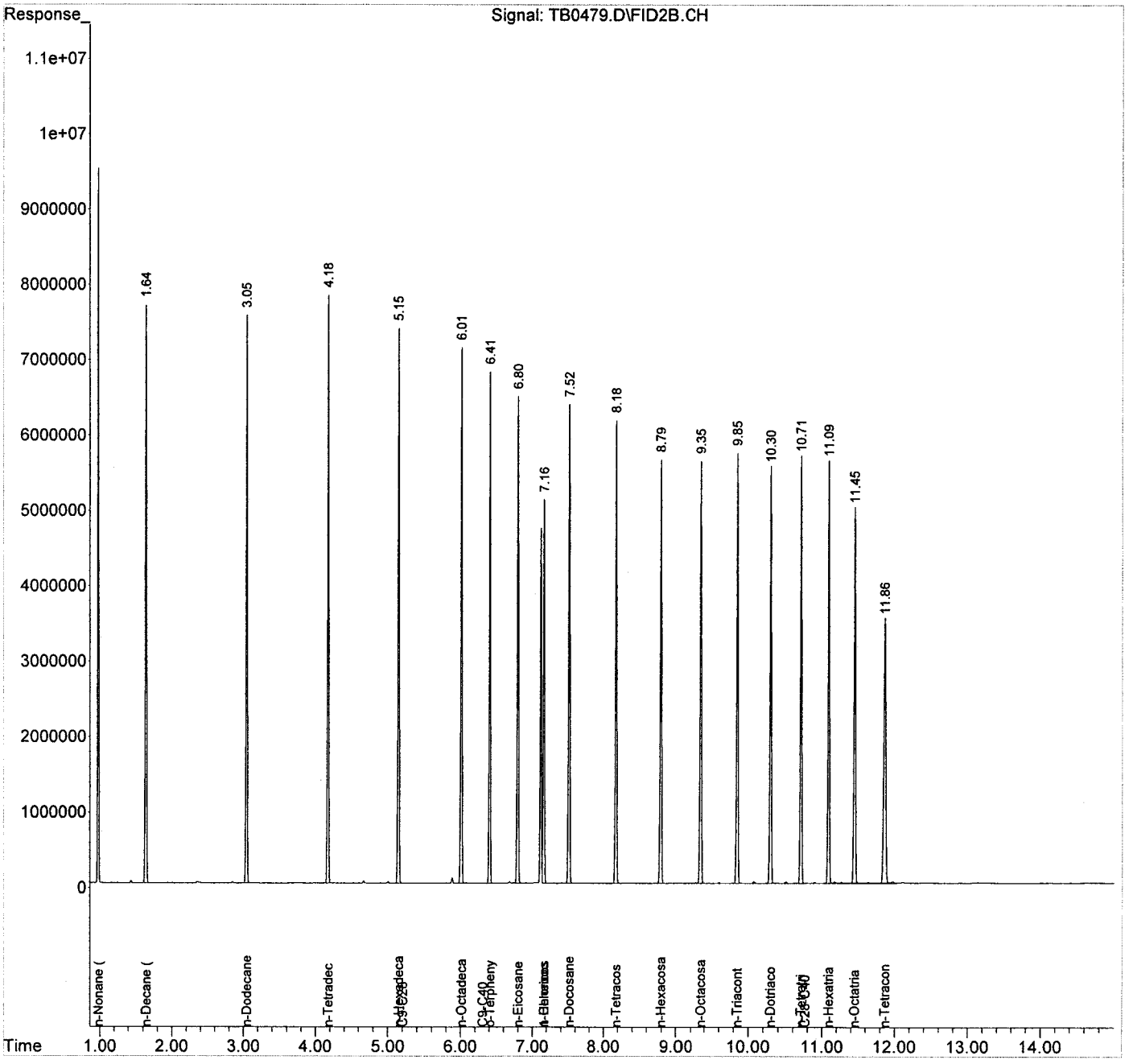
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-06-13\
Data File : TB0479.D
Signal(s) : FID2B.CH
Acq On : 06 Jan 2013 19:43
Operator : MJ
Sample : ALI_C_IAS_4492,250_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 13:13:25 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:11:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



NJ-EPH-DRO CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/10/2013 **Instrument ID:** GC-T

Data File: TB0485.D **GC Column :** RTX-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
n-Nonane (C9)	0.97	0.87	1.09	314430	351741	11.87
n-Decane (C10)	1.64	1.51	1.77	303168	344093	13.50
n-Dodecane (C12)	3.04	2.94	3.16	299939	338308	12.79
n-Tetradecane (C14)	4.17	4.07	4.29	297478	334353	12.40
n-Hexadecane (C16)	5.14	5.04	5.26	294407	328514	11.59
n-Octadecane (C18)	6.01	5.91	6.13	288605	319648	10.76
n-Eicosane (C20)	6.79	6.69	6.91	284048	309018	8.79
n-Heneicosane (C21)	7.16	7.06	7.28	219184	237283	8.26
n-Docosane (C22)	7.51	7.41	7.63	280140	301566	7.65
n-Tetracosane (C24)	8.17	8.07	8.29	272742	291595	6.91
n-Hexacosane (C26)	8.78	8.68	8.90	261884	280570	7.14
n_Octacosane (C28)	9.35	9.24	9.46	253223	275149	8.66
n-Triacontane (C30)	9.85	9.74	9.96	252415	278336	10.27
n-Dotriacontane (C32)	10.29	10.19	10.41	251898	277714	10.25
n-Tetratriacontane (C34)	10.70	10.60	10.82	248593	273013	9.82
n-Hexatriacontane (C36)	11.09	10.98	11.20	249895	273907	9.61
n-Octatriacontane (C38)	11.45	11.34	11.56	242561	261946	7.99
n-Tetracontane (40)	11.86	11.76	11.98	233358	236445	1.32
C9-C28	5.21	5.10	5.32	285438	312278	9.40
C28-C40	10.78	10.67	10.89	258268	274812	6.41
C9-C40	6.30	6.19	6.41	277949	299541	7.77

NJ-EPH-DRO CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/10/2013 **Instrument ID:** GC-T

Data File: TB0493.D **GC Column :** RTX-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
n-Nonane (C9)	0.97	0.87	1.09	314430	307193	2.30
n-Decane (C10)	1.64	1.51	1.77	303168	298658	1.49
n-Dodecane (C12)	3.04	2.94	3.16	299939	294516	1.81
n-Tetradecane (C14)	4.17	4.07	4.29	297478	289869	2.56
n-Hexadecane (C16)	5.14	5.04	5.26	294407	283442	3.72
n-Octadecane (C18)	6.01	5.91	6.13	288605	274935	4.74
n-Eicosane (C20)	6.79	6.69	6.91	284048	266194	6.29
n-Heneicosane (C21)	7.16	7.06	7.28	219184	204315	6.78
n-Docosane (C22)	7.51	7.41	7.63	280140	261478	6.66
n-Tetracosane (C24)	8.17	8.07	8.29	272742	253166	7.18
n-Hexacosane (C26)	8.78	8.68	8.90	261884	244774	6.53
n_Octacosane (C28)	9.35	9.24	9.46	253223	241186	4.75
n-Triacontane (C30)	9.84	9.74	9.96	252415	243981	3.34
n-Dotriacontane (C32)	10.29	10.19	10.41	251898	243361	3.39
n-Tetratriacontane (C34)	10.70	10.60	10.82	248593	237733	4.37
n-Hexatriacontane (C36)	11.09	10.98	11.20	249895	237257	5.06
n-Octatriacontane (C38)	11.44	11.34	11.56	242561	226048	6.81
n-Tetracontane (40)	11.86	11.76	11.98	233358	200604	14.04
C9-C28	5.21	5.10	5.32	285438	270592	5.20
C28-C40	10.78	10.67	10.89	258268	238120	7.80
C9-C40	6.30	6.19	6.41	277949	259514	6.63

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0485.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 18:22
Operator : MJ
Sample : ALI_C_IAS_4492,250_PPM
Misc : ,NA,NA,1
ALS Vial : 52 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:22:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	7.16	59320868	270.644 ng
Spiked Amount	100.000		Recovery	= 270.64%
23) S	o-Terphenyl	6.41	70196723	269.483 ng
Spiked Amount	100.000		Recovery	= 269.48%
Target Compounds				
2) T	n-Nonane (C9)	0.97	87935156	279.666 ng
3) T	n-Decane (C10)	1.64	86023215	283.748 ng
4) T	n-Dodecane (C12)	3.04	84576987	281.980 ng
5) T	n-Tetradecane (C14)	4.17	83588262	280.990 ng
6) T	n-Hexadecane (C16)	5.14	82128621	278.963 ng
7) T	n-Octadecane (C18)	6.01	79912047	276.891 ng
8) T	n-Eicosane (C20)	6.79	77254476	271.977 ng
9) T	n-Heneicosane (C21)	7.16	59320868	270.644 ng
10) T	n-Docosane (C22)	7.51	75391429	269.120 ng
11) T	n-Tetracosane (C24)	8.17	72898652	267.280 ng
12) T	n-Hexacosane (C26)	8.78	70142481	267.838 ng
13) T	n-Octacosane (C28)	9.35	68787173	271.646 ng
14) T	n-Triacontane (C30)	9.85	69583916	275.672 ng
15) T	n-Dotriacontane (C32)	10.29	69428445	275.621 ng
16) T	n-Tetratriacontane (C34)	10.70	68253187	274.558 ng
17) T	n-Hexatriacontane (C36)	11.09	68476656	274.022 ng
18) T	n-Octatriacontane (C38)	11.45	65486532	269.979 ng
19) T	n-Tetracontane (40)	11.86	59111308	253.308 ng
20) H	C9-C28	5.21	936833958	3282.091 ng
21) H	C28-C40	10.78	412218221	1596.088 ng
22) H	C9-C40	6.30	1347936638	4849.575 ng

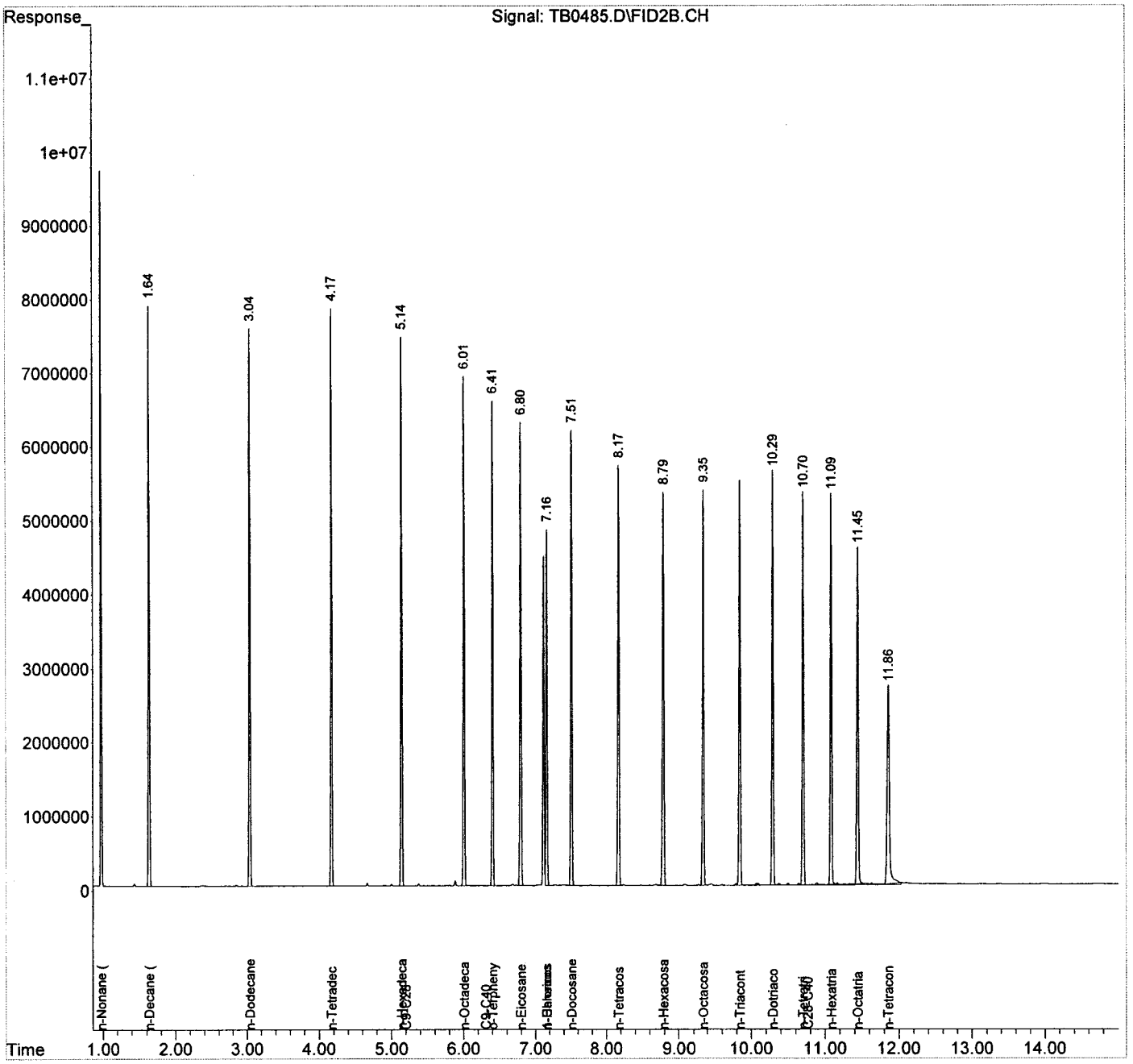
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0485.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 18:22
Operator : MJ
Sample : ALI_C_IAS_4492,250_PPM
Misc : ,NA,NA,1
ALS Vial : 52 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:22:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0493.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 21:25
Operator : MJ
Sample : ALI_C_IAS_4492.,250_PPM
Misc : ,NA,NA,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:13:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	7.16	51078716	233.040 ng
Spiked Amount 100.000		Recovery =	233.04%
23) S o-Terphenyl	6.40	60663388	232.885 ng
Spiked Amount 100.000		Recovery =	232.89%
Target Compounds			
2) T n-Nonane (C9)	0.97	76798293	244.246 ng
3) T n-Decane (C10)	1.64	74664455	246.281 ng
4) T n-Dodecane (C12)	3.04	73629115	245.480 ng
5) T n-Tetradecane (C14)	4.17	72467184	243.605 ng
6) T n-Hexadecane (C16)	5.14	70860564	240.690 ng
7) T n-Octadecane (C18)	6.01	68733821	238.159 ng
8) T n-Eicosane (C20)	6.79	66548451	234.286 ng
9) T n-Heneicosane (C21)	7.16	51078716	233.040 ng
10) T n-Docosane (C22)	7.51	65369408	233.345 ng
11) T n-Tetracosane (C24)	8.17	63291466	232.056 ng
12) T n-Hexacosane (C26)	8.78	61193533	233.667 ng
13) T n-Octacosane (C28)	9.35	60296443	238.116 ng
14) T n-Triacontane (C30)	9.84	60995308	241.647 ng
15) T n-Dotriacontane (C32)	10.29	60840130	241.527 ng
16) T n-Tetratriacontane (C34)	10.70	59433196	239.078 ng
17) T n-Hexatriacontane (C36)	11.09	59314343	237.357 ng
18) T n-Octatriacontane (C38)	11.44	56511906	232.980 ng
19) T n-Tetracontane (40)	11.86	50151033	214.911 ng
20) H C9-C28	5.21	811775639	2843.964 ng
21) H C28-C40	10.78	357179882	1382.983 ng
22) H C9-C40	6.30	1167811615	4201.526 ng

(f)=RT Delta > 1/2 Window (m)=manual int.

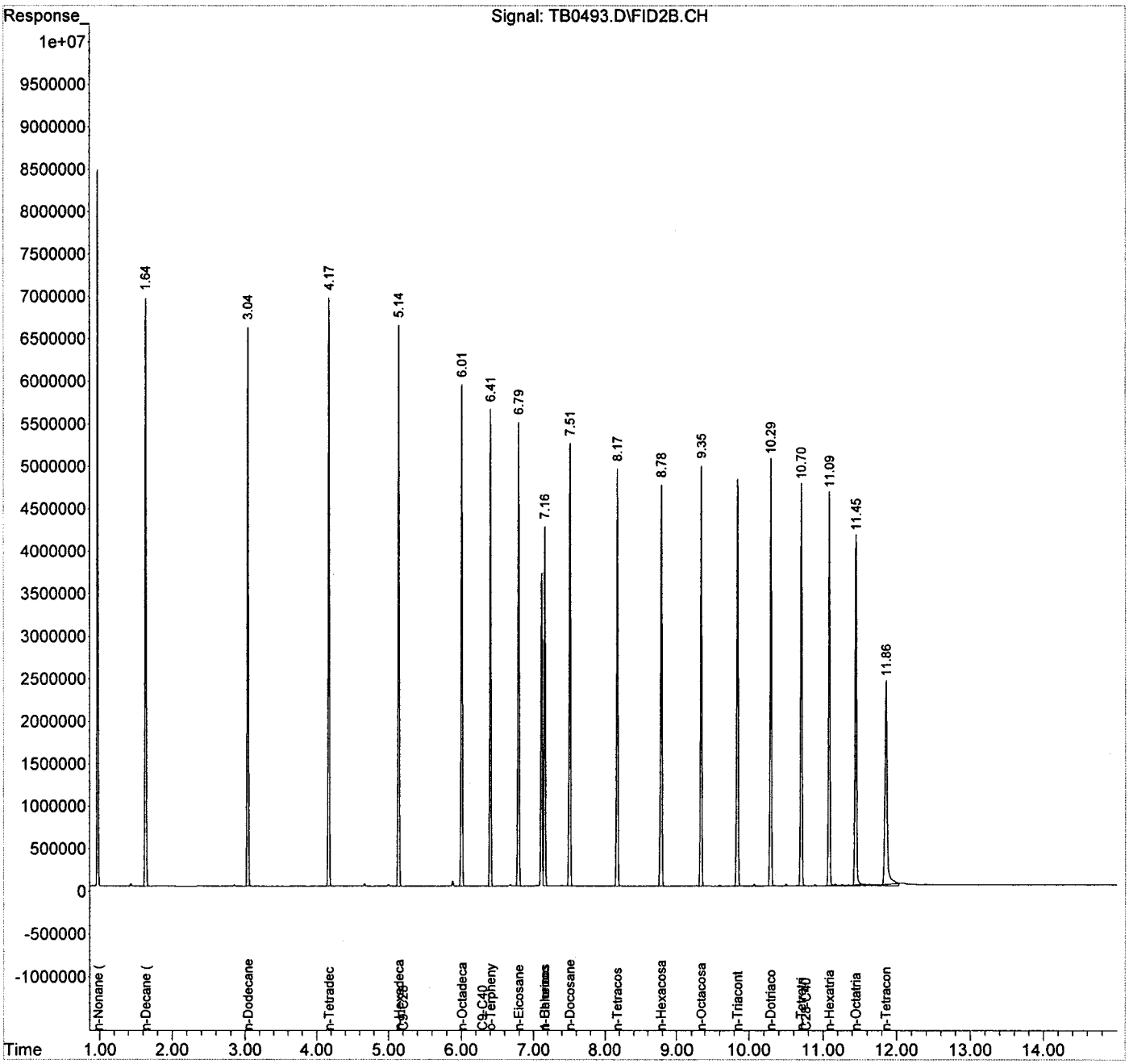
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0493.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 21:25
Operator : MJ
Sample : ALI_C_IAS_4492.,250_PPM
Misc : ,NA,NA,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:13:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EXTRACTABLE PETROLEUM HYDROCARBON
RAW QC DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA_2\01-10-13\
Data File : TB0487.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 19:08
Operator : MJ
Sample : NJ-EPH-C,LCSS130108-02,S,10.0g,0,01/08/13,1
Misc : 130108-02,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 11:28:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
System Monitoring Compounds					
1) S	1-Chlorooctadecane	7.11	19400453	88.512 ng	m
Spiked Amount	100.000		Recovery	= 88.51%	
23) S	o-Terphenyl	6.40	26348012	101.149 ng	
Spiked Amount	100.000		Recovery	= 101.15%	
Target Compounds					
2) T	n-Nonane (C9)	0.97	22763283	72.395 ng	
3) T	n-Decane (C10)	1.63	19145744	63.152 ng	
4) T	n-Dodecane (C12)	3.04	21348106	71.175 ng	
5) T	n-Tetradecane (C14)	4.17	22869725	76.879 ng	
6) T	n-Hexadecane (C16)	5.14	23561701	80.031 ng	
7) T	n-Octadecane (C18)	5.99	33848465	117.283 ng	m
8) T	n-Eicosane (C20)	6.79	23816754	83.848 ng	
9) T	n-Heneicosane (C21)	7.16	28105367	128.227 ng	m
10) T	n-Docosane (C22)	7.51	25514035	91.076 ng	
11) T	n-Tetracosane (C24)	8.17	22350596	81.948 ng	
12) T	n-Hexacosane (C26)	8.78	21840011	83.396 ng	
13) T	n-Octacosane (C28)	9.33	22483508	88.789 ng	m
14) T	n-Triacontane (C30)	9.84	20997311	83.186 ng	
15) T	n-Dotriacontane (C32)	10.29	24520409	97.343 ng	m
16) T	n-Tetratriacontane (C34)	10.70	21129677	84.997 ng	
17) T	n-Hexatriacontane (C36)	11.08	19501369	78.038 ng	
18) T	n-Octatriacontane (C38)	11.44	17505963	72.171 ng	
19) T	n-Tetracontane (40)	11.85	14608171	62.600 ng	
20) H	C9-C28	5.21	688640779	2412.575 ng	
21) H	C28-C40	10.78	215229928	833.360 ng	
22) H	C9-C40	6.30	886020216	3187.703 ng	

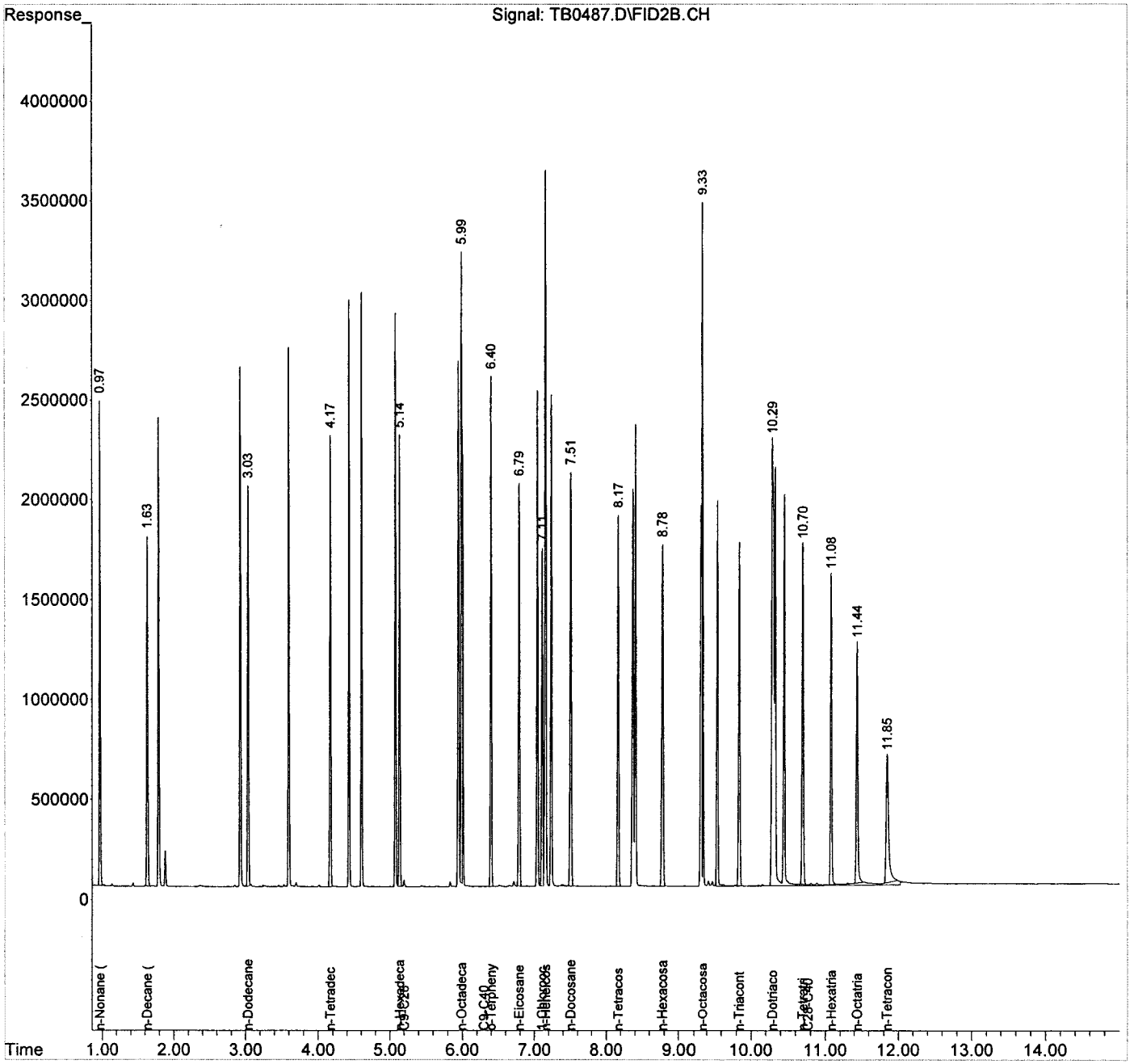
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA_2\01-10-13\
Data File : TB0487.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 19:08
Operator : MJ
Sample : NJ-EPH-C,LCSS130108-02,S,10.0g,0,01/08/13,1
Misc : 130108-02,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 11:28:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0488.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 19:30
Operator : MJ
Sample : NJ-EPH-C,LCSDS130108-02,S,10.0g,0,01/08/13,1
Misc : 130108-02,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:27:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
System Monitoring Compounds					
1) S	1-Chlorooctadecane	7.11	19239143	87.776 ng	m
Spiked Amount	100.000		Recovery	= 87.78%	
23) S	o-Terphenyl	6.40	26099209	100.194 ng	
Spiked Amount	100.000		Recovery	= 100.19%	
Target Compounds					
2) T	n-Nonane (C9)	0.97	22535867	71.672 ng	
3) T	n-Decane (C10)	1.63	19030822	62.773 ng	
4) T	n-Dodecane (C12)	3.04	21174069	70.595 ng	
5) T	n-Tetradecane (C14)	4.17	22674125	76.221 ng	
6) T	n-Hexadecane (C16)	5.14	23322238	79.218 ng	
7) T	n-Octadecane (C18)	5.99	29012300	100.526 ng	m
8) T	n-Eicosane (C20)	6.79	23560391	82.945 ng	
9) T	n-Heneicosane (C21)	7.16	30348552	138.461 ng	m
10) T	n-Docosane (C22)	7.51	25306376	90.335 ng	
11) T	n-Tetracosane (C24)	8.17	22222643	81.479 ng	
12) T	n-Hexacosane (C26)	8.78	21814380	83.298 ng	
13) T	n-Octacosane (C28)	9.31	21291010	84.080 ng	m
14) T	n-Triacontane (C30)	9.84	21022837	83.287 ng	
15) T	n-Dotriacontane (C32)	10.29	26091827	103.581 ng	m
16) T	n-Tetratriacontane (C34)	10.70	21136552	85.025 ng	
17) T	n-Hexatriacontane (C36)	11.08	19550327	78.234 ng	
18) T	n-Octatriacontane (C38)	11.44	17462663	71.993 ng	
19) T	n-Tetracontane (40)	11.85	14764464	63.270 ng	
20) H	C9-C28	5.21	685531997	2401.683 ng	
21) H	C28-C40	10.78	216176259	837.024 ng	
22) H	C9-C40	6.30	883704458	3179.372 ng	

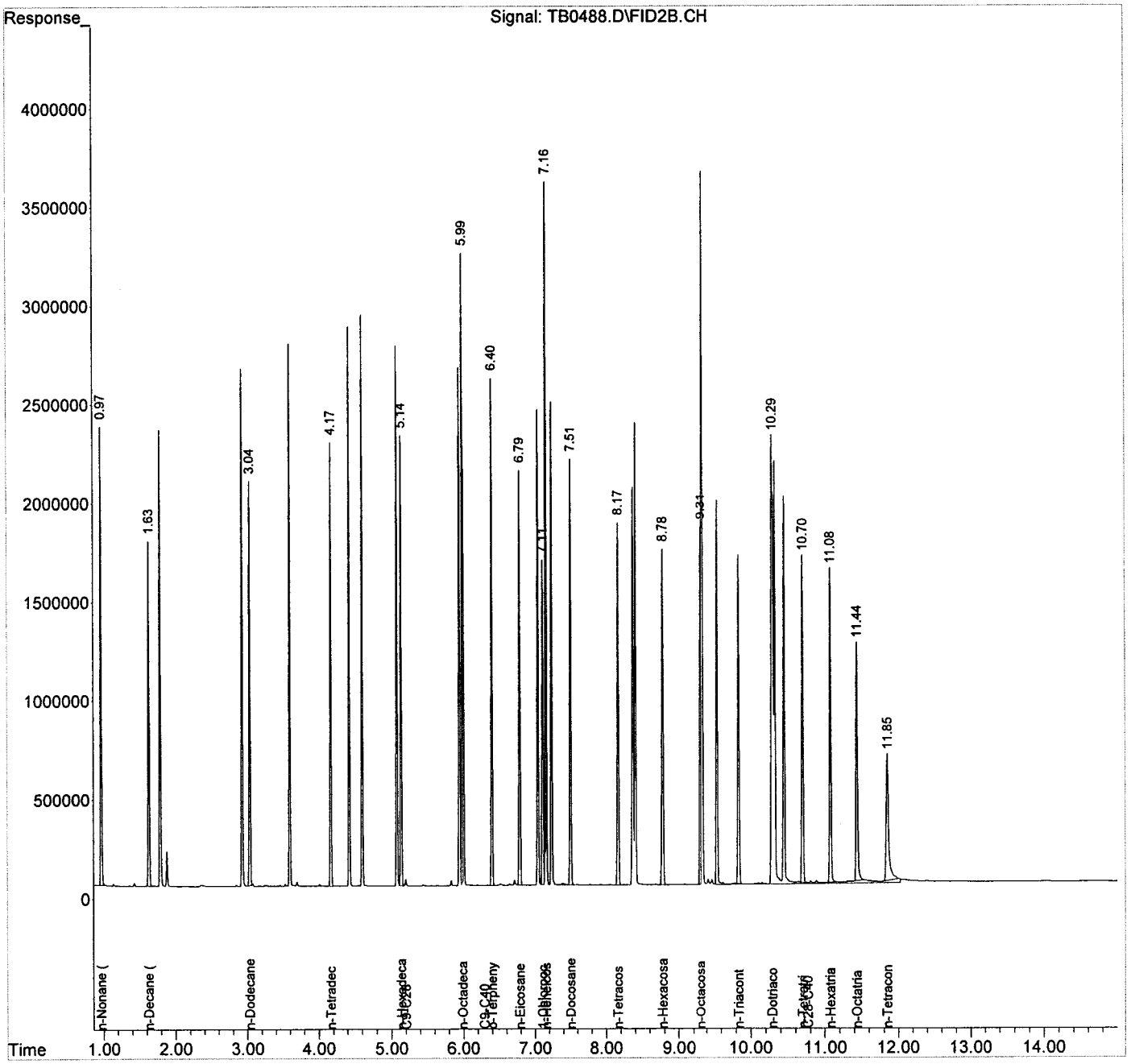
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0488.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 19:30
Operator : MJ
Sample : NJ-EPH-C,LCSDS130108-02,S,10.0g,0,01/08/13,1
Misc : 130108-02,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:27:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-03-13\
Data File : T2458.D
Signal(s) : FID1A.CH
Acq On : 05 Jan 2013 00:49
Operator : MJ
Sample : NJ-EPH-C,12686-004MS,S,10.35g,0,12/31/12,1
Misc : 121231-12,NA,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 09 11:48:25 2013
Quant Method : C:\MSDCHEM\1\METHODS\TEPH0103.M
Quant Title :
QLast Update : Fri Jan 04 15:10:20 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds							
1)	S	1-Chlorooctadecane	6.86	14437420	108.834	ng	
Spiked Amount		100.000		Recovery	= 108.83%		
23)	S	o-Terphenyl	6.13	24126082	135.556	ng	
Spiked Amount		100.000		Recovery	= 135.56%		
Target Compounds							
2)	T	n-Nonane (C9)	0.73	9520418	52.529	ng	
3)	T	n-Decane (C10)	1.20	11388004	56.633	ng	
4)	T	n-Dodecane (C12)	2.99	14565677	71.959	ng	
5)	T	n-Tetradecane (C14)	3.96	15350768	75.892	ng	
6)	T	n-Hexadecane (C16)	4.90	15629782	77.677	ng	
7)	T	n-Octadecane (C18)	5.75	16366596	83.232	ng	
8)	T	n-Eicosane (C20)	6.54	16327267	84.887	ng	
9)	T	n-Heneicosane (C21)	6.90	6030479	40.321	ng	m
10)	T	n-Docosane (C22)	7.26	16776705	87.886	ng	
11)	T	n-Tetracosane (C24)	7.92	17327956	92.302	ng	
12)	T	n-Hexacosane (C26)	8.53	15231033	83.783	ng	
13)	T	n-Octacosane (C28)	9.10	16289943	89.315	ng	
14)	T	n-Triacontane (C30)	9.62	15650177	81.997	ng	
15)	T	n-Dotriacontane (C32)	10.05	20421494	101.265	ng	m
16)	T	n-Tetratriacontane (C34)	10.49	17345414	81.863	ng	
17)	T	n-Hexatriacontane (C36)	10.88	19743455	90.860	ng	
18)	T	n-Octatriacontane (C38)	11.24	15299098	70.355	ng	
19)	T	n-Tetracontane (40)	11.60	15279409	71.029	ng	
20)	H	C9-C28	5.05	648451977	2881.227	ng	
21)	H	C28-C40	10.65	267011858	1123.349	ng	
22)	H	C9-C40	6.30	1022237880	4370.861	ng	

(f)=RT Delta > 1/2 Window (m)=manual int.

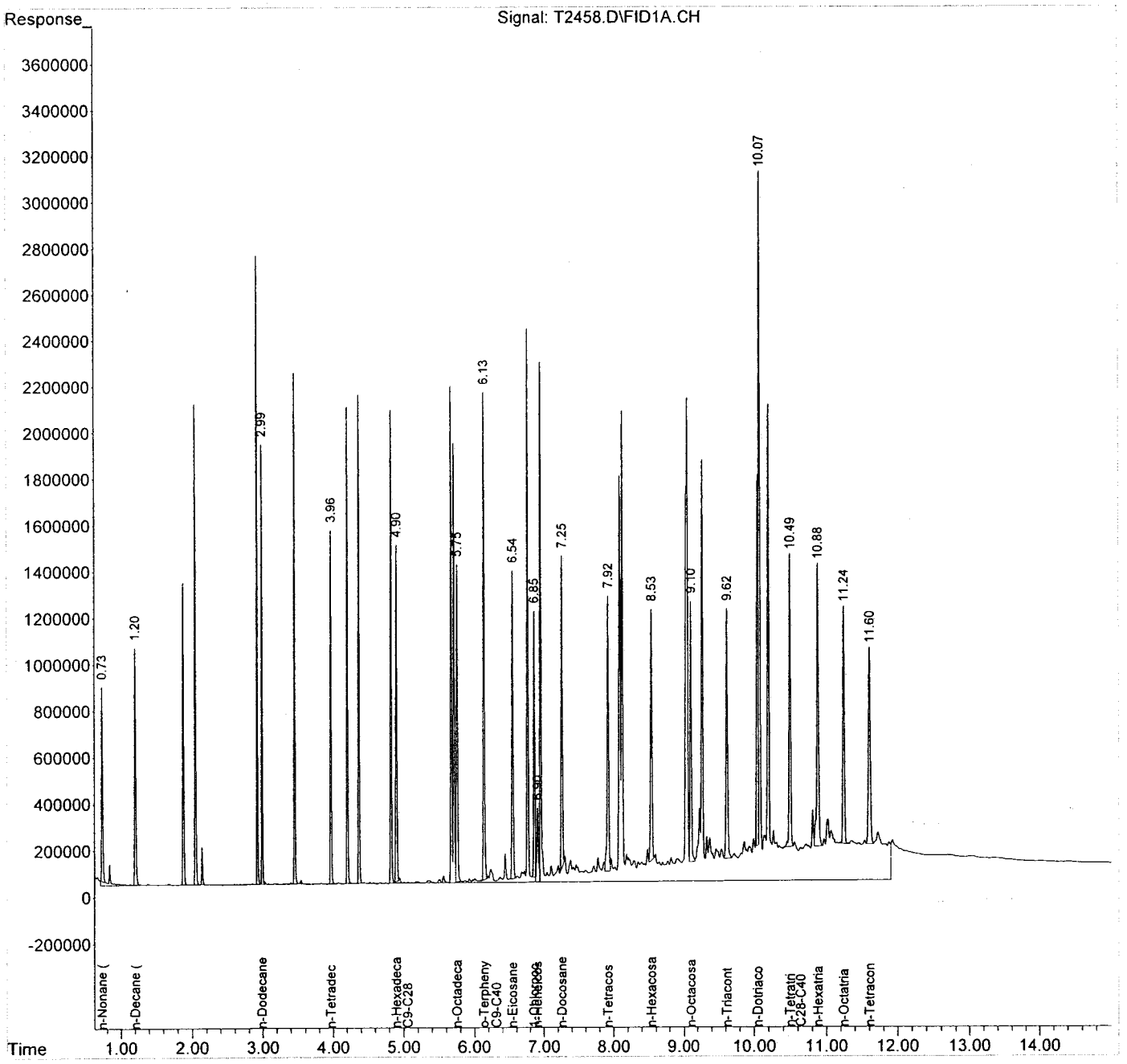
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-03-13\
Data File : T2458.D
Signal(s) : FID1A.CH
Acq On : 05 Jan 2013 00:49
Operator : MJ
Sample : NJ-EPH-C,12686-004MS,S,10.35g,0,12/31/12,1
Misc : 121231-12,NA,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 09 11:48:25 2013
Quant Method : C:\MSDCHEM\1\METHODS\TEPH0103.M
Quant Title :
QLast Update : Fri Jan 04 15:10:20 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-03-13\
Data File : T2457.D
Signal(s) : FID1A.CH
Acq On : 05 Jan 2013 00:26
Operator : MJ
Sample : AOC-2-2/,12686-4D,S,10.35g,15.7,12/31/12,1
Misc : 121231-12,12/26/12,12/26/12,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 09 12:05:45 2013
Quant Method : C:\MSDCHEM\1\METHODS\TEPH0103.M
Quant Title :
QLast Update : Sun Jan 06 16:24:36 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	6.85	14397729	108.534 ng
Spiked Amount 100.000		Recovery	= 108.53%
23) S o-Terphenyl	6.13	23322712	131.042 ng
Spiked Amount 100.000		Recovery	= 131.04%
Target Compounds			
22) H C9-C40	6.30	348184193	1488.758 ng

(f)=RT Delta > 1/2 Window (m)=manual int.

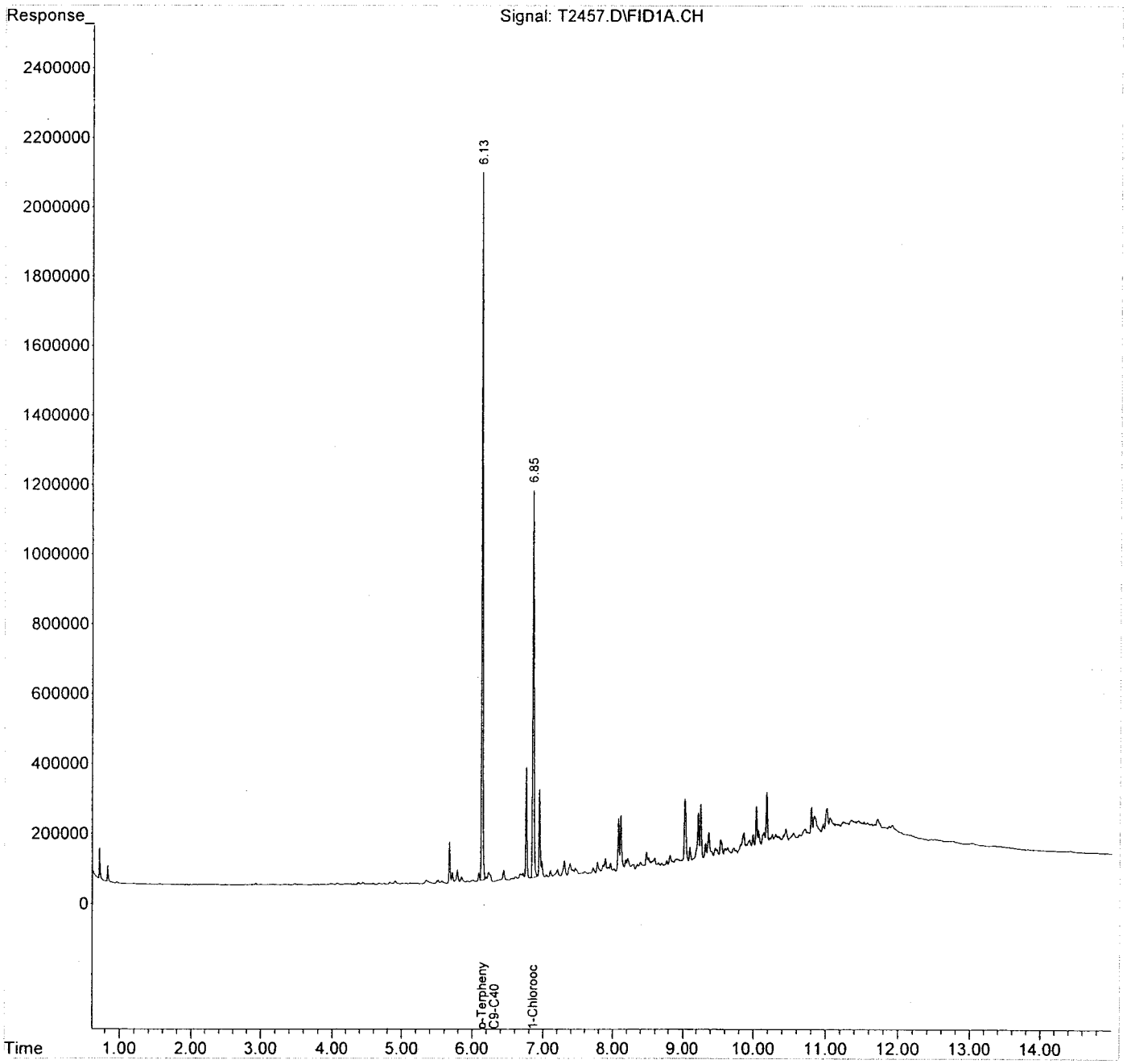
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-03-13\
Data File : T2457.D
Signal(s) : FID1A.CH
Acq On : 05 Jan 2013 00:26
Operator : MJ
Sample : AOC-2-2/,12686-4D,S,10.35g,15.7,12/31/12,1
Misc : 121231-12,12/26/12,12/26/12,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 09 12:05:45 2013
Quant Method : C:\MSDCHEM\1\METHODS\TEPH0103.M
Quant Title :
QLast Update : Sun Jan 06 16:24:36 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-C40

Lab ID: BLKS121231-12
Client ID: NJ-EPH-C
Date Received: NA
Date Extracted: 12/31/2012
Date Analyzed: 01/04/2013
Data file: T2446.D

GC Column: RTX-5
Sample wt/vol: 10.0g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
C9-C40	ND		36.0	9.00

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-03-13\
Data File : T2446.D
Signal(s) : FID1A.CH
Acq On : 04 Jan 2013 20:18
Operator : MJ
Sample : NJ-EPH-C,BLKS121231-12,S,10.0g,0,12/31/12,1
Misc : 121231-12,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 09 12:43:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\TEPH0103.M
Quant Title :
QLast Update : Fri Jan 04 15:10:20 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	6.86	15896159	119.830 ng
Spiked Amount 100.000		Recovery = 119.83%	
23) S o-Terphenyl	6.13	23614641	132.683 ng m
Spiked Amount 100.000		Recovery = 132.68%	
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

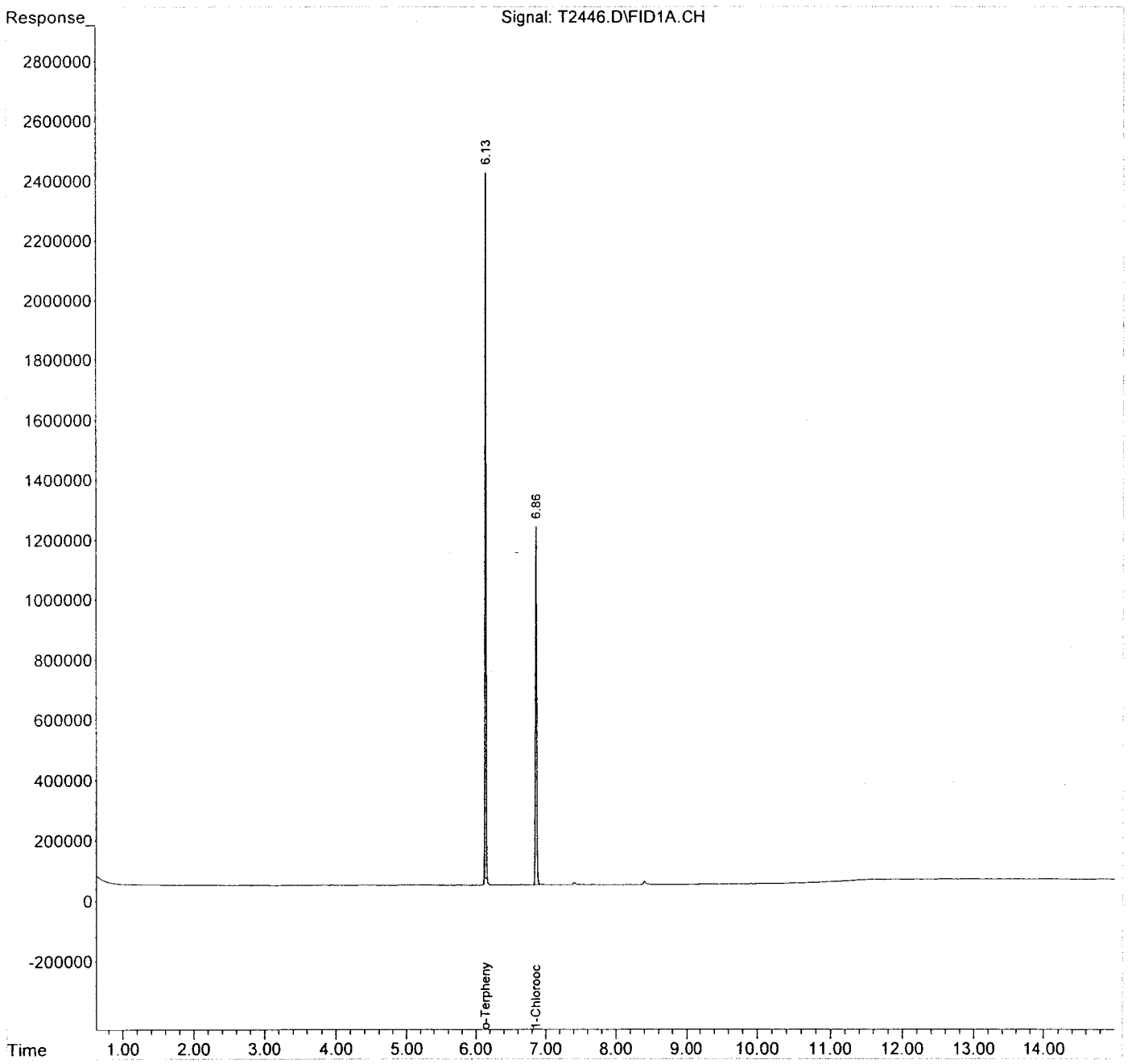
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-03-13\
Data File : T2446.D
Signal(s) : FID1A.CH
Acq On : 04 Jan 2013 20:18
Operator : MJ
Sample : NJ-EPH-C,BLKS121231-12,S,10.0g,0,12/31/12,1
Misc : 121231-12,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 09 12:43:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\TEPH0103.M
Quant Title :
QLast Update : Fri Jan 04 15:10:20 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-C40

Lab ID: BLKS130108-02
Client ID: NJ-EPH-C
Date Received: NA
Date Extracted: 01/08/2013
Date Analyzed: 01/10/2013
Data file: TB0486.D

GC Column: RTX-5
Sample wt/vol: 10.0g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
C9-C40	ND		36.0	9.00

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0486.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 18:45
Operator : MJ
Sample : NJ-EPH-C,BLKS130108-02,S,10.0g,0,01/08/13,1
Misc : 130108-02,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:22:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	7.11	16155107	73.706 ng
Spiked Amount 100.000		Recovery =	73.71%
23) S o-Terphenyl	6.40	27910552	107.148 ng
Spiked Amount 100.000		Recovery =	107.15%
Target Compounds			

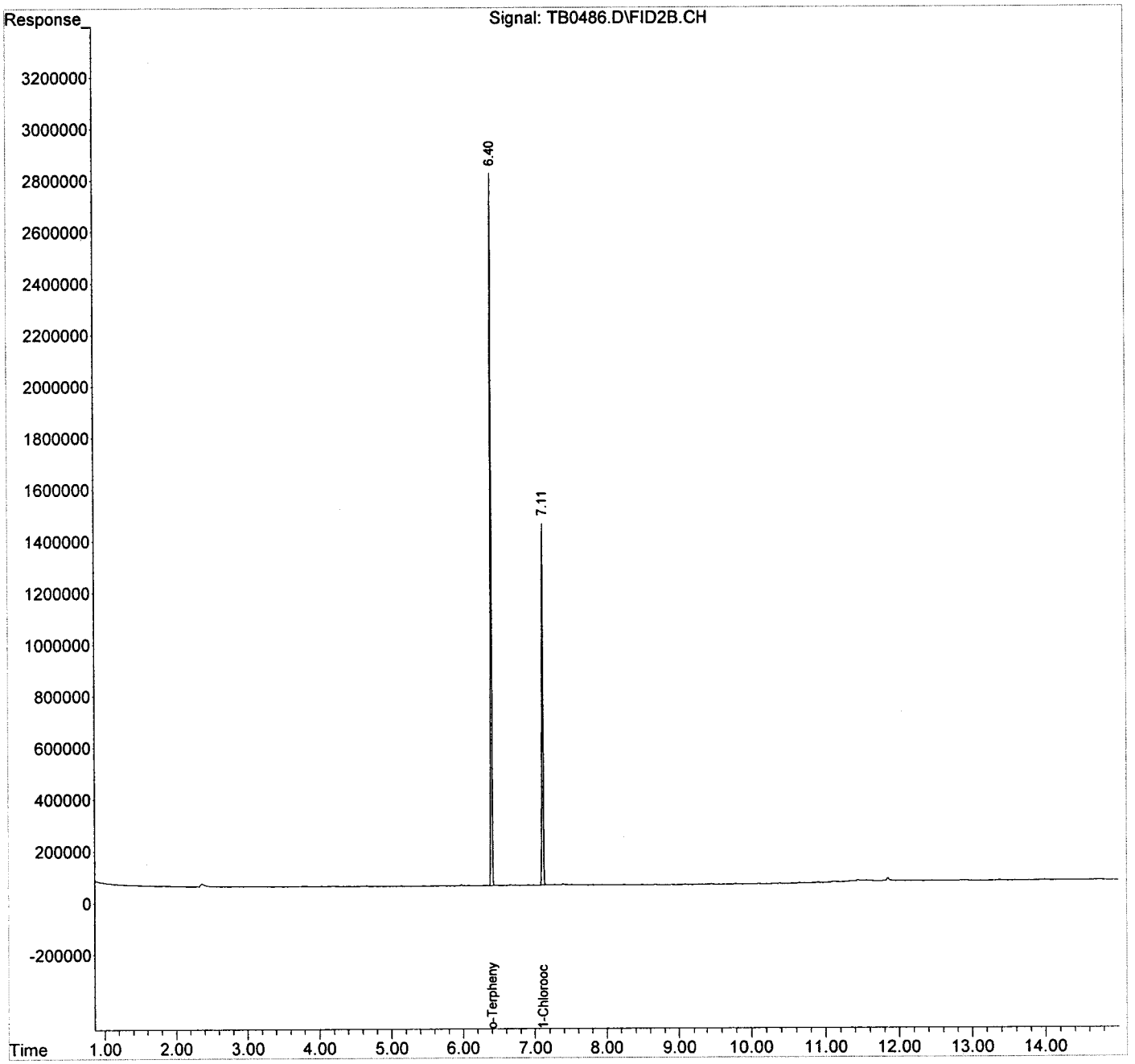
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-10-13\
Data File : TB0486.D
Signal(s) : FID2B.CH
Acq On : 10 Jan 2013 18:45
Operator : MJ
Sample : NJ-EPH-C,BLKS130108-02,S,10.0g,0,01/08/13,1
Misc : 130108-02,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 09:22:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\T2PH0106.M
Quant Title :
QLast Update : Mon Jan 07 13:23:46 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



FRACTIONATED
EXTRACTABLE PETROLEUM HYDROCARBON

FRACTIOANTED
EXTRACTABLE PETROLEUM HYDROCARBON
QC SUMMARY

NJ-EPH ALIPHATIC SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/13/2013

Client ID	Lab Sample ID	Matrix	COD % rec	#
ALI	BLKS130111-02	SOIL	81	
ALI	LCSS130111-02	SOIL	86	
ALI	LCSDS130111-02	SOIL	87	
PE-1	00325-001	SOIL	72	
PE-2	00325-002	SOIL	82	
SB-7/1-1	00167-002	SOIL	70	

Surrogate QC Limits	Soil	Aqueous
COD = 1-Chlorooctadecane	40-140	40-140

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

NJ-EPH AROMATIC SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/13/2013

Client ID	Lab Sample ID	Matrix	FBP % rec	#	BNP % rec	#	OTP % rec	#
ARO	BLKS130111-02	SOIL	124		130		128	
ARO	LCSS130111-02	SOIL	139		140		137	
ARO	LCSDS130111-02	SOIL	138		139		136	
PE-1	00325-001	SOIL	83		90		80	
PE-2	00325-002	SOIL	40		71		86	
SB-7/1-1	00167-002	SOIL	120		126		109	

Surrogate QC Limits	Soil	Aqueous
FBP = 2-Fluorobiphenyl	40-140	40-140
BNP = 2-Bromonaphthalene	40-140	40-140
OTP = o-Terphenyl	40-140	40-140

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH ALIPHATIC LCS/LCSD ACCURACY REPORT

Lab ID: LCSDS130111-02
Client ID: ALI
Date Received: NA
Date Extracted: 01/11/2013
Date Analyzed: 01/13/2013
Data file: U2543.D

GC Column: HP-5
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	Conc. LCSD	%Rec. LCSD	%RPD
n-Nonane (C9)	50	0.00	21	42	21	42	0
n-Decane (C10)	50	0.00	20	40	20	40	0
n-Dodecane (C12)	50	0.00	24	48	25	50	4
n-Tetradecane (C14)	50	0.00	29	58	29	58	0
n-Hexadecane (C16)	50	0.00	34	68	34	68	0
n-Octadecane (C18)	50	0.00	35	70	35	70	0
n-Eicosane (C20)	50	0.00	37	74	38	76	3
n-Heneicosane (C21)	50	0.00	70	140	70	140	0
n-Docosane (C22)	50	0.00	43	86	43	86	0
n-Tetracosane (C24)	50	0.00	41	82	42	84	2
n-Hexacosane (C26)	50	0.00	44	88	44	88	0
n-Octacosane (C28)	50	0.00	45	90	46	92	2
n-Triacontane (C30)	50	0.00	47	94	47	94	0
n-Dotriacontane (C32)	50	0.00	45	90	46	92	2
n-Tetratriacontane (C34)	50	0.00	47	94	47	94	0
n-Hexatriacontane (C36)	50	0.00	43	86	43	86	0
n-Octatriacontane (C38)	50	0.00	40	80	41	82	2
n-Tetracontane (40)	50	0.00	40	80	40	80	0
C9-C12	150	0.00	74	49	69	46	7
C12-C16	100	0.00	66	66	66	66	0
C16-C21	150	0.00	143	95	145	97	1
C21-C40	500	0.00	467	93	468	94	0

	Aqueous	Soil/Sediment
n-Nonane (C9) ACCURACY (%REC)	25-140	25-140
MS/MSD ACCURACY (%REC)	40-140	40-140
MS/MSD PRECISION (RPD)	25	25

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH AROMATIC LCS/LCSD ACCURACY REPORT

Lab ID: LCSDS130111-02
Client ID: ARO
Date Received: NA
Date Extracted: 01/11/2013
Date Analyzed: 01/13/2013
Data file: UB0728.D

GC Column: HP-5
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	Conc. LCSD	%Rec. LCSD	%RPD
1,2,3-Trimethylbenzene	50	0.00	34	68	33	66	3
Napthalene	50	0.00	39	78	38	76	3
2-Methylnaphthalene	50	0.00	39	78	38	76	3
Acenaphthylene	50	0.00	41	82	41	82	0
Acenaphthene	50	0.00	43	86	42	84	2
Fluorene	50	0.00	42	84	41	82	2
Phenanthrene	50	0.00	43	86	43	86	0
Anthracene	50	0.00	43	86	43	86	0
Fluoroanthene	50	0.00	43	86	43	86	0
Pyrene	50	0.00	43	86	43	86	0
Benzo[a]anthracene	50	0.00	44	88	44	88	0
Chrysene	50	0.00	46	92	47	94	2
Benzo[b]fluoranthene	50	0.00	44	88	45	90	2
Benzo[k]fluoranthene	50	0.00	44	88	45	90	2
Benzo[a]pyrene	50	0.00	41	82	42	84	2
Indeno[1,2,3-cd]pyrene	50	0.00	44	88	44	88	0
Dibenz[a,h]anthracene	50	0.00	44	88	44	88	0
Benzo[g,h,i]perylene	50	0.00	44	88	44	88	0
C10-C12	100	0.00	82	82	81	81	1
C12-C16	150	0.00	128	85	126	84	2
C16-C21	250	0.00	221	88	220	88	0
C21-C36	400	0.00	378	95	378	95	0

	Aqueous	Soil/Sediment
MS/MSD ACCURACY (%REC)	40-140	40-140
MS/MSD PRECISION (RPD)	25	25

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH ALIPHATIC MS ACCURACY REPORT

Lab ID: 12805-019MS
Client ID: ALI
Date Received: NA
Date Extracted: 01/03/2013
Date Analyzed: 01/16/2013
Data file: U2606.D

GC Column: HP-5
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Conc. Add	Sample	MS Conc.	%Rec.
C9-C12	150	0	106	71
C12-C16	100	0	88	88
C16-C21	150	0	172	115
C21-C40	500	144	470	65

	Aqueous	Soil/Sediment
MS/MSD ACCURACY (%REC)	40-140	40-140

NC Non calculable

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH AROMATIC MS ACCURACY REPORT

Lab ID: 12805-019MS
Client ID: ARO
Date Received: NA
Date Extracted: 01/03/2013
Date Analyzed: 01/13/2013
Data file: UB0757.D

GC Column: HP-5
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Conc. Add	Sample	MS Conc.	%Rec.
C10-C12	100	0	77	77
C12-C16	150	0	118	79
C16-C21	250	0	219	88
C21-C36	400	131	434	76

	Aqueous	Soil/Sediment
MS/MSD ACCURACY (%REC)	40-140	40-140

NC Non calculable

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH DUPLICATE SAMPLE RESULTS SUMMARY

Client ID: S-19
Date Received: 12/31/2012
Date Extracted: 01/03/2013
Lab ID: 12805-019
Sample wt/vol: 5.10g
Date Analyzed: 01/16/2013
Aliphatics Sample Data file: U2604.D
Dilution Factor: 1
Date Analyzed: 01/13/2013
Aromatics Sample Data file: UB0755.D
Dilution Factor: 1

GC Column: HP-5
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 20.3
Lab ID: 12805-19D
Sample wt/vol: 5.09g
Date Analyzed: 01/16/2013
Aliphatics Sample Dup Data file: U2605.D
Dilution Factor: 1
Date Analyzed: 01/13/2013
Aromatics Sample Dup Data file: UB0756.D
Dilution Factor: 1

Compound	Sample Conc.	Sample Dup Conc.	% RPD
C9-C12 Aliphatics	ND	ND	NA
C12-C16 Aliphatics	ND	ND	NA
C16-C21 Aliphatics	ND	ND	NA
C21-C40 Aliphatics	35.4	35.3	0
Total Aliphatics	35.4	35.3	0
C10-C12 Aromatics	ND	ND	NA
C12-C16 Aromatics	ND	ND	NA
C16-C21 Aromatics	ND	ND	NA
C21-C36 Aromatics	32.3	36.4	12
Total Aromatics	32.3	36.4	12
Total NJ-EPH	67.7	71.7	6

	Aqueous	Soil/Sediment
Sample/Sample Dup PRECISION (% RPD)	50	50

NA --- Not Applied

NJ-EPH ALIPHATIC METHOD BLANK SUMMARY

Lab File ID:	U2585.D	Instrument ID:	GC-U
Date Extracted:	01/03/2013	Matrix:	SOIL
Date Analyzed:	01/15/2013	Time Analyzed:	17:33

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
ALI	LCSS130103-05	01/15/2013	18:07
ALI	LCSDS130103-05	01/15/2013	18:41
S-3	12805-003	01/15/2013	19:16
S-4	12805-004	01/15/2013	19:50
S-5	12805-005	01/15/2013	20:24
S-6	12805-006	01/15/2013	20:58
S-7	12805-007	01/15/2013	21:32
S-8	12805-008	01/15/2013	22:06
S-9	12805-009	01/15/2013	22:40
S-10	12805-010	01/15/2013	23:15
S-11	12805-011	01/15/2013	23:49
S-12	12805-012	01/16/2013	00:23
S-13	12805-013	01/16/2013	00:57
S-14	12805-014	01/16/2013	01:31
S-15	12805-015	01/16/2013	02:05
S-16	12805-016	01/16/2013	02:40
S-17	12805-017	01/16/2013	03:14
S-18	12805-018	01/16/2013	03:48
S-19	12805-019	01/16/2013	04:22
S-19	12805-19D	01/16/2013	04:56
ALI	12805-019MS	01/16/2013	05:30

NJ-EPH AROMATIC METHOD BLANK SUMMARY

Lab File ID: UB0736.D

Instrument ID: GC-U

Date Extracted: 01/03/2013

Matrix: SOIL

Date Analyzed: 01/13/2013

Time Analyzed: 08:47

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
ARO	LCSS130103-05	01/13/2013	09:21
ARO	LCSDS130103-05	01/13/2013	09:55
S-3	12805-003	01/13/2013	10:29
S-4	12805-004	01/13/2013	11:03
S-5	12805-005	01/13/2013	11:37
S-6	12805-006	01/13/2013	12:12
S-7	12805-007	01/13/2013	12:46
S-8	12805-008	01/13/2013	13:20
S-9	12805-009	01/13/2013	13:54
S-10	12805-010	01/13/2013	14:28
S-11	12805-011	01/13/2013	15:02
S-12	12805-012	01/13/2013	15:37
S-13	12805-013	01/13/2013	16:11
S-14	12805-014	01/13/2013	16:45
S-15	12805-015	01/13/2013	17:19
S-16	12805-016	01/13/2013	17:53
S-17	12805-017	01/13/2013	18:27
S-18	12805-018	01/13/2013	19:02
S-19	12805-019	01/13/2013	19:36
S-19	12805-19D	01/13/2013	20:10
ARO	12805-019MS	01/13/2013	20:44

NJ-EPH ALIPHATIC METHOD BLANK SUMMARY

Lab File ID:	U2541.D	Instrument ID:	GC-U
Date Extracted:	01/11/2013	Matrix:	SOIL
Date Analyzed:	01/13/2013	Time Analyzed:	03:06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
ALI	LCSS130111-02	01/13/2013	03:40
ALI	LCSDS130111-02	01/13/2013	04:14
PE-1	00325-001	01/13/2013	04:48
PE-2	00325-002	01/13/2013	05:22
SB-7/1-1	00167-002	01/13/2013	05:56

NJ-EPH AROMATIC METHOD BLANK SUMMARY

Lab File ID:	UB0726.D	Instrument ID:	GC-U
Date Extracted:	01/11/2013	Matrix:	SOIL
Date Analyzed:	01/13/2013	Time Analyzed:	03:06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
ARO	LCSS130111-02	01/13/2013	03:40
ARO	LCSDS130111-02	01/13/2013	04:14
PE-1	00325-001	01/13/2013	04:48
PE-2	00325-002	01/13/2013	05:22
SB-7/1-1	00167-002	01/13/2013	05:56

NJ-EPH ALIPHATIC RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-U **Column:** HP-5

Surrogate RT from initial calibration :

COD **12.05**

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	COD RT	#
ALI	BLKS130111-02	01/13/2013	03:06	12.05	
ALI	LCSS130111-02	01/13/2013	03:40	12.05	
ALI	LCSDS130111-02	01/13/2013	04:14	12.05	
PE-1	00325-001	01/13/2013	04:48	12.05	
PE-2	00325-002	01/13/2013	05:22	12.05	
SB-7/1-1	00167-002	01/13/2013	05:56	12.06	

Surrogate QC Limits

COD = 1-Chlorooctadecane (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

NJ-EPH AROMATIC RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-U **Column:** HP-5

Surrogate RT from initial calibration :

FBP **4.70** **BNP** **5.75** **OTP** **10.15**

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	FBP RT	#	BNP RT	#	OTP RT	#
ARO	BLKS130111-02	01/13/2013	03:06	4.70		5.75		10.15	
ARO	LCSS130111-02	01/13/2013	03:40	4.70		5.75		10.15	
ARO	LCSDS130111-02	01/13/2013	04:14	4.70		5.75		10.15	
PE-1	00325-001	01/13/2013	04:48	4.69		5.75		10.15	
PE-2	00325-002	01/13/2013	05:22	4.69		5.75		10.15	
SB-7/1-1	00167-002	01/13/2013	05:56	4.70		5.75		10.16	

Surrogate QC Limits

FBP = 2-Fluorobiphenyl (± 0.10 Minutes)

BNP = 2-Bromonaphthalene (± 0.10 Minutes)

OTP = o-Terphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH Naphthalene & 2-Methylnaphthalene BREAKTHROUGH REPORT

	Fraction Data file:	Fraction Data file:
Lab ID: LCSS130111-02	Aliphatic U2542.D	Aromatic UB0727.D
Lab ID: LCSDS130111-02	Aliphatic U2543.D	Aromatic UB0728.D

Date Extracted: 01/11/2013
Date Analyzed: 01/13/2013
Matrix-Units: Soil-mg/Kg (ppm)

	LCS			LCSD			
Compound	Aromatic	Aliphatic	% BT	Aromatic	Aliphatic	% BT	
Naphthalene	38.5	0.0	0.0	38.1	0.0	0.0	Pass
2-Methylnaphthalene	38.7	0.0	0.0	38.5	0.0	0.0	Pass

Total Naphthalene & 2-Methylnaphthalene in the aliphatic fraction < 5%
% BT ---- % Breakthrough

FRACTIONATED
EXTRACTABLE PETROLEUM HYDROCARBON
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2546.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 5:56
Operator : MJ
Sample : SB-7/1-1,00167-002,S,5.13g,8.20,01/11/13,1
Misc : 130111-02,01/04/13,01/04/13,1
ALS Vial : 28 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:20:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.06	15785323	34.779 ng
Spiked Amount 50.000		Recovery =	69.56%
Target Compounds			
21) H C12-C16	5.60	172651381	292.314 ng
22) H C16-C21	10.20	1655422322	2683.904 ng
23) H C21-C40	19.20	6047125534	10196.612 ng

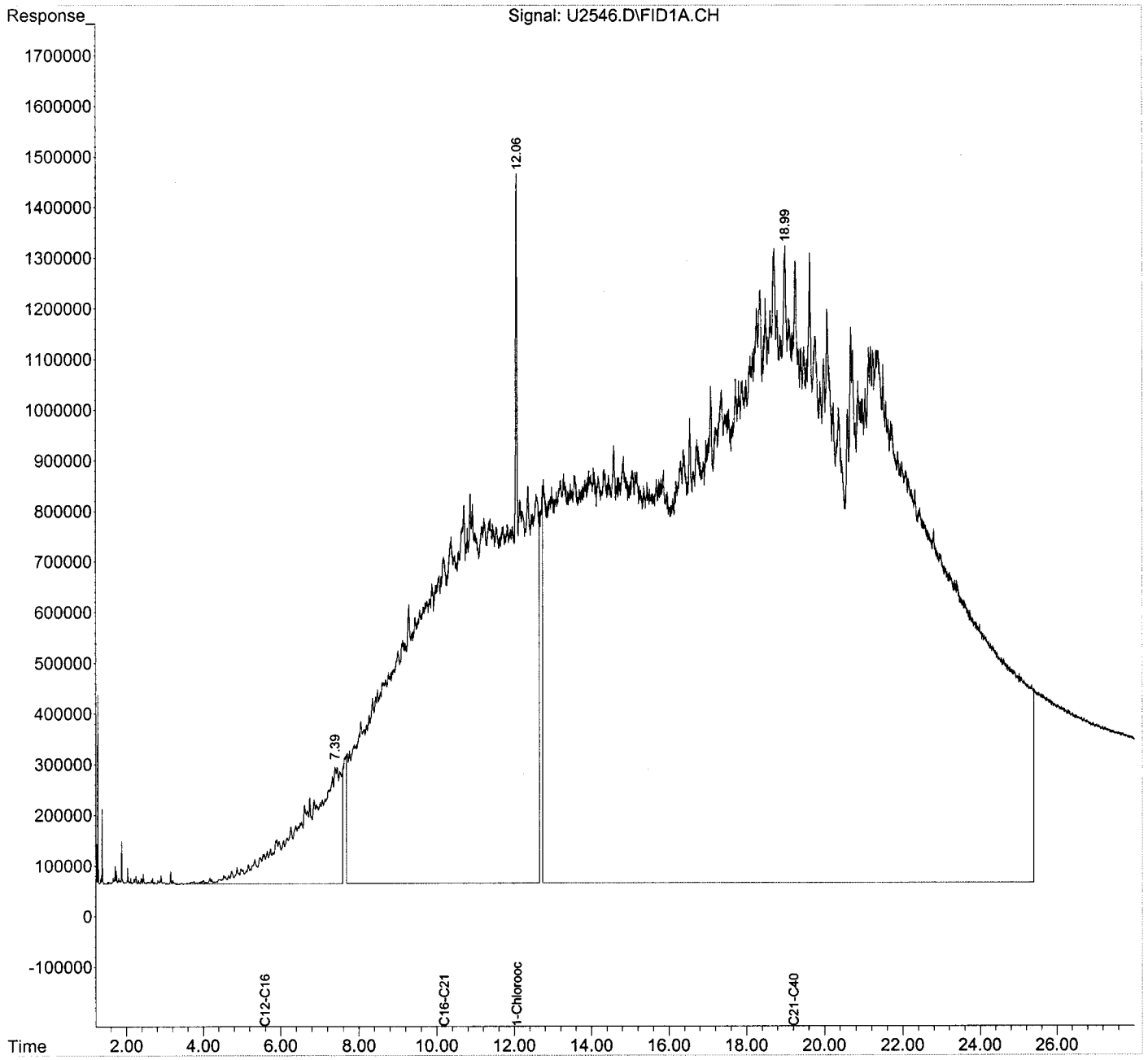
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2546.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 5:56
Operator : MJ
Sample : SB-7/1-1,00167-002,S,5.13g,8.20,01/11/13,1
Misc : 130111-02,01/04/13,01/04/13,1
ALS Vial : 28 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:20:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA_2\01-12-13\
Data File : UB0731.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 5:56
Operator : MJ
Sample : SB-7/1-1,00167-002,S,5.13g,8.20,01/11/13,1
Misc : 130111-02,01/04/13,01/04/13,1
ALS Vial : 78 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:53:37 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units	
System Monitoring Compounds				
1) S 2-Fluorobiphenyl	4.70	40619794	60.160 ng	
Spiked Amount 50.000		Recovery	= 120.32%	
2) S 2-Bromonaphthalene	5.75	29182702	62.748 ng	
Spiked Amount 50.000		Recovery	= 125.50%	
3) S o-Terphenyl	10.16	33774430	54.614 ng	m
Spiked Amount 50.000		Recovery	= 109.23%	
Target Compounds				
24) H C16-C21	9.60	847221889	1120.338 ng	
25) H C21-C36	17.20	4199323293	5419.845 ng	

(f)=RT Delta > 1/2 Window (m)=manual int.

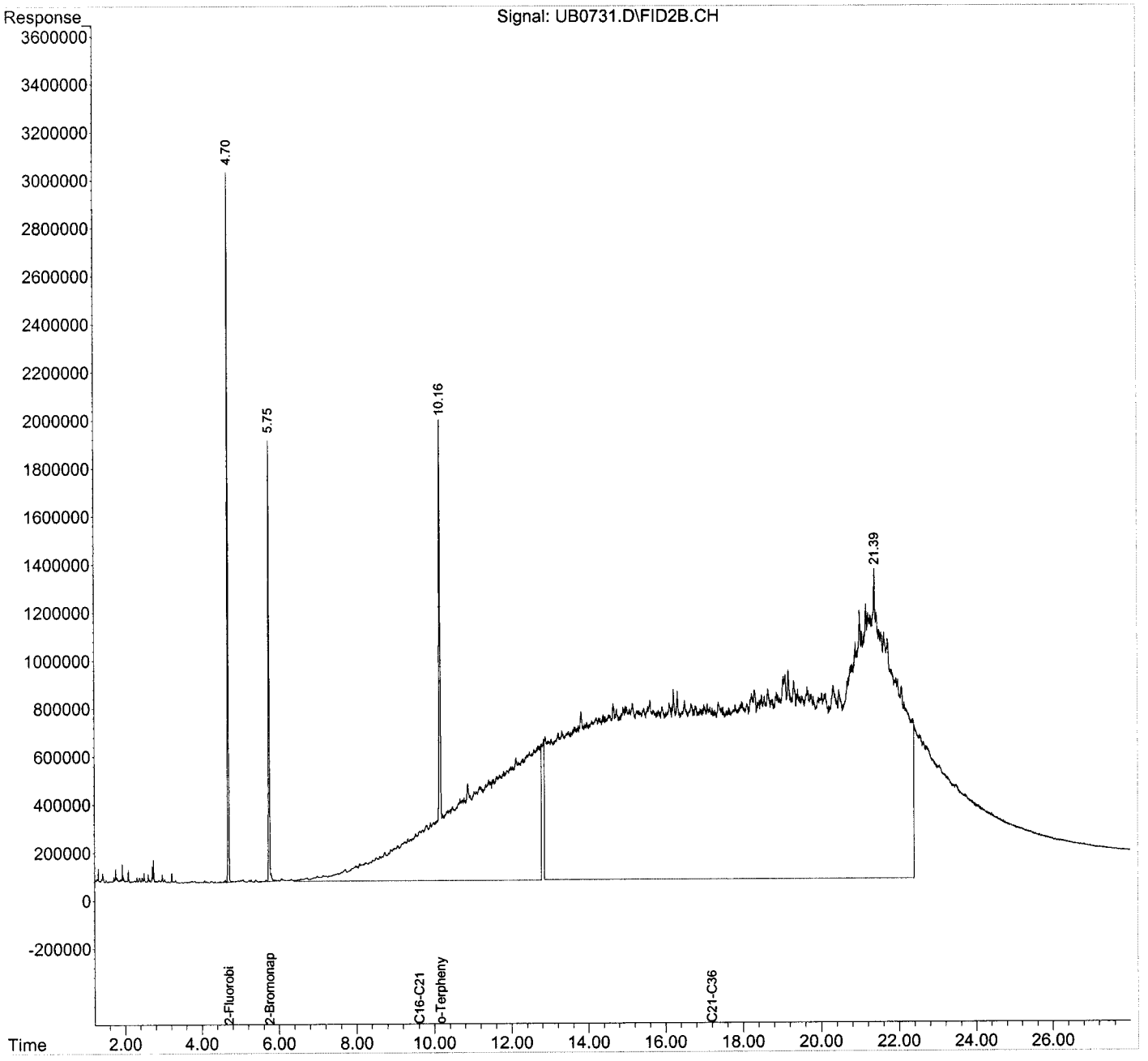
J.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA_2\01-12-13\
Data File : UB0731.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 5:56
Operator : MJ
Sample : SB-7/1-1,00167-002,S,5.13g,8.20,01/11/13,1
Misc : 130111-02,01/04/13,01/04/13,1
ALS Vial : 78 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:53:37 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



FRACTIONATED
EXTRACTABLE PETROLEUM HYDROCARBON
STANDARDS

NJ-EPH ALIPHATIC INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/07/2013

Instrument ID: GC-U
GC Column : HP-5

Data File: U2363.D U2362.D U2361.D U2360.D U2359.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	20	100	250	500	1000	RT	FROM	TO
n-Nonane (C9)	1.38	1.38	1.38	1.38	1.39	1.38	1.31	1.45
n-Decane (C10)	1.89	1.89	1.89	1.90	1.90	1.90	1.83	1.97
n-Dodecane (C12)	3.22	3.22	3.23	3.23	3.25	3.23	3.15	3.31
n-Tetradecane (C14)	4.88	4.89	4.90	4.91	4.93	4.90	4.81	4.99
n-Hexadecane (C16)	6.93	6.93	6.95	6.96	6.99	6.95	6.84	7.06
n-Octadecane (C18)	9.10	9.11	9.12	9.14	9.17	9.13	9.01	9.25
n-Eicosane (C20)	11.20	11.21	11.23	11.25	11.28	11.23	11.11	11.35
n-Heneicosane (C21)	12.20	12.21	12.23	12.25	12.29	12.24	12.10	12.38
n-Docosane (C22)	13.17	13.18	13.20	13.22	13.25	13.20	13.06	13.34
n-Tetracosane (C24)	14.99	15.00	15.02	15.05	15.08	15.03	14.88	15.18
n-Hexacosane (C26)	16.69	16.70	16.72	16.74	16.77	16.72	16.57	16.87
n_Octacosane (C28)	18.27	18.28	18.30	18.32	18.35	18.30	18.15	18.45
n-Triacontane (C30)	19.75	19.76	19.77	19.80	19.83	19.78	19.63	19.93
n-Dotriacontane (C32)	21.01	21.02	21.03	21.05	21.07	21.04	20.92	21.16
n-Tetratriacontane (C34)	21.76	21.77	21.78	21.80	21.81	21.79	21.67	21.91
n-Hexatriacontane (C36)	22.58	22.59	22.61	22.63	22.65	22.61	22.46	22.76
n-Octatriacontane (C38)	23.59	23.61	23.63	23.66	23.69	23.63	23.48	23.78
n-Tetracontane (40)	24.94	24.96	24.98	25.02	25.07	24.99	24.84	25.14
C9-C12	2.40	2.40	2.40	2.40	2.40	2.40	2.30	2.50
C12-C16	5.60	5.60	5.60	5.60	5.60	5.60	5.50	5.70
C16-C21	10.20	10.20	10.20	10.20	10.20	10.20	10.09	10.31
C21-C40	19.20	19.20	19.20	19.20	19.20	19.20	19.09	19.31

NJ-EPH ALIPHATIC INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/07/2013

Instrument ID: GC-U
GC Column : HP-5

Data File: U2363.D U2362.D U2361.D U2360.D U2359.D

Compound	CALIBRATION FACTORS 20	100	250	500	1000	MEAN	%RSD
n-Nonane (C9)	631996	473427	462936	464662	443360	495276	15.59
n-Decane (C10)	647736	487823	482339	486311	471138	515069	14.45
n-Dodecane (C12)	659860	503143	510561	514218	501738	537904	12.71
n-Tetradecane (C14)	682506	525404	543640	544660	540491	567340	11.43
n-Hexadecane (C16)	690275	533283	556692	552719	546506	575895	11.21
n-Octadecane (C18)	739268	572972	597134	588168	574311	614371	11.48
n-Eicosane (C20)	735498	573718	591251	578050	558674	607438	11.94
n-Heneicosane (C21)	734133	574841	584306	559061	537288	597926	13.08
n-Docosane (C22)	730830	573963	582485	565466	545246	599598	12.45
n-Tetracosane (C24)	726087	570072	568847	534720	530865	586118	13.71
n-Hexacosane (C26)	714659	546699	545981	517439	510621	567080	14.83
n_Octacosane (C28)	700735	530503	519961	494938	494777	548183	15.82
n-Triacontane (C30)	687789	509293	501575	482009	486334	533400	16.31
n-Dotriacontane (C32)	670345	491980	493344	480649	487803	524824	15.53
n-Tetratriacontane (C34)	644813	473284	488075	482839	487623	515327	14.09
n-Hexatriacontane (C36)	622843	464370	485986	480554	490641	508879	12.67
n-Octatriacontane (C38)	591762	450789	476044	471403	480921	494184	11.28
n-Tetracontane (40)	565514	439134	463834	459423	468972	479375	10.32
C9-C12	2061430	1485422	1467555	1477475	1423108	1582998	16.96
C12-C16	1452687	1091979	1128115	1123123	1110457	1181272	12.90
C16-C21	2282648	1744258	1793531	1744132	1687377	1850389	13.22
C21-C40	8390616	5662513	5394770	5132937	5071785	5930524	23.52

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2359.D
Signal(s) : FID1A.CH
Acq On : 06 Jan 2013 23:21
Operator : MJ
Sample : ALI_L5_IAS_4503,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	12.13	424390367	935.050 ng
Spiked Amount	50.000		Recovery	= 1870.10%
24) S	o-Terphenyl	10.15	544504624	938.162 ng
Spiked Amount	50.000		Recovery	= 1876.32%
25) S	Naphthalene	3.19	544727111	949.682 ng
Spiked Amount	50.000		Recovery	= 1899.36%
26) S	2-Methylnaphthalene	4.06	572916521	953.721 ng
Spiked Amount	50.000		Recovery	= 1907.44%
Target Compounds				
2) T	n-Nonane (C9)	1.39	443360411	895.178 ng
3) T	n-Decane (C10)	1.90	471138023	914.708 ng
4) T	n-Dodecane (C12)	3.25	501737617	932.764 ng
5) T	n-Tetradecane (C14)	4.93	540490661	952.675 ng
6) T	n-Hexadecane (C16)	6.99	546506112	948.968 ng
7) T	n-Octadecane (C18)	9.17	574310930	934.795 ng
8) T	n-Eicosane (C20)	11.28	558674212	919.722 ng
9) T	n-Heneicosane (C21)	12.29	537287870	904.115 ng
10) T	n-Docosane (C22)	13.25	545246295	916.003 ng
11) T	n-Tetracosane (C24)	15.08	530864836	905.499 ng
12) T	n-Hexacosane (C26)	16.77	510620720	900.576 ng
13) T	n-Octacosane (C28)	18.35	494777266	902.433 ng
14) T	n-Triacontane (C30)	19.83	486333594	911.691 ng
15) T	n-Dotriacontane (C32)	21.07	487803130	929.484 ng
16) T	n-Tetratriacontane (C34)	21.81	487622985	945.499 ng
17) T	n-Hexatriacontane (C36)	22.65	490640654	964.330 ng
18) T	n-Octatriacontane (C38)	23.69	480921488	973.076 ng
19) T	n-Tetracontane (40)	25.07	468972072	978.298 ng
20) H	C9-C12	2.40	1423108482	2696.650 ng
21) H	C12-C16	5.60	1110457170	1880.575 ng
22) H	C16-C21	10.20	1687377219	2735.712 ng
23) H	C21-C40	19.20	5071784714	8609.782 ng

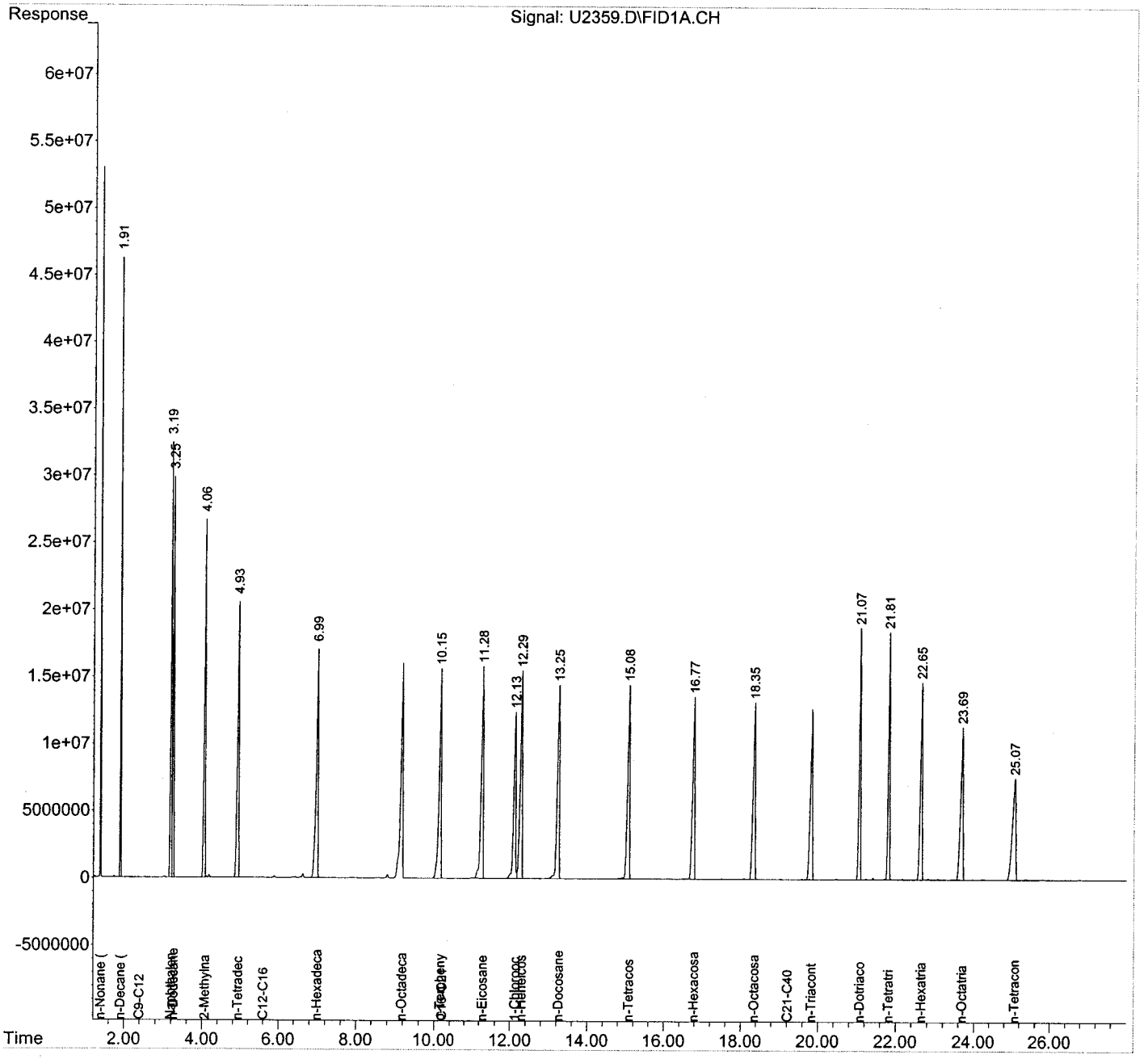
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2359.D
Signal(s) : FID1A.CH
Acq On : 06 Jan 2013 23:21
Operator : MJ
Sample : ALI_L5_IAS_4503,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2360.D
Signal(s) : FID1A.CH
Acq On : 06 Jan 2013 23:55
Operator : MJ
Sample : ALI_L4_IAS_4504,500_PPM
Misc : ,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.10	218874132	482.241 ng
Spiked Amount 50.000		Recovery	= 964.48%
24) S o-Terphenyl	10.11	277973881	478.939 ng
Spiked Amount 50.000		Recovery	= 957.88%
25) S Naphthalene	3.18	272292178	474.717 ng
Spiked Amount 50.000		Recovery	= 949.43%
26) S 2-Methylnaphthalene	4.04	287862839	479.198 ng
Spiked Amount 50.000		Recovery	= 958.40%
Target Compounds			
2) T n-Nonane (C9)	1.38	232330948	469.094 ng
3) T n-Decane (C10)	1.90	243155471	472.083 ng
4) T n-Dodecane (C12)	3.23	257109241	477.984 ng
5) T n-Tetradecane (C14)	4.91	272329967	480.012 ng
6) T n-Hexadecane (C16)	6.96	276359503	479.878 ng
7) T n-Octadecane (C18)	9.14	294084045	478.675 ng
8) T n-Eicosane (C20)	11.25	289025213	475.810 ng
9) T n-Heneicosane (C21)	12.25	279530518	470.377 ng
10) T n-Docosane (C22)	13.22	282732880	474.986 ng
11) T n-Tetracosane (C24)	15.05	267359835	456.037 ng
12) T n-Hexacosane (C26)	16.74	258719419	456.301 ng
13) T n-Octacosane (C28)	18.32	247468855	451.363 ng
14) T n-Triacontane (C30)	19.80	241004458	451.792 ng
15) T n-Dotriacontane (C32)	21.05	240324599	457.926 ng
16) T n-Tetratriacontane (C34)	21.80	241419613	468.112 ng
17) T n-Hexatriacontane (C36)	22.63	240277054	472.253 ng
18) T n-Octatriacontane (C38)	23.66	235701466	476.908 ng
19) T n-Tetracontane (40)	25.02	229711592	479.189 ng
20) H C9-C12	2.40	738737428	1399.834 ng
21) H C12-C16	5.60	561561624	951.013 ng
22) H C16-C21	10.20	872065992	1413.864 ng
23) H C21-C40	19.20	2566468662	4356.797 ng

(f)=RT Delta > 1/2 Window (m)=manual int.

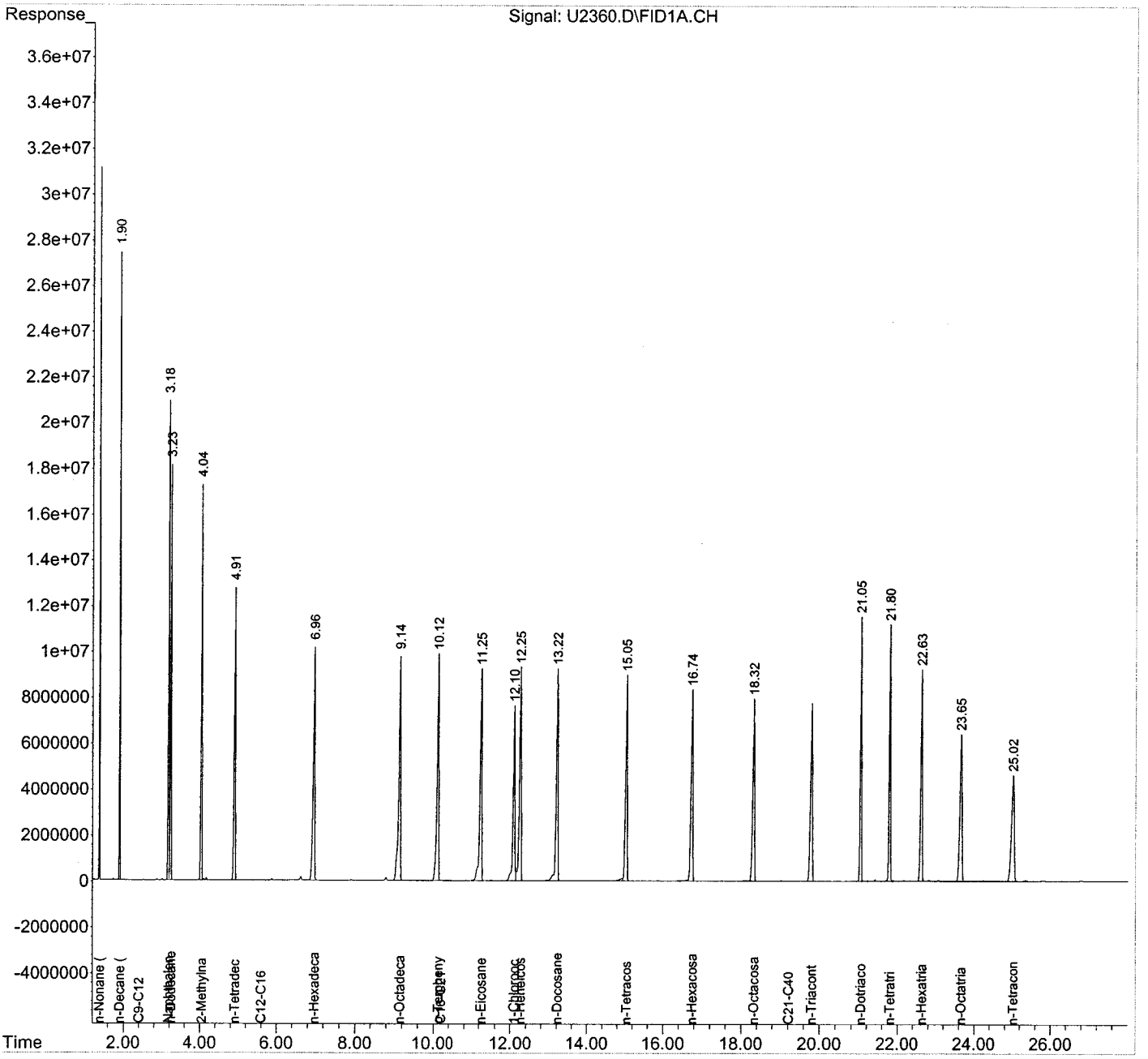
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2360.D
Signal(s) : FID1A.CH
Acq On : 06 Jan 2013 23:55
Operator : MJ
Sample : ALI_L4_IAS_4504,500_PPM
Misc : ,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2361.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 00:29
Operator : MJ
Sample : ALI_L3_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	12.08	110215241	242.835 ng
Spiked Amount	50.000		Recovery	= 485.67%
24) S	o-Terphenyl	10.09	140764547	242.532 ng
Spiked Amount	50.000		Recovery	= 485.06%
25) S	Naphthalene	3.17	134286627	234.117 ng
Spiked Amount	50.000		Recovery	= 468.23%
26) S	2-Methylnaphthalene	4.03	142252646	236.805 ng
Spiked Amount	50.000		Recovery	= 473.61%
Target Compounds				
2) T	n-Nonane (C9)	1.38	115733975	233.676 ng
3) T	n-Decane (C10)	1.89	120584648	234.113 ng
4) T	n-Dodecane (C12)	3.23	127640187	237.292 ng
5) T	n-Tetradecane (C14)	4.90	135910011	239.556 ng
6) T	n-Hexadecane (C16)	6.95	139173121	241.664 ng
7) T	n-Octadecane (C18)	9.12	149283559	242.986 ng
8) T	n-Eicosane (C20)	11.23	147812645	243.338 ng
9) T	n-Heneicosane (C21)	12.23	146076551	245.809 ng
10) T	n-Docosane (C22)	13.20	145621232	244.641 ng
11) T	n-Tetracosane (C24)	15.02	142211850	242.572 ng
12) T	n-Hexacosane (C26)	16.72	136495309	240.735 ng
13) T	n-Octacosane (C28)	18.30	129990336	237.092 ng
14) T	n-Triacontane (C30)	19.77	125393672	235.066 ng
15) T	n-Dotriacontane (C32)	21.03	123336010	235.011 ng
16) T	n-Tetratriacontane (C34)	21.78	122018697	236.594 ng
17) T	n-Hexatriacontane (C36)	22.61	121496606	238.796 ng
18) T	n-Octatriacontane (C38)	23.63	119010936	240.802 ng
19) T	n-Tetracontane (40)	24.98	115958551	241.895 ng
20) H	C9-C12	2.40	366888715	695.218 ng
21) H	C12-C16	5.60	282028832	477.620 ng
22) H	C16-C21	10.20	448382804	726.954 ng
23) H	C21-C40	19.20	1348692469	2289.519 ng

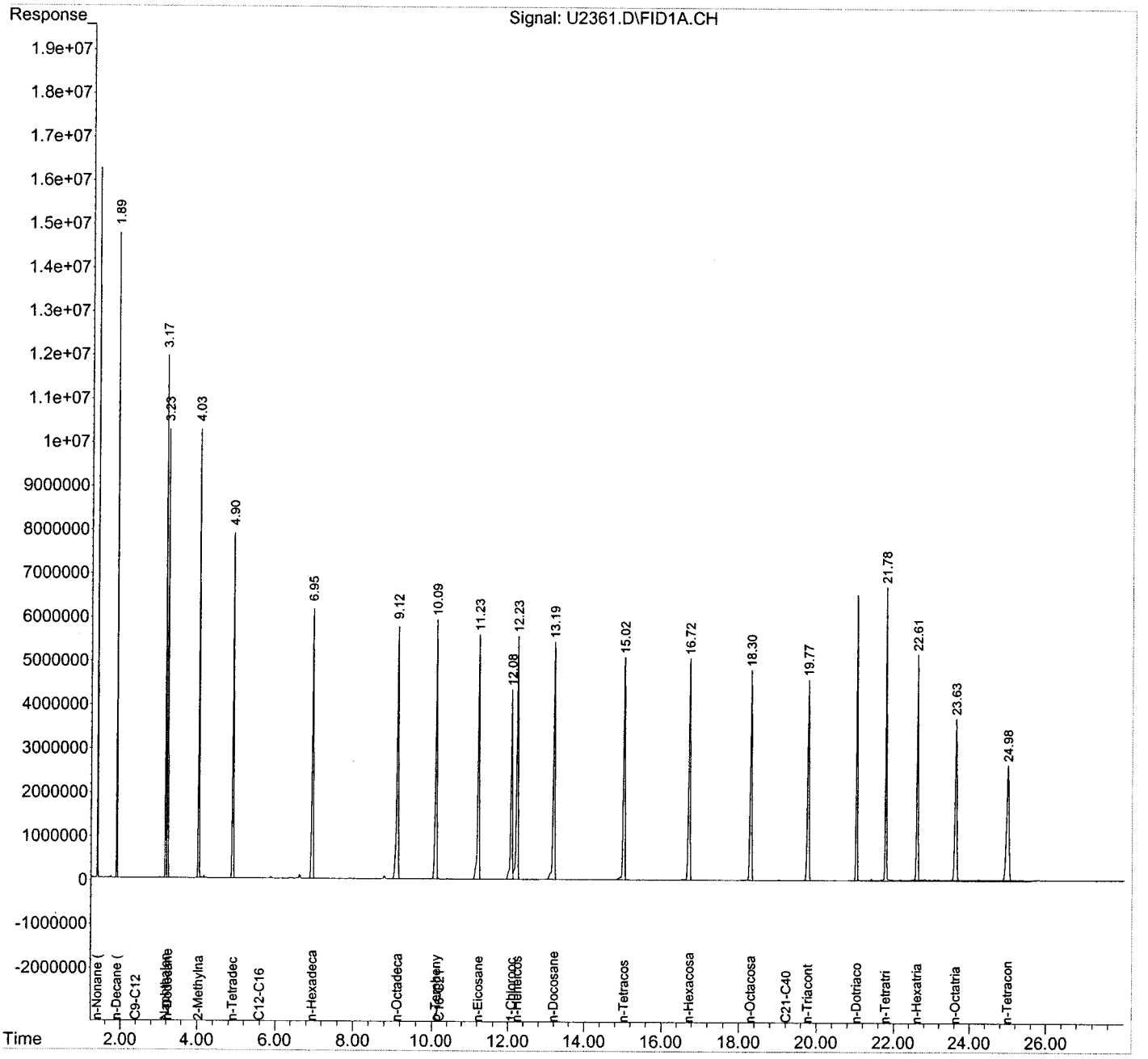
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2361.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 00:29
Operator : MJ
Sample : ALI_L3_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2362.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 1:03
Operator : MJ
Sample : ALI_L2_IAS_4506,100_PPM
Misc : ,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:41 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.06	42455086	93.540 ng
Spiked Amount 50.000		Recovery =	187.08%
24) S o-Terphenyl	10.08	54011493	93.060 ng
Spiked Amount 50.000		Recovery =	186.12%
25) S Naphthalene	3.16	53483314	93.243 ng
Spiked Amount 50.000		Recovery =	186.49%
26) S 2-Methylnaphthalene	4.02	55762817	92.827 ng
Spiked Amount 50.000		Recovery =	185.65%
Target Compounds			
2) T n-Nonane (C9)	1.38	47342691	95.588 ng
3) T n-Decane (C10)	1.89	48782332	94.710 ng
4) T n-Dodecane (C12)	3.22	50314346	93.538 ng
5) T n-Tetradecane (C14)	4.89	52540401	92.608 ng
6) T n-Hexadecane (C16)	6.93	53328275	92.601 ng
7) T n-Octadecane (C18)	9.11	57297201	93.262 ng
8) T n-Eicosane (C20)	11.21	57371792	94.449 ng
9) T n-Heneicosane (C21)	12.21	57484086	96.731 ng
10) T n-Docosane (C22)	13.18	57396339	96.425 ng
11) T n-Tetracosane (C24)	15.00	57007202	97.238 ng
12) T n-Hexacosane (C26)	16.70	54669912	96.421 ng
13) T n-Octacosane (C28)	18.28	53050288	96.759 ng
14) T n-Triacontane (C30)	19.76	50929273	95.473 ng
15) T n-Dotriacontane (C32)	21.02	49198015	93.744 ng
16) T n-Tetratriacontane (C34)	21.77	47328450	91.770 ng
17) T n-Hexatriacontane (C36)	22.59	46437011	91.270 ng
18) T n-Octatriacontane (C38)	23.61	45078942	91.211 ng
19) T n-Tetracontane (40)	24.96	43913400	91.605 ng
20) H C9-C12	2.40	148542186	281.473 ng
21) H C12-C16	5.60	109197898	184.928 ng
22) H C16-C21	10.20	174425791	282.793 ng
23) H C21-C40	19.20	566251345	961.259 ng

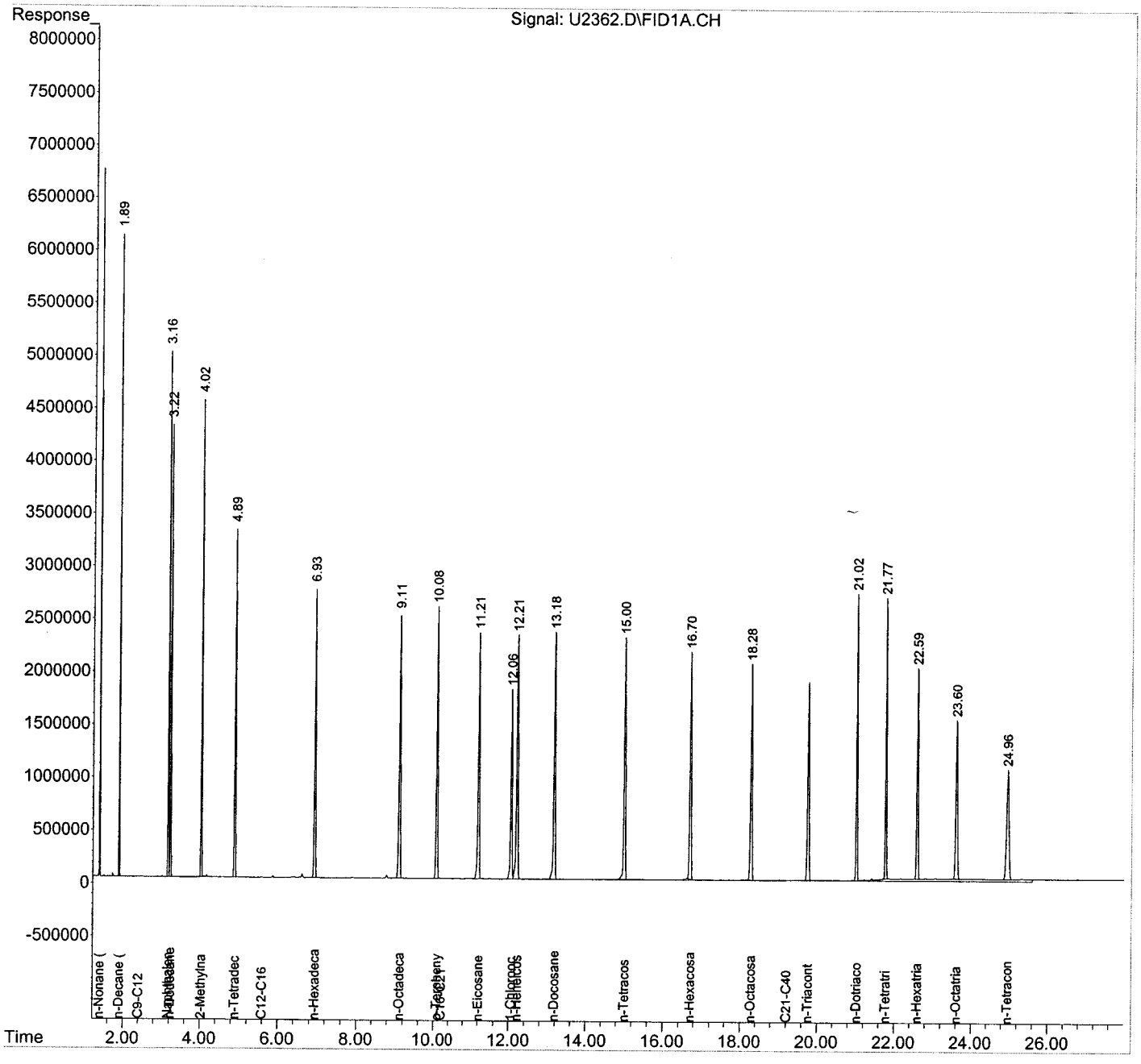
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2362.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 1:03
Operator : MJ
Sample : ALI_L2_IAS_4506,100_PPM
Misc : ,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:19:41 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2363.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 1:38
Operator : MJ
Sample : ALI_L1_IAS_4507,20_PPM
Misc : ,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:20:47 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.06	10835889	23.874 ng
Spiked Amount 50.000		Recovery =	47.75%
24) S o-Terphenyl	10.07	13967006	24.065 ng
Spiked Amount 50.000		Recovery =	48.13%
25) S Naphthalene	3.16	14152872	24.674 ng
Spiked Amount 50.000		Recovery =	49.35%
26) S 2-Methylnaphthalene	4.02	14564493	24.245 ng
Spiked Amount 50.000		Recovery =	48.49%
Target Compounds			
2) T n-Nonane (C9)	1.38	12639914	25.521 ng
3) T n-Decane (C10)	1.89	12954729	25.151 ng
4) T n-Dodecane (C12)	3.22	13197192	24.534 ng
5) T n-Tetradecane (C14)	4.88	13650122	24.060 ng
6) T n-Hexadecane (C16)	6.93	13805495	23.972 ng
7) T n-Octadecane (C18)	9.10	14785366	24.066 ng
8) T n-Eicosane (C20)	11.20	14709951	24.216 ng
9) T n-Heneicosane (C21)	12.20	14682652	24.707 ng
10) T n-Docosane (C22)	13.17	14616605	24.556 ng
11) T n-Tetracosane (C24)	14.99	14521736	24.770 ng
12) T n-Hexacosane (C26)	16.69	14293185	25.209 ng
13) T n-Octacosane (C28)	18.27	14014708	25.562 ng
14) T n-Triacontane (C30)	19.75	13755778	25.787 ng
15) T n-Dotriacontane (C32)	21.01	13406898	25.546 ng
16) T n-Tetratriacontane (C34)	21.76	12896263	25.006 ng
17) T n-Hexatriacontane (C36)	22.58	12456856	24.483 ng
18) T n-Octatriacontane (C38)	23.59	11835244	23.947 ng
19) T n-Tetracontane (40)	24.94	11310278	23.594 ng
20) H C9-C12	2.40	41228591	78.124 ng
21) H C12-C16	5.60	29053735	49.203 ng
22) H C16-C21	10.20	45652963	74.016 ng
23) H C21-C40	19.20	167812330	284.876 ng

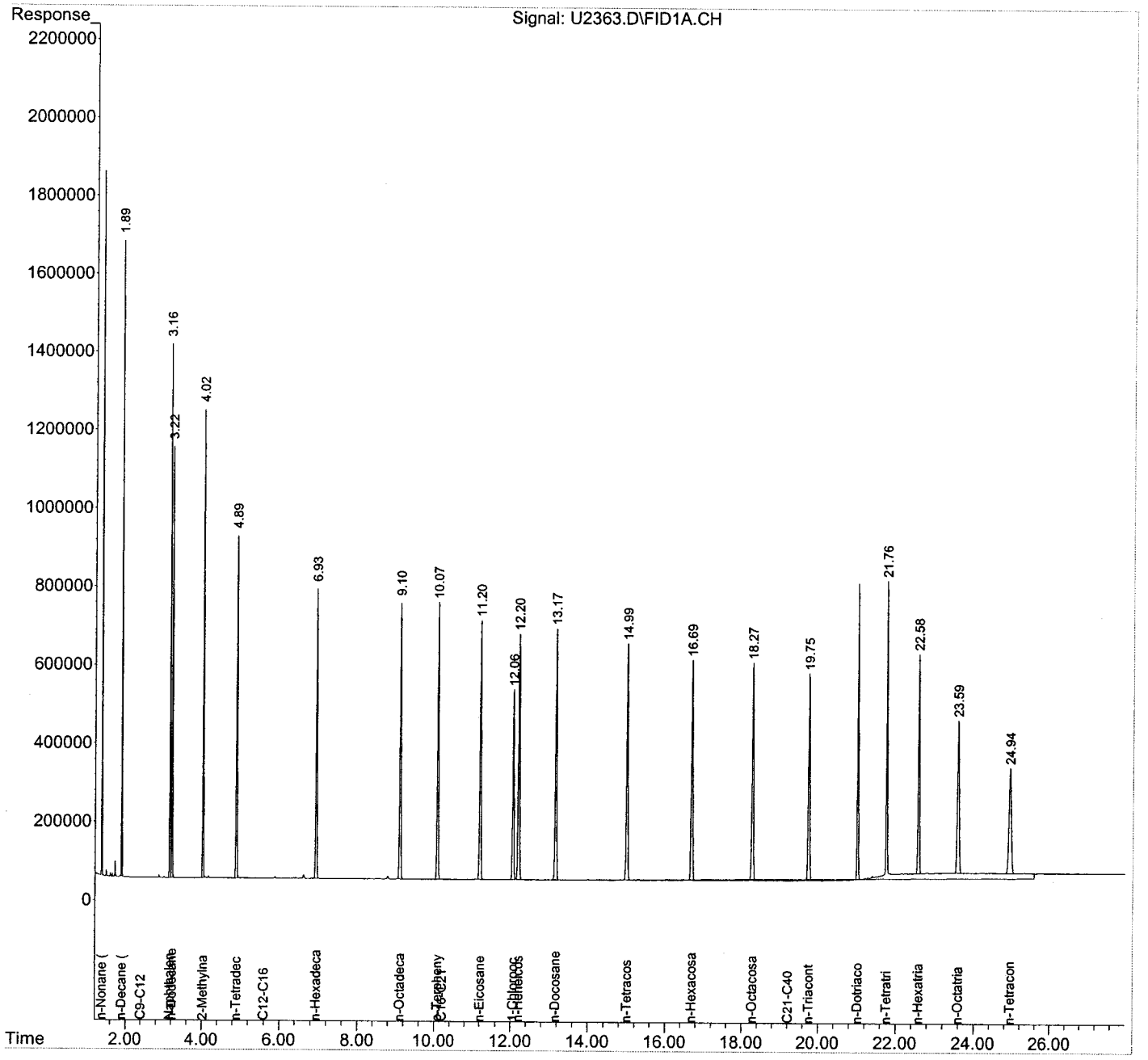
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2363.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 1:38
Operator : MJ
Sample : ALI_L1_IAS_4507,20_PPM
Misc : ,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:20:47 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:18:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2364.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 2:12
Operator : MJ
Sample : ALI_C_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:21:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.08	117581750	259.065 ng
Spiked Amount 50.000		Recovery	= 518.13%
24) S o-Terphenyl	10.09	143855003	247.857 ng
Spiked Amount 50.000		Recovery	= 495.71%
25) S Naphthalene	3.17	138663328	241.663 ng
Spiked Amount 50.000		Recovery	= 483.33%
26) S 2-Methylnaphthalene	4.03	145813558	242.739 ng
Spiked Amount 50.000		Recovery	= 485.48%
Target Compounds			
2) T n-Nonane (C9)	1.38	120961879	244.231 ng
3) T n-Decane (C10)	1.89	125442581	243.545 ng
4) T n-Dodecane (C12)	3.22	130900139	243.352 ng
5) T n-Tetradecane (C14)	4.89	137959023	243.168 ng
6) T n-Hexadecane (C16)	6.94	141062762	244.945 ng
7) T n-Octadecane (C18)	9.12	152534739	248.278 ng
8) T n-Eicosane (C20)	11.22	137420818	226.230 ng
9) T n-Heneicosane (C21)	12.23	140299293	234.643 ng
10) T n-Docosane (C22)	13.19	142564368	237.767 ng
11) T n-Tetracosane (C24)	15.02	146946478	250.711 ng
12) T n-Hexacosane (C26)	16.72	146493382	258.329 ng
13) T n-Octacosane (C28)	18.30	142395479	259.759 ng
14) T n-Triacontane (C30)	19.78	138645962	259.929 ng
15) T n-Dotriacontane (C32)	21.03	136733444	260.532 ng
16) T n-Tetratriacontane (C34)	21.78	133678435	259.405 ng
17) T n-Hexatriacontane (C36)	22.60	134336034	263.984 ng
18) T n-Octatriacontane (C38)	23.63	131473755	266.042 ng
19) T n-Tetracontane (40)	24.98	128040054	267.098 ng
20) H C9-C12	2.40	381864896	723.687 ng
21) H C12-C16	5.60	286437915	484.965 ng
22) H C16-C21	10.20	461684456	748.520 ng
23) H C21-C40	19.20	1467466503	2474.430 ng

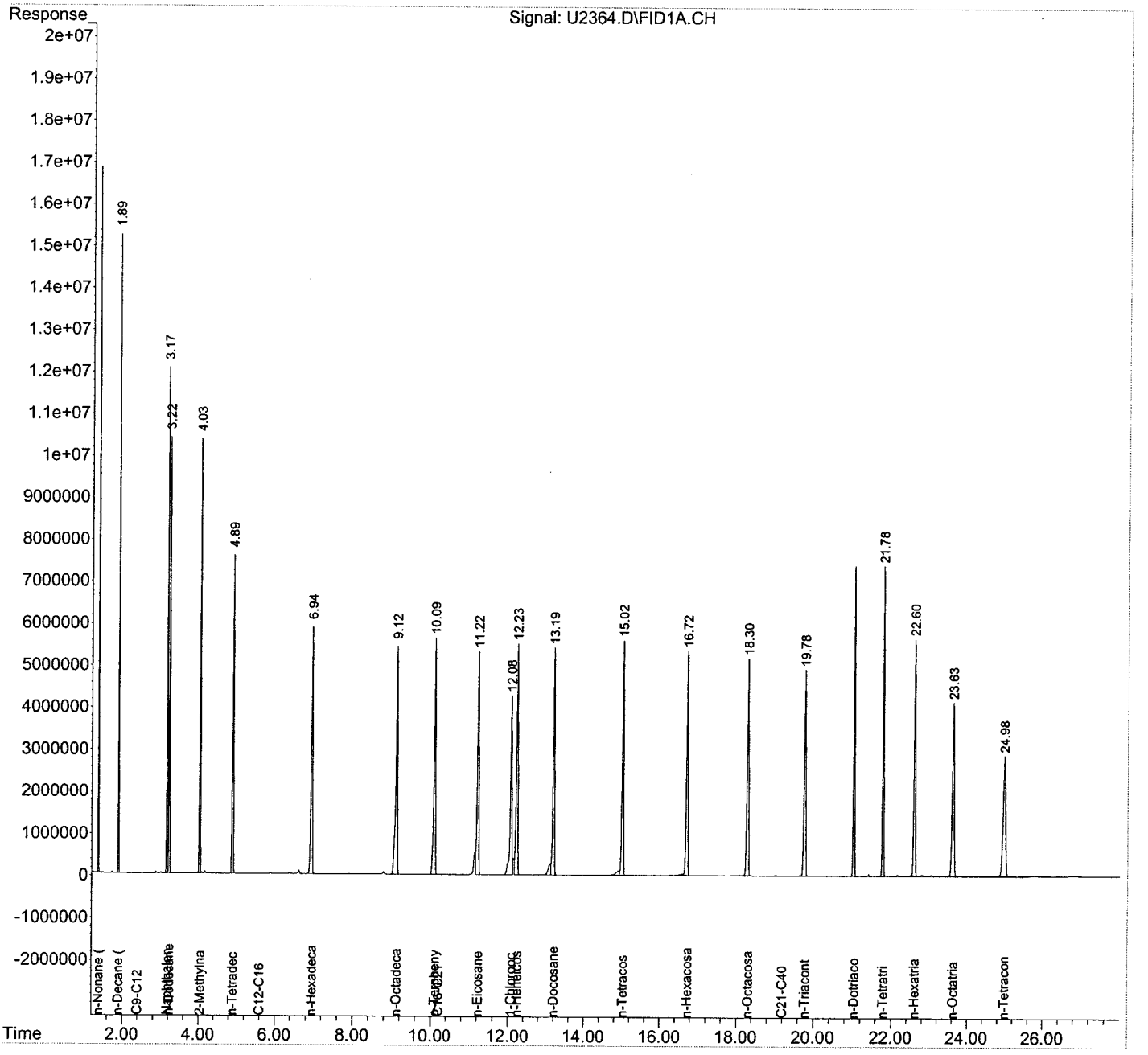
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-07-13\
Data File : U2364.D
Signal(s) : FID1A.CH
Acq On : 07 Jan 2013 2:12
Operator : MJ
Sample : ALI_C_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 07 10:21:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



NJ-EPH AROMATIC INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/11/2013

Instrument ID: GC-U
GC Column : HP-5

Data File: UB0661.D UB0660.D UB0659.D UB0658.D UB0657.D

Compound	RT OF STANDARDS 20	100	250	500	1000	MEAN RT	RT WI NDOW FROM	TO
1,2,3-Trimethylbenzene	2.09	2.09	2.09	2.09	2.10	2.09	1.97	2.21
Napthalene	3.22	3.22	3.23	3.23	3.25	3.23	3.11	3.35
2-Methylnaphthalene	4.08	4.09	4.09	4.11	4.12	4.10	3.98	4.22
Acenaphthylene	5.51	5.52	5.53	5.54	5.57	5.53	5.41	5.65
Acenaphthene	5.86	5.87	5.89	5.91	5.94	5.89	5.77	6.01
Fluorene	6.87	6.88	6.90	6.92	6.95	6.90	6.78	7.02
Phenanthrene	8.96	8.97	8.99	9.02	9.06	9.00	8.88	9.12
Anthracene	9.06	9.08	9.11	9.14	9.20	9.12	9.00	9.24
Fluoroanthene	11.83	11.85	11.88	11.91	11.96	11.89	11.77	12.01
Pyrene	12.34	12.36	12.39	12.42	12.48	12.40	12.28	12.52
Benzo[a]anthracene	15.42	15.44	15.47	15.51	15.57	15.48	15.36	15.60
Chrysene	15.51	15.54	15.58	15.63	15.72	15.60	15.48	15.72
Benzo[b]fluoranthene	18.04	18.09	18.15	18.20	18.28	18.15	18.03	18.27
Benzo[k]fluoranthene	18.04	18.09	18.15	18.20	18.28	18.15	18.03	18.27
Benzo[a]pyrene	18.65	18.69	18.73	18.79	18.87	18.75	18.63	18.87
Indeno[1,2,3-cd]pyrene	20.93	20.97	21.00	21.04	21.11	21.01	20.89	21.13
Dibenz[a,h]anthracene	20.93	20.97	21.00	21.04	21.11	21.01	20.89	21.13
Benzo[g,h,i]perylene	21.17	21.20	21.24	21.28	21.35	21.25	21.13	21.37
C10-C12	2.70	2.70	2.70	2.70	2.70	2.70	2.58	2.82
C12-C16	4.95	4.95	4.95	4.95	4.95	4.95	4.83	5.07
C16-C21	9.60	9.60	9.60	9.60	9.60	9.60	9.48	9.72
C21-C36	17.20	17.20	17.20	17.20	17.20	17.20	17.08	17.32

NJ-EPH AROMATIC INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/11/2013

Instrument ID: GC-U
GC Column : HP-5

Data File: UB0661.D UB0660.D UB0659.D UB0658.D UB0657.D

Compound	CALIBRATION FACTORS 20	100	250	500	1000	MEAN	%RSD
1,2,3-Trimethylbenzene	608940	577639	551051	541467	564353	568690	4.63
Napthalene	665719	643997	616811	615090	640208	636365	3.31
2-Methylnaphthalene	694137	678238	649923	651792	675643	669946	2.81
Acenaphthylene	715564	696184	664269	667647	686649	686063	3.08
Acenaphthene	734473	711881	678982	681652	699965	701391	3.27
Fluorene	751783	737397	702637	704155	719286	723052	2.95
Phenanthrene	764606	755554	718116	715576	730337	736838	3.01
Anthracene	782454	763303	721107	719104	728220	742838	3.83
Fluoroanthene	805699	787423	743935	734125	737643	761765	4.28
Pyrene	810921	790564	745617	735336	737550	763997	4.52
Benzo[a]anthracene	802987	776459	734018	729959	747822	758249	4.08
Chrysene	781875	748774	700140	678747	683434	718594	6.25
Benzo[b]fluoranthene	1626904	1564589	1469900	1443920	1450507	1511164	5.35
Benzo[k]fluoranthene	1626904	1564894	1470315	1443920	1450507	1511308	5.35
Benzo[a]pyrene	800485	771258	724993	712338	716050	745025	5.23
Indeno[1,2,3-cd]pyrene	1596808	1522249	1426510	1406966	1420293	1474565	5.58
Dibenz[a,h]anthracene	1593865	1523404	1426510	1406966	1420293	1474208	5.52
Benzo[g,h,i]perylene	795308	765396	720619	710461	710519	740460	5.15
C10-C12	1296180	1232511	1174998	1164859	1210813	1215872	4.32
C12-C16	2199129	2102948	2004543	2010636	2070734	2077598	3.83
C16-C21	4028310	3885202	3672840	3642326	3676817	3781099	4.46
C21-C36	7238884	6349030	5887785	5750615	5765888	6198440	10.17

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0657.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 11:24
Operator : MJ
Sample : ARO_L5_IAS_4497,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 95 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:24:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
1) S	2-Fluorobiphenyl	4.74	680708468	1008.165	ng	
Spiked Amount	50.000		Recovery	= 2016.33%		
2) S	2-Bromonaphthalene	5.82	466434305	1002.923	ng	
Spiked Amount	50.000		Recovery	= 2005.85%		
3) S	o-Terphenyl	10.23	606728137	981.095	ng	
Spiked Amount	50.000		Recovery	= 1962.19%		
Target Compounds						
4) T	1,2,3-Trimethylbenzene	2.10	564353345	992.374	ng	
5) T	Napthalene	3.25	640208158	1006.039	ng	
6) T	2-Methylnaphthalene	4.12	675643325	1008.504	ng	
7) T	Acenaphthylene	5.57	686648581	1000.854	ng	
8) T	Acenaphthene	5.94	699964805	997.967	ng	
9) T	Fluorene	6.95	719286299	994.793	ng	
10) T	Phenanthrene	9.06	730337082	991.177	ng	
11) T	Anthracene	9.20	728219729	979.483	ng	m
12) T	Fluoroanthene	11.96	737643014	968.334	ng	
13) T	Pyrene	12.48	737549794	965.382	ng	
14) T	Benzo[a]anthracene	15.57	747821560	989.821	ng	
15) T	Chrysene	15.72	683433820	953.437	ng	m
16) T	Benzo[b]fluoranthene	18.28	1450507156	959.826	ng	
17) T	Benzo[k]fluoranthene	18.28	1450507156	959.828	ng	
18) T	Benzo[a]pyrene	18.87	716050293	961.109	ng	
19) T	Indeno[1,2,3-cd]pyrene	21.11	1420292910	964.334	ng	
20) T	Dibenz[a,h]anthracene	21.11	1420292910	962.748	ng	
21) T	Benzo[g,h,i]perylene	21.35	710519232	959.617	ng	
22) H	C10-C12	2.70	1210813461	1991.679	ng	
23) H	C12-C16	4.95	2070734296	2990.089	ng	
24) H	C16-C21	9.60	3676817417	4862.101	ng	
25) H	C21-C36	17.20	5765888017	7441.728	ng	

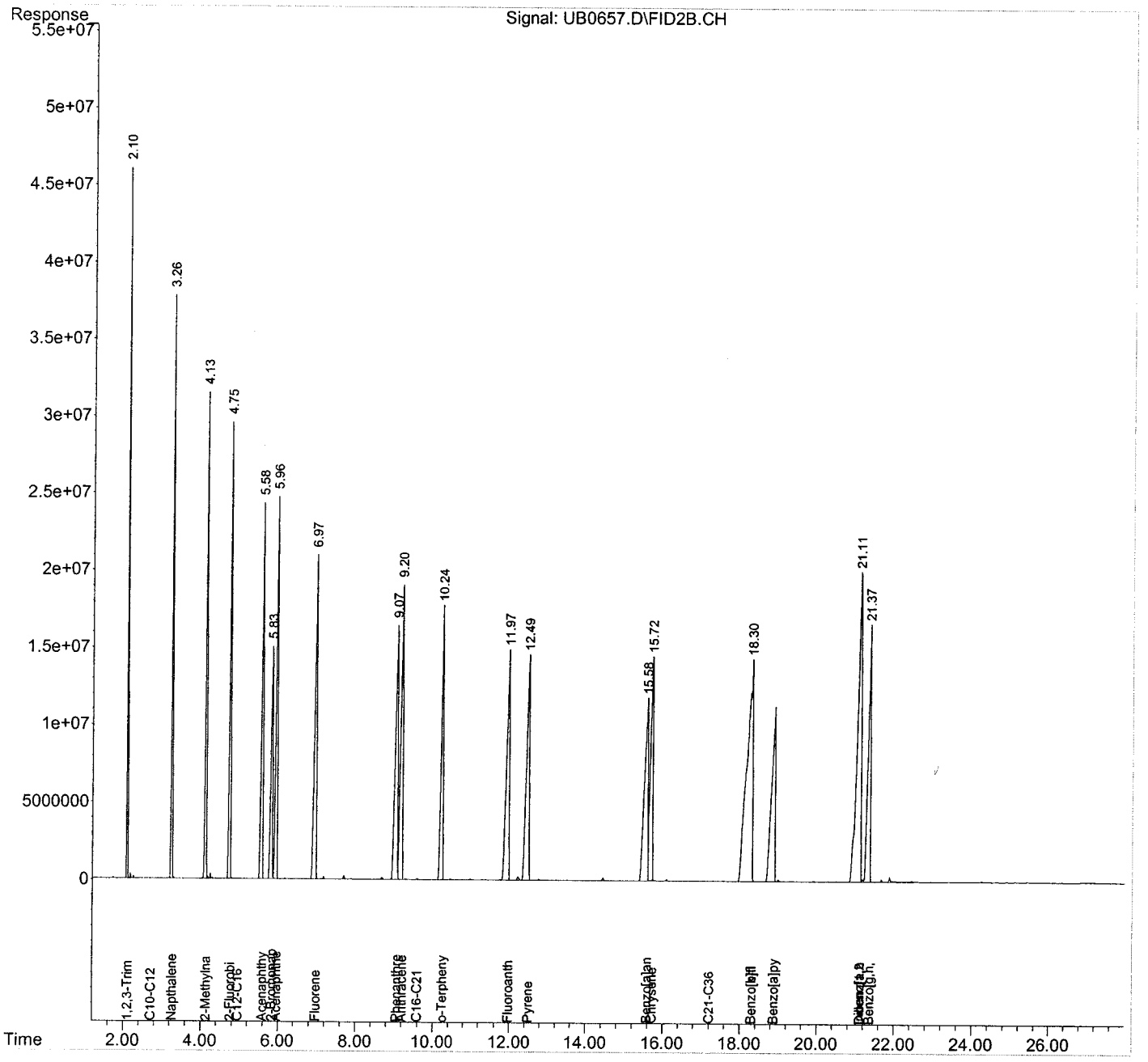
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0657.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 11:24
Operator : MJ
Sample : ARO_L5_IAS_4497,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 95 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:24:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0658.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 11:58
Operator : MJ
Sample : ARO_L4_IAS_4498,500_PPM
Misc : ,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:26:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc Units
		System Monitoring Compounds			
1)	S	2-Fluorobiphenyl	4.72	328818131	486.997 ng
Spiked Amount		50.000		Recovery	= 973.99%
2)	S	2-Bromonaphthalene	5.79	227075473	488.255 ng
Spiked Amount		50.000		Recovery	= 976.51%
3)	S	o-Terphenyl	10.19	299688689	484.605 ng
Spiked Amount		50.000		Recovery	= 969.21%
		Target Compounds			
4)	T	1,2,3-Trimethylbenzene	2.09	270733358	476.065 ng
5)	T	Napthalene	3.23	307545100	483.284 ng
6)	T	2-Methylnaphthalene	4.11	325895802	486.451 ng
7)	T	Acenaphthylene	5.54	333823362	486.579 ng
8)	T	Acenaphthene	5.91	340826140	485.929 ng
9)	T	Fluorene	6.92	352077376	486.933 ng
10)	T	Phenanthrene	9.02	357787826	485.572 ng
11)	T	Anthracene	9.14	359552078	483.611 ng
12)	T	Fluoroanthene	11.91	367062711	481.858 ng
13)	T	Pyrene	12.42	367667883	481.242 ng
14)	T	Benzo[a]anthracene	15.51	364979685	483.089 ng
15)	T	Chrysene	15.63	339373683	473.450 ng
16)	T	Benzo[b]fluoranthene	18.20	721960172	477.734 ng
17)	T	Benzo[k]fluoranthene	18.20	721960172	477.735 ng
18)	T	Benzo[a]pyrene	18.79	356168959	478.063 ng
19)	T	Indeno[1,2,3-cd]pyrene	21.04	703483219	477.643 ng
20)	T	Dibenz[a,h]anthracene	21.04	703483219	476.857 ng
21)	T	Benzo[g,h,i]perylene	21.28	355230261	479.769 ng
22)	H	C10-C12	2.70	582429443	958.044 ng
23)	H	C12-C16	4.95	1005318019	1451.654 ng
24)	H	C16-C21	9.60	1821163126	2408.246 ng
25)	H	C21-C36	17.20	2875307334	3711.008 ng

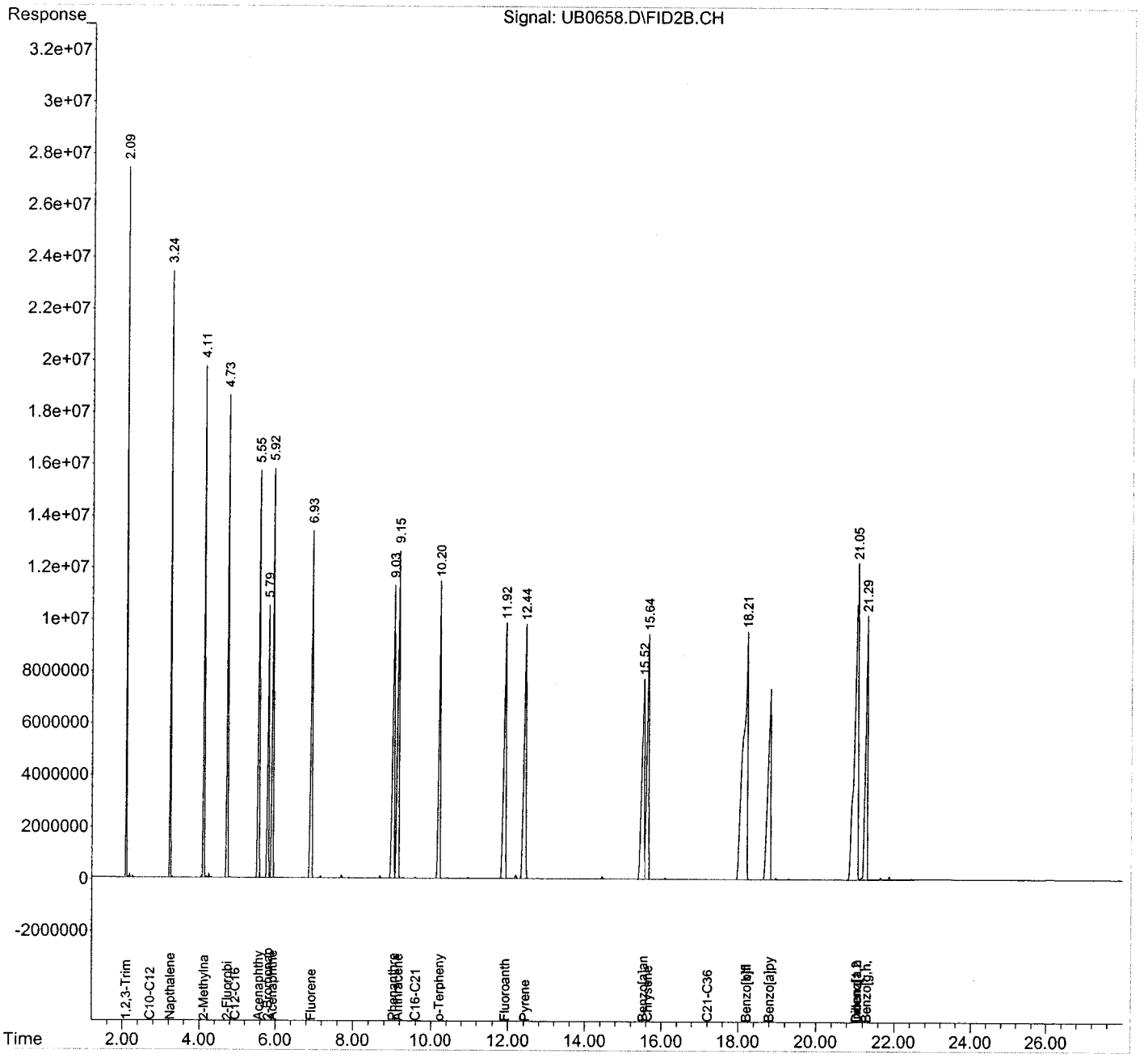
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0658.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 11:58
Operator : MJ
Sample : ARO_L4_IAS_4498,500_PPM
Misc : ,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:26:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0659.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 12:32
Operator : MJ
Sample : ARO_L3_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 97 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:26:42 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
1) S	2-Fluorobiphenyl	4.71	163489518	242.137 ng	
Spiked Amount	50.000		Recovery	= 484.27%	
2) S	2-Bromonaphthalene	5.77	113003721	242.980 ng	
Spiked Amount	50.000		Recovery	= 485.96%	
3) S	o-Terphenyl	10.17	150742734	243.755 ng	
Spiked Amount	50.000		Recovery	= 487.51%	
	Target Compounds				
4) T	1,2,3-Trimethylbenzene	2.09	137762635	242.246 ng	
5) T	Napthalene	3.23	154202726	242.318 ng	
6) T	2-Methylnaphthalene	4.09	162480631	242.528 ng	
7) T	Acenaphthylene	5.53	166067244	242.058 ng	
8) T	Acenaphthene	5.89	169745569	242.013 ng	
9) T	Fluorene	6.90	175659228	242.942 ng	
10) T	Phenanthrene	8.99	179528988	243.648 ng	
11) T	Anthracene	9.11	180276868	242.479 ng	
12) T	Fluoroanthene	11.88	185983798	244.149 ng	
13) T	Pyrene	12.39	186404341	243.986 ng	
14) T	Benzo[a]anthracene	15.47	183504462	242.888 ng	
15) T	Chrysene	15.58	175034902	244.186 ng	
16) T	Benzo[b]fluoranthene	18.15	367475104	243.165 ng	m
17) T	Benzo[k]fluoranthene	18.15	367578842	243.234 ng	m
18) T	Benzo[a]pyrene	18.73	181248332	243.278 ng	
19) T	Indeno[1,2,3-cd]pyrene	21.00	356627524	242.139 ng	
20) T	Dibenz[a,h]anthracene	21.00	356627524	241.741 ng	
21) T	Benzo[g,h,i]perylene	21.24	180154628	243.314 ng	
22) H	C10-C12	2.70	293749509	483.191 ng	
23) H	C12-C16	4.95	501135682	723.627 ng	
24) H	C16-C21	9.60	918210111	1214.211 ng	
25) H	C21-C36	17.20	1471946136	1899.763 ng	

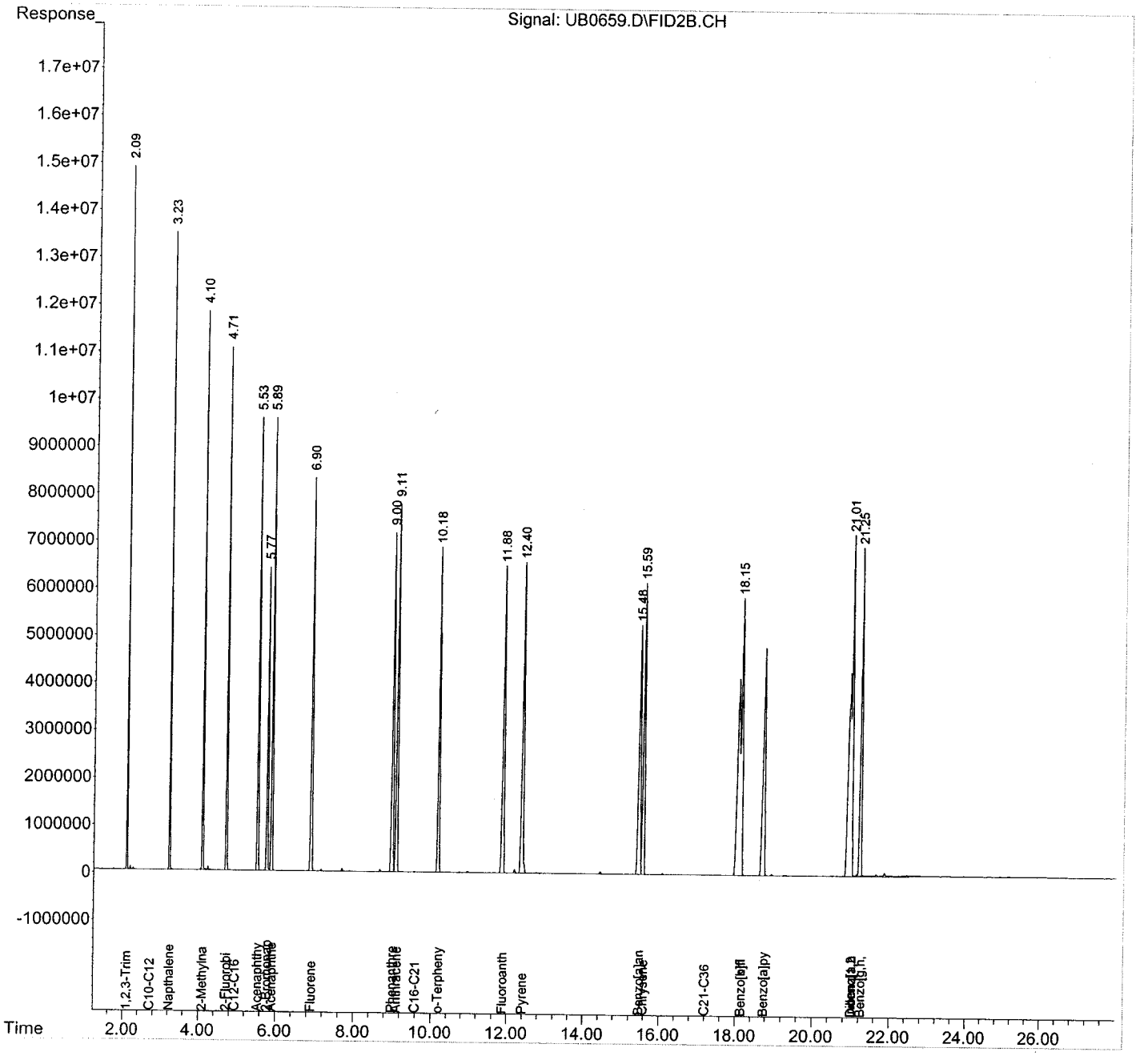
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0659.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 12:32
Operator : MJ
Sample : ARO_L3_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 97 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:26:42 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0660.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 13:07
Operator : MJ
Sample : ARO_L2_IAS_4500,100_PPM
Misc : ,NA,NA,1
ALS Vial : 98 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:27:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	2-Fluorobiphenyl	4.70	68217879	101.034	ng	
Spiked Amount	50.000		Recovery	= 202.07%		
2) S	2-Bromonaphthalene	5.76	47236029	101.566	ng	
Spiked Amount	50.000		Recovery	= 203.13%		
3) S	o-Terphenyl	10.16	63441635	102.587	ng	
Spiked Amount	50.000		Recovery	= 205.17%		
	Target Compounds					
4) T	1,2,3-Trimethylbenzene	2.09	57763948	101.574	ng	
5) T	Napthalene	3.22	64399707	101.199	ng	
6) T	2-Methylnaphthalene	4.09	67823753	101.238	ng	
7) T	Acenaphthylene	5.52	69618436	101.475	ng	
8) T	Acenaphthene	5.87	71188060	101.496	ng	
9) T	Fluorene	6.88	73739690	101.984	ng	
10) T	Phenanthrene	8.97	75555449	102.540	ng	
11) T	Anthracene	9.08	76330349	102.667	ng	
12) T	Fluoroanthene	11.85	78742252	103.368	ng	
13) T	Pyrene	12.36	79056380	103.477	ng	
14) T	Benzo[a]anthracene	15.44	77645903	102.773	ng	
15) T	Chrysene	15.54	74877364	104.459	ng	
16) T	Benzo[b]fluoranthene	18.09	156458883	103.532	ng	m
17) T	Benzo[k]fluoranthene	18.09	156489402	103.552	ng	m
18) T	Benzo[a]pyrene	18.69	77125763	103.521	ng	
19) T	Indeno[1,2,3-cd]pyrene	20.97	152224880	103.356	ng	m
20) T	Dibenz[a,h]anthracene	20.97	152340399	103.264	ng	m
21) T	Benzo[g,h,i]perylene	21.20	76539618	103.373	ng	
22) H	C10-C12	2.70	123251083	202.737	ng	
23) H	C12-C16	4.95	210294831	303.661	ng	
24) H	C16-C21	9.60	388520181	513.766	ng	
25) H	C21-C36	17.20	634903015	819.436	ng	

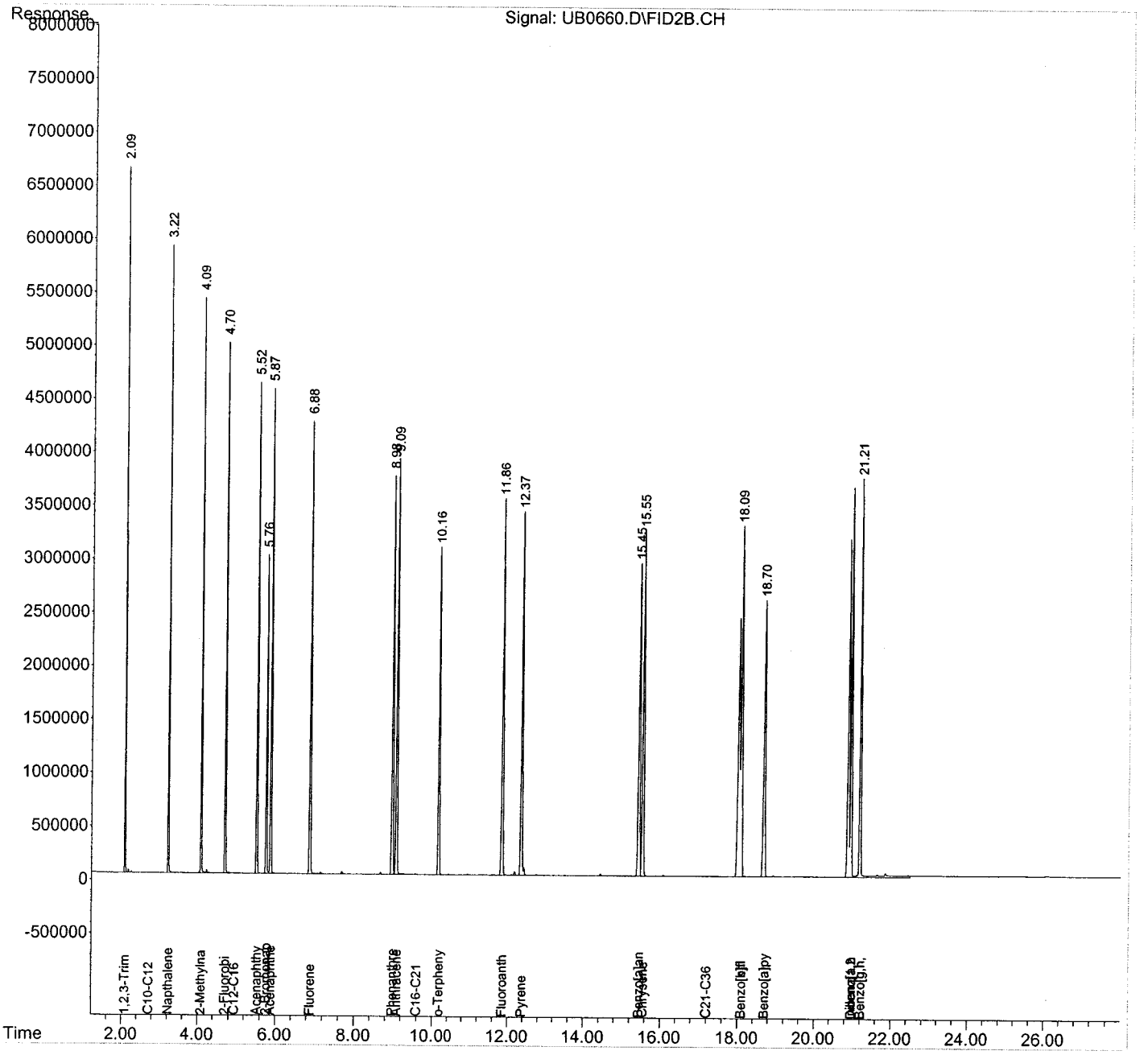
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0660.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 13:07
Operator : MJ
Sample : ARO_L2_IAS_4500,100_PPM
Misc : ,NA,NA,1
ALS Vial : 98 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:27:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0661.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 13:41
Operator : MJ
Sample : ARO_L1_IAS_4501,20_PPM
Misc : ,NA,NA,1
ALS Vial : 99 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:28:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
System Monitoring Compounds					
1) S	2-Fluorobiphenyl	4.69	14029902	20.779 ng	
Spiked Amount	50.000		Recovery =	41.56%	
2) S	2-Bromonaphthalene	5.75	9608303	20.660 ng	
Spiked Amount	50.000		Recovery =	41.32%	
3) S	o-Terphenyl	10.15	12972054	20.976 ng	
Spiked Amount	50.000		Recovery =	41.95%	
Target Compounds					
4) T	1,2,3-Trimethylbenzene	2.09	12178799	21.416 ng	
5) T	Napthalene	3.22	13314374	20.923 ng	
6) T	2-Methylnaphthalene	4.08	13882740	20.722 ng	
7) T	Acenaphthylene	5.51	14311286	20.860 ng	
8) T	Acenaphthene	5.86	14689458	20.943 ng	
9) T	Fluorene	6.87	15035656	20.795 ng	
10) T	Phenanthrene	8.96	15292121	20.754 ng	
11) T	Anthracene	9.06	15649082	21.049 ng	
12) T	Fluoroanthene	11.83	16113983	21.153 ng	
13) T	Pyrene	12.34	16218414	21.228 ng	
14) T	Benzo[a]anthracene	15.42	16059744	21.257 ng	m
15) T	Chrysene	15.51	15637494	21.815 ng	
16) T	Benzo[b]fluoranthene	18.04	32538086	21.531 ng	
17) T	Benzo[k]fluoranthene	18.04	32538086	21.531 ng	
18) T	Benzo[a]pyrene	18.65	16009698	21.489 ng	
19) T	Indeno[1,2,3-cd]pyrene	20.93	31936163	21.684 ng	m
20) T	Dibenz[a,h]anthracene	20.93	31877308	21.608 ng	m
21) T	Benzo[g,h,i]perylene	21.17	15906158	21.483 ng	
22) H	C10-C12	2.70	25923601	42.642 ng	
23) H	C12-C16	4.95	43982582	63.510 ng	
24) H	C16-C21	9.60	80566192	106.538 ng	
25) H	C21-C36	17.20	144777685	186.857 ng	

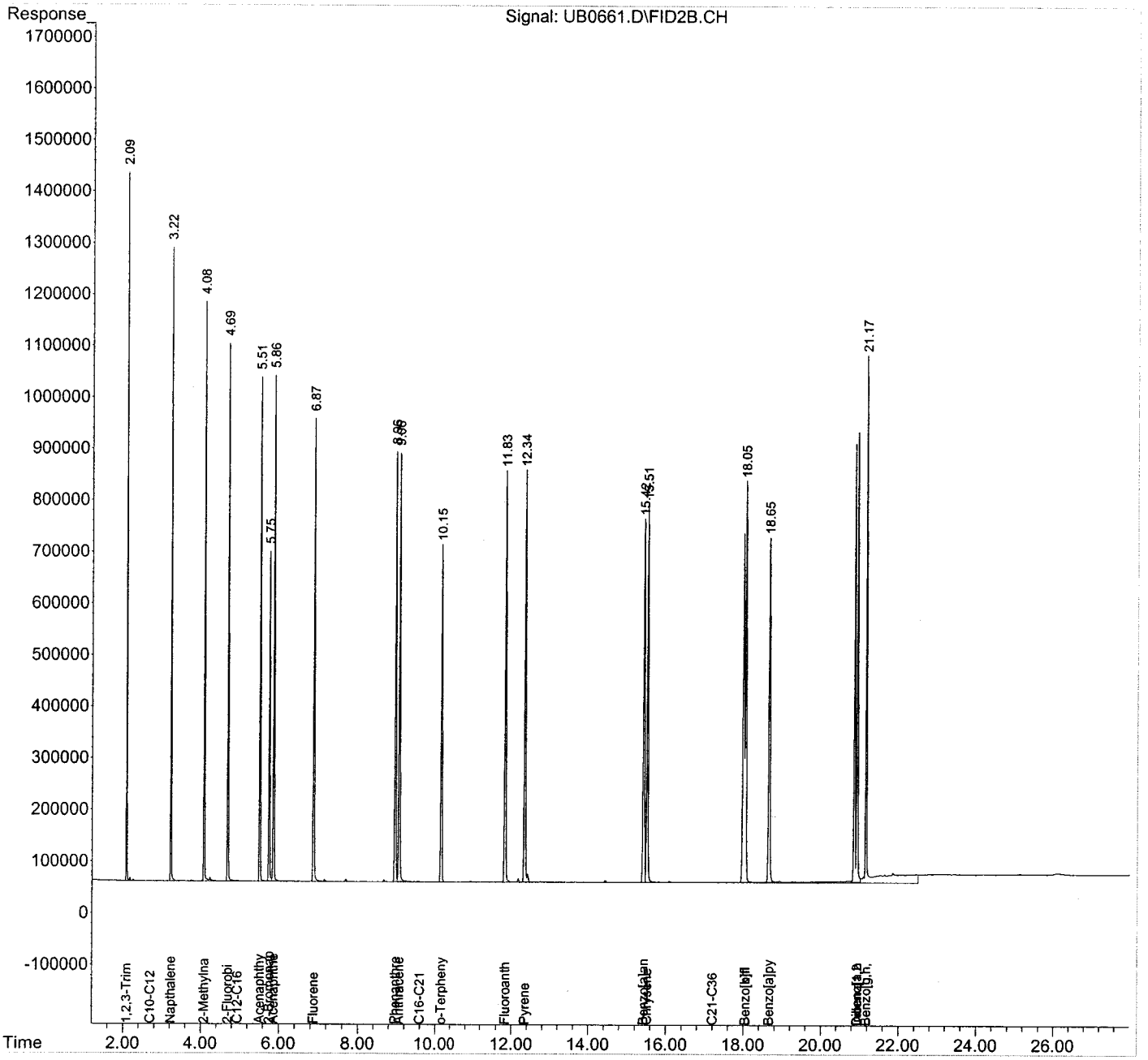
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0661.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 13:41
Operator : MJ
Sample : ARO_L1_IAS_4501,20_PPM
Misc : ,NA,NA,1
ALS Vial : 99 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 11 14:28:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:22:18 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0662.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 14:58
Operator : MJ
Sample : ARO_C_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 100 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 12 09:58:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
1) S	2-Fluorobiphenyl	4.71	164417623	243.511 ng	
Spiked Amount	50.000		Recovery	= 487.02%	
2) S	2-Bromonaphthalene	5.77	113513803	244.076 ng	
Spiked Amount	50.000		Recovery	= 488.15%	
3) S	o-Terphenyl	10.18	150388815	243.183 ng	
Spiked Amount	50.000		Recovery	= 486.37%	
	Target Compounds				
4) T	1,2,3-Trimethylbenzene	2.09	137946155	242.568 ng	
5) T	Napthalene	3.23	154731320	243.149 ng	
6) T	2-Methylnaphthalene	4.10	163259672	243.691 ng	
7) T	Acenaphthylene	5.53	166866726	243.224 ng	
8) T	Acenaphthene	5.89	170499119	243.087 ng	
9) T	Fluorene	6.90	176177376	243.658 ng	
10) T	Phenanthrene	9.00	179235384	243.249 ng	
11) T	Anthracene	9.11	179479793	241.614 ng	
12) T	Fluoroanthene	11.88	185417858	243.406 ng	
13) T	Pyrene	12.39	185904163	243.331 ng	
14) T	Benzo[a]anthracene	15.47	183182386	241.586 ng	
15) T	Chrysene	15.58	175178462	243.780 ng	
16) T	Benzo[b]fluoranthene	18.15	367762118	243.363 ng	m
17) T	Benzo[k]fluoranthene	18.15	367771838	243.347 ng	m
18) T	Benzo[a]pyrene	18.73	181519720	243.643 ng	
19) T	Indeno[1,2,3-cd]pyrene	21.00	357602773	242.514 ng	
20) T	Dibenz[a,h]anthracene	21.00	357602773	242.573 ng	
21) T	Benzo[g,h,i]perylene	21.23	180554773	243.841 ng	
22) H	C10-C12	2.70	294543272	484.497 ng	
23) H	C12-C16	4.95	503483430	727.018 ng	
24) H	C16-C21	9.60	916934496	1212.524 ng	
25) H	C21-C36	17.20	1468657043	1895.518 ng	

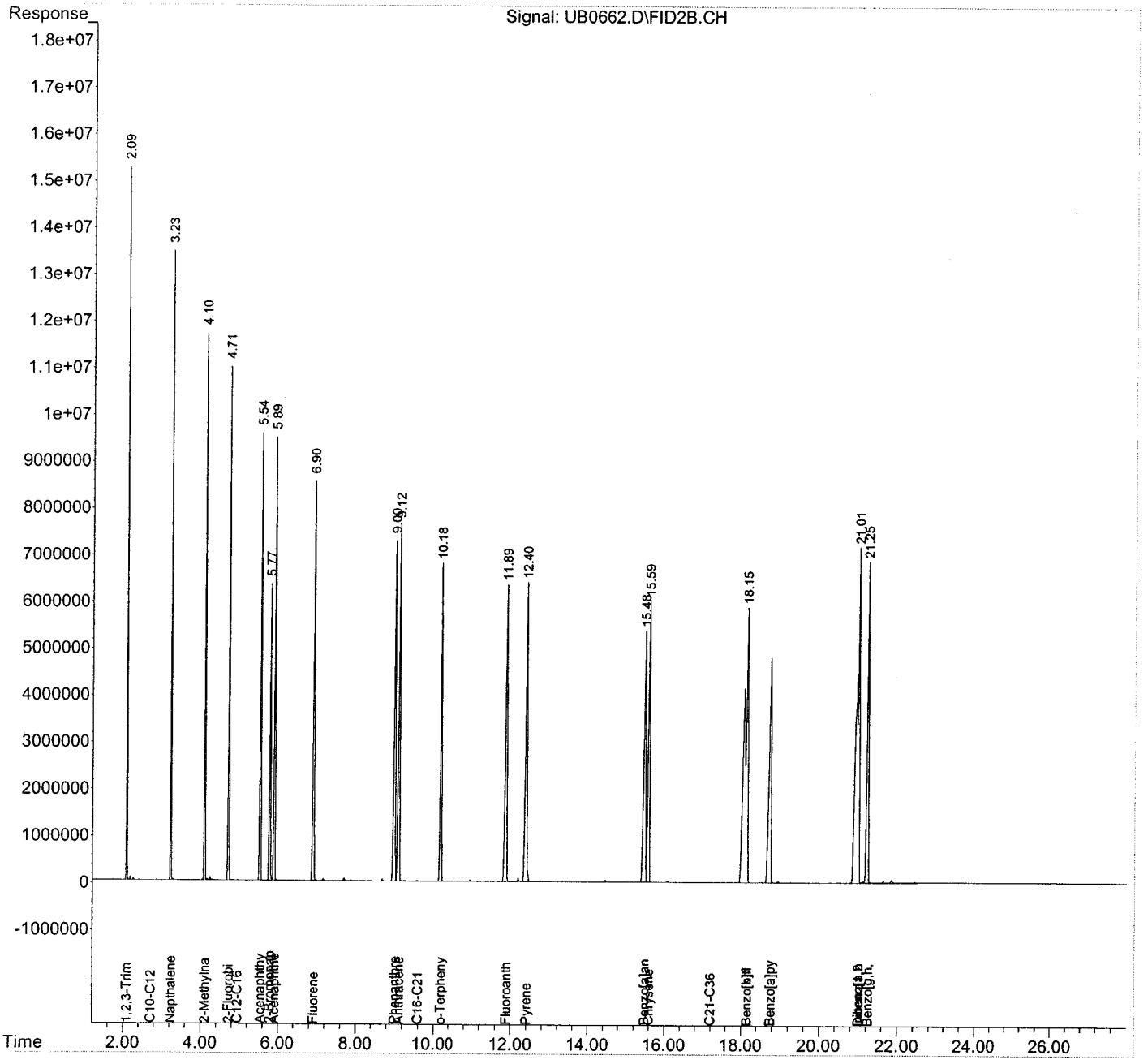
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-11-13\
Data File : UB0662.D
Signal(s) : FID2B.CH
Acq On : 11 Jan 2013 14:58
Operator : MJ
Sample : ARO_C_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 100 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 12 09:58:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



NJ-EPH ALIPHATIC CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/13/2013 **Instrument ID:** GC-U

Data File: U2540.D **GC Column :** HP-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
n-Nonane (C9)	1.37	1.31	1.45	495276	399560	19.33
n-Decane (C10)	1.89	1.83	1.97	515069	431623	16.20
n-Dodecane (C12)	3.22	3.15	3.31	537904	477583	11.21
n-Tetradecane (C14)	4.89	4.81	4.99	567340	518185	8.66
n-Hexadecane (C16)	6.94	6.84	7.06	575895	539242	6.36
n-Octadecane (C18)	9.12	9.01	9.25	614371	590657	3.86
n-Eicosane (C20)	11.22	11.11	11.35	607438	602684	0.78
n-Heneicosane (C21)	12.23	12.10	12.38	597926	610056	2.03
n-Docosane (C22)	13.19	13.06	13.34	599598	616659	2.85
n-Tetracosane (C24)	15.02	14.88	15.18	586118	631340	7.72
n-Hexacosane (C26)	16.71	16.57	16.87	567080	636207	12.19
n_Octacosane (C28)	18.29	18.15	18.45	548183	636032	16.03
n-Triacontane (C30)	19.77	19.63	19.93	533400	627527	17.65
n-Dotriacontane (C32)	21.03	20.92	21.16	524824	620618	18.25
n-Tetratriacontane (C34)	21.78	21.67	21.91	515327	605294	17.46
n-Hexatriacontane (C36)	22.60	22.46	22.76	508879	602637	18.42
n-Octatriacontane (C38)	23.62	23.48	23.78	494184	579357	17.23
n-Tetracontane (40)	24.97	24.84	25.14	479375	549313	14.59
C9-C12	2.40	2.30	2.50	1582998	1316837	16.81
C12-C16	5.60	5.50	5.70	1181272	1084853	8.16
C16-C21	10.20	10.09	10.31	1850389	1822667	1.50
C21-C40	19.20	19.09	19.31	5930524	6347054	7.02

NJ-EPH ALIPHATIC CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/13/2013 **Instrument ID:** GC-U

Data File: U2548.D **GC Column :** HP-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
n-Nonane (C9)	1.37	1.31	1.45	495276	407796	17.66
n-Decane (C10)	1.89	1.83	1.97	515069	437790	15.00
n-Dodecane (C12)	3.22	3.15	3.31	537904	486852	9.49
n-Tetradecane (C14)	4.89	4.81	4.99	567340	535713	5.57
n-Hexadecane (C16)	6.94	6.84	7.06	575895	566973	1.55
n-Octadecane (C18)	9.11	9.01	9.25	614371	629523	2.47
n-Eicosane (C20)	11.22	11.11	11.35	607438	646697	6.46
n-Heneicosane (C21)	12.23	12.10	12.38	597926	655612	9.65
n-Docosane (C22)	13.19	13.06	13.34	599598	663876	10.72
n-Tetracosane (C24)	15.02	14.88	15.18	586118	681007	16.19
n-Hexacosane (C26)	16.71	16.57	16.87	567080	685474	20.88
n_Octacosane (C28)	18.29	18.15	18.45	548183	679246	23.91
n-Triacontane (C30)	19.77	19.63	19.93	533400	661343	23.99
n-Dotriacontane (C32)	21.03	20.92	21.16	524824	651071	24.06
n-Tetratriacontane (C34)	21.78	21.67	21.91	515327	635930	23.40
n-Hexatriacontane (C36)	22.61	22.46	22.76	508879	637580	25.29
n-Octatriacontane (C38)	23.63	23.48	23.78	494184	616342	24.72
n-Tetracontane (40)	24.98	24.84	25.14	479375	585617	22.16
C9-C12	2.40	2.30	2.50	1582998	1344527	15.06
C12-C16	5.60	5.50	5.70	1181272	1131907	4.18
C16-C21	10.20	10.09	10.31	1850389	1955141	5.66
C21-C40	19.20	19.09	19.31	5930524	7392204	24.65

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2540.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 2:32
Operator : MJ
Sample : ALI_C_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 22 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 13 03:00:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	12.07	112289893	247.406 ng
Spiked Amount	50.000		Recovery	= 494.81%
24) S	o-Terphenyl	10.09	162043160	279.195 ng
Spiked Amount	50.000		Recovery	= 558.39%
25) S	Naphthalene	3.16	125750972	219.160 ng
Spiked Amount	50.000		Recovery	= 438.32%
26) S	2-Methylnaphthalene	4.02	135735530	225.962 ng
Spiked Amount	50.000		Recovery	= 451.92%
Target Compounds				
2) T	n-Nonane (C9)	1.37	99890001	201.685 ng
3) T	n-Decane (C10)	1.89	107905740	209.497 ng
4) T	n-Dodecane (C12)	3.22	119395704	221.965 ng
5) T	n-Tetradecane (C14)	4.89	129546340	228.340 ng
6) T	n-Hexadecane (C16)	6.94	134810472	234.089 ng
7) T	n-Octadecane (C18)	9.12	147664260	240.350 ng
8) T	n-Eicosane (C20)	11.22	150670951	248.043 ng
9) T	n-Heneicosane (C21)	12.23	152514046	255.072 ng
10) T	n-Docosane (C22)	13.19	154164808	257.114 ng
11) T	n-Tetracosane (C24)	15.02	157834886	269.289 ng
12) T	n-Hexacosane (C26)	16.71	159051693	280.475 ng
13) T	n-Octacosane (C28)	18.29	159007925	290.064 ng
14) T	n-Triacontane (C30)	19.77	156881852	294.117 ng
15) T	n-Dotriacontane (C32)	21.03	155154518	295.631 ng
16) T	n-Tetratriacontane (C34)	21.78	151323602	293.646 ng
17) T	n-Hexatriacontane (C36)	22.60	150659184	296.061 ng
18) T	n-Octatriacontane (C38)	23.62	144839136	293.087 ng
19) T	n-Tetracontane (40)	24.97	137328150	286.473 ng
20) H	C9-C12	2.40	329209235	623.897 ng
21) H	C12-C16	5.60	271213160	459.188 ng
22) H	C16-C21	10.20	455666651	738.763 ng
23) H	C21-C40	19.20	1586763475	2675.587 ng

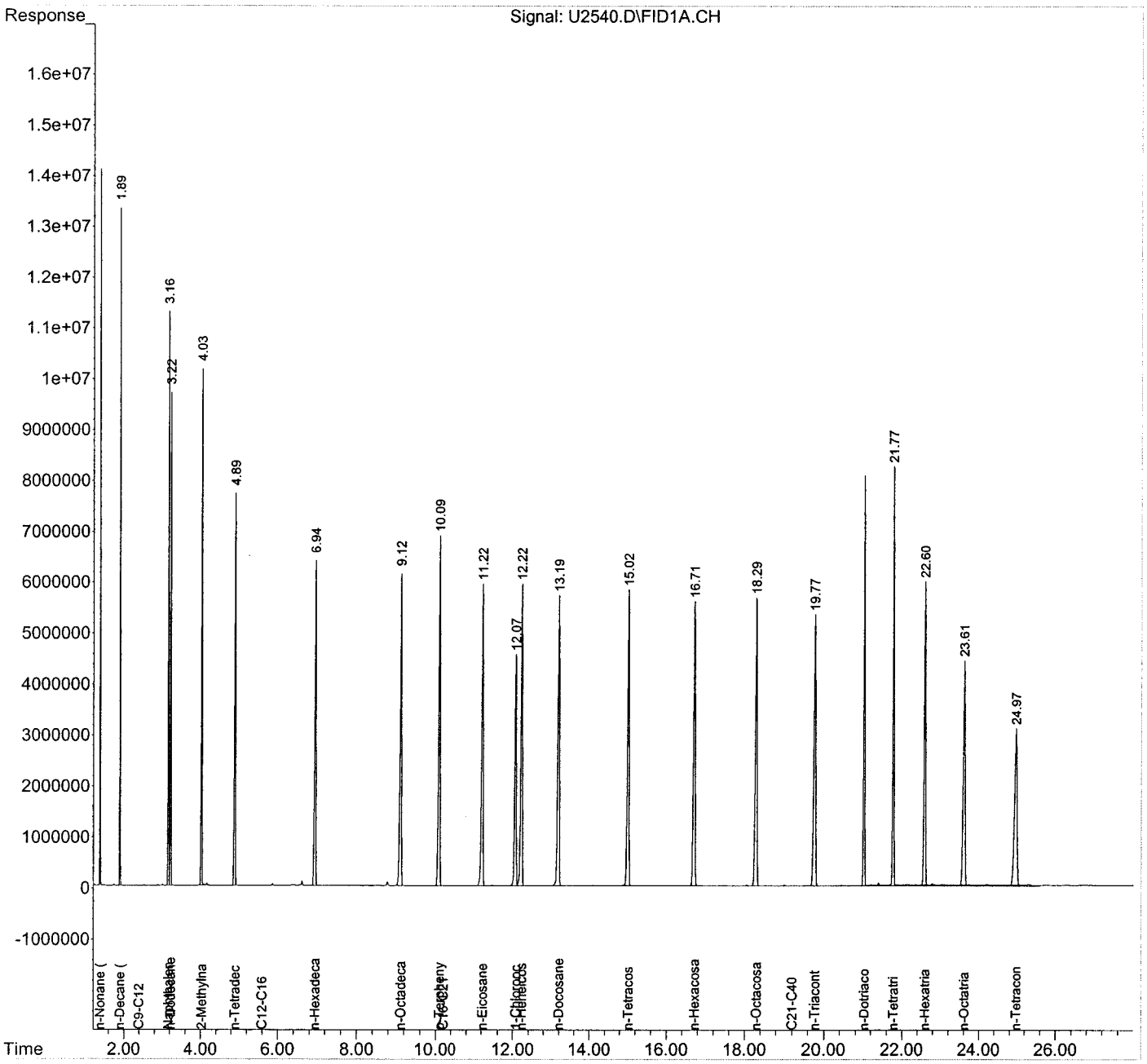
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2540.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 2:32
Operator : MJ
Sample : ALI_C_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 22 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 13 03:00:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-12-13\
Data File : U2548.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 7:05
Operator : MJ
Sample : ALI_C_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 30 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 17 14:54:28 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
1) S	1-Chlorooctadecane	12.07	120972335	266.536 ng
Spiked Amount	50.000		Recovery	= 533.07%
24) S	o-Terphenyl	10.09	173642895	299.180 ng
Spiked Amount	50.000		Recovery	= 598.36%
25) S	Naphthalene	3.16	127949195	222.991 ng
Spiked Amount	50.000		Recovery	= 445.98%
26) S	2-Methylnaphthalene	4.02	139126630	231.607 ng
Spiked Amount	50.000		Recovery	= 463.21%
Target Compounds				
2) T	n-Nonane (C9)	1.37	101948976	205.843 ng
3) T	n-Decane (C10)	1.89	109447426	212.491 ng
4) T	n-Dodecane (C12)	3.22	121713001	226.273 ng
5) T	n-Tetradecane (C14)	4.89	133928165	236.063 ng
6) T	n-Hexadecane (C16)	6.94	141743261	246.127 ng
7) T	n-Octadecane (C18)	9.11	157380728	256.166 ng
8) T	n-Eicosane (C20)	11.22	161674142	266.157 ng
9) T	n-Heneicosane (C21)	12.23	163903018	274.119 ng
10) T	n-Docosane (C22)	13.19	165968886	276.800 ng
11) T	n-Tetracosane (C24)	15.02	170251724	290.473 ng
12) T	n-Hexacosane (C26)	16.71	171368422	302.195 ng
13) T	n-Octacosane (C28)	18.29	169811492	309.772 ng
14) T	n-Triacontane (C30)	19.77	165335717	309.966 ng
15) T	n-Dotriacontane (C32)	21.03	162767788	310.138 ng
16) T	n-Tetratriacontane (C34)	21.78	158982622	308.508 ng
17) T	n-Hexatriacontane (C36)	22.61	159394911	313.228 ng
18) T	n-Octatriacontane (C38)	23.63	154085619	311.798 ng
19) T	n-Tetracontane (40)	24.98	146404308	305.406 ng
20) H	C9-C12	2.40	336131849	637.016 ng
21) H	C12-C16	5.60	282976674	479.105 ng
22) H	C16-C21	10.20	488785271	792.458 ng
23) H	C21-C40	19.20	1848051098	3116.168 ng

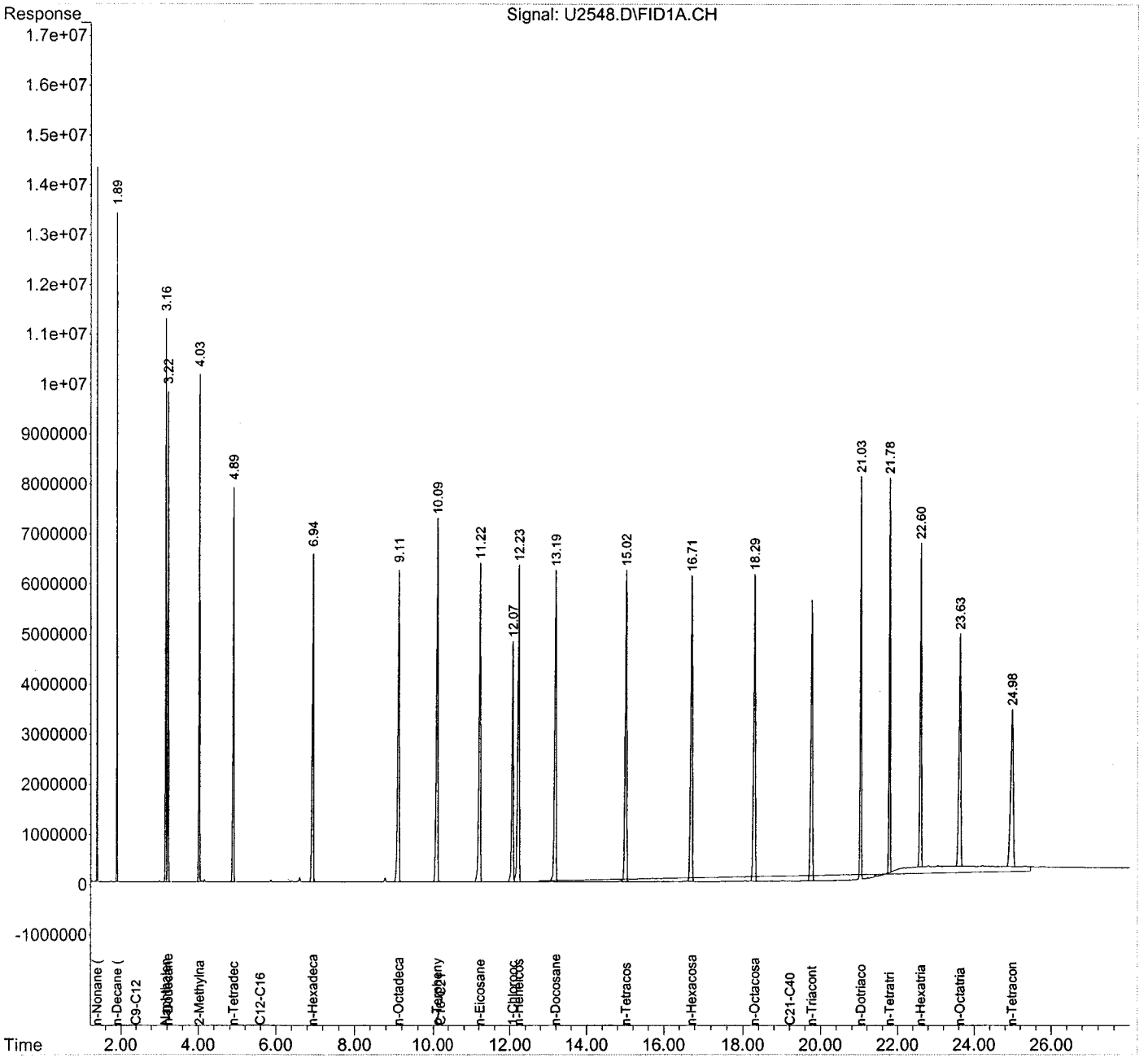
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-12-13\
Data File : U2548.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 7:05
Operator : MJ
Sample : ALI_C_IAS_4505,250_PPM
Misc : ,NA,NA,1
ALS Vial : 30 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 17 14:54:28 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



NJ-EPH AROMATIC CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/13/2013 **Instrument ID:** GC-U

Data File: UB0725.D **GC Column :** HP-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
1,2,3-Trimethylbenzene	2.09	1.97	2.21	568690	536181	5.72
Napthalene	3.23	3.11	3.35	636365	607584	4.52
2-Methylnaphthalene	4.09	3.98	4.22	669946	644089	3.86
Acenaphthylene	5.53	5.41	5.65	686063	665835	2.95
Acenaphthene	5.89	5.77	6.01	701391	680442	2.99
Fluorene	6.90	6.78	7.02	723052	706831	2.24
Phenanthrene	8.99	8.88	9.12	736838	723219	1.85
Anthracene	9.11	9.00	9.24	742838	728155	1.98
Fluoroanthene	11.88	11.77	12.01	761765	744781	2.23
Pyrene	12.39	12.28	12.52	763997	746039	2.35
Benzo[a]anthracene	15.47	15.36	15.60	758249	732823	3.35
Chrysene	15.58	15.48	15.72	718594	700086	2.58
Benzo[b]fluoranthene	18.15	18.03	18.27	1511164	1475036	2.39
Benzo[k]fluoranthene	18.15	18.03	18.27	1511308	1475175	2.39
Benzo[a]pyrene	18.74	18.63	18.87	745025	729367	2.10
Indeno[1,2,3-cd]pyrene	21.00	20.89	21.13	1474565	1433926	2.76
Dibenz[a,h]anthracene	21.00	20.89	21.13	1474208	1433926	2.73
Benzo[g,h,i]perylene	21.23	21.13	21.37	740460	722360	2.44
C10-C12	2.70	2.58	2.82	1215872	1152441	5.22
C12-C16	4.95	4.83	5.07	2077598	2001642	3.66
C16-C21	9.60	9.48	9.72	3781099	3694214	2.30
C21-C36	17.20	17.08	17.32	6198440	5968461	3.71

NJ-EPH AROMATIC CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 01/13/2013 **Instrument ID:** GC-U

Data File: UB0733.D **GC Column :** HP-5

Compound	RT	RT WI NDOW FROM	TO	Avg CF	CC CF	%D
1,2,3-Trimethylbenzene	2.09	1.97	2.21	568690	557997	1.88
Napthalene	3.23	3.11	3.35	636365	634949	0.22
2-Methylnaphthalene	4.10	3.98	4.22	669946	671718	0.26
Acenaphthylene	5.53	5.41	5.65	686063	689479	0.50
Acenaphthene	5.89	5.77	6.01	701391	703145	0.25
Fluorene	6.90	6.78	7.02	723052	725389	0.32
Phenanthrene	9.00	8.88	9.12	736838	731884	0.67
Anthracene	9.11	9.00	9.24	742838	735853	0.94
Fluoroanthene	11.88	11.77	12.01	761765	745079	2.19
Pyrene	12.39	12.28	12.52	763997	745501	2.42
Benzo[a]anthracene	15.48	15.36	15.60	758249	730290	3.69
Chrysene	15.59	15.48	15.72	718594	700250	2.55
Benzo[b]fluoranthene	18.15	18.03	18.27	1511164	1473865	2.47
Benzo[k]fluoranthene	18.15	18.03	18.27	1511308	1474031	2.47
Benzo[a]pyrene	18.74	18.63	18.87	745025	727422	2.36
Indeno[1,2,3-cd]pyrene	21.00	20.89	21.13	1474565	1408829	4.46
Dibenz[a,h]anthracene	21.00	20.89	21.13	1474208	1408829	4.43
Benzo[g,h,i]perylene	21.24	21.13	21.37	740460	698186	5.71
C10-C12	2.70	2.58	2.82	1215872	1204378	0.95
C12-C16	4.95	4.83	5.07	2077598	2076773	0.04
C16-C21	9.60	9.48	9.72	3781099	3730103	1.35
C21-C36	17.20	17.08	17.32	6198440	6121425	1.24

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0725.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 2:32
Operator : MJ
Sample : ARO_C_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 14 11:47:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds							
1)	S	2-Fluorobiphenyl	4.71	162315941	240.398	ng	
Spiked Amount		50.000		Recovery	= 480.80%		
2)	S	2-Bromonaphthalene	5.77	113355339	243.736	ng	
Spiked Amount		50.000		Recovery	= 487.47%		
3)	S	o-Terphenyl	10.17	151578135	245.106	ng	
Spiked Amount		50.000		Recovery	= 490.21%		
Target Compounds							
4)	T	1,2,3-Trimethylbenzene	2.09	134045231	235.709	ng	
5)	T	Napthalene	3.23	151896025	238.693	ng	
6)	T	2-Methylnaphthalene	4.09	161022180	240.351	ng	
7)	T	Acenaphthylene	5.53	166458823	242.629	ng	
8)	T	Acenaphthene	5.89	170110445	242.533	ng	
9)	T	Fluorene	6.90	176707703	244.392	ng	
10)	T	Phenanthrene	8.99	180804642	245.379	ng	
11)	T	Anthracene	9.11	182038756	245.059	ng	
12)	T	Fluoroanthene	11.88	186195210	244.426	ng	
13)	T	Pyrene	12.39	186509741	244.124	ng	
14)	T	Benzo[a]anthracene	15.47	183205840	241.617	ng	
15)	T	Chrysene	15.58	175021390	243.561	ng	
16)	T	Benzo[b]fluoranthene	18.15	368758925	244.023	ng	m
17)	T	Benzo[k]fluoranthene	18.15	368793639	244.023	ng	m
18)	T	Benzo[a]pyrene	18.74	182341679	244.746	ng	
19)	T	Indeno[1,2,3-cd]pyrene	21.00	358481553	243.110	ng	
20)	T	Dibenz[a,h]anthracene	21.00	358481553	243.169	ng	
21)	T	Benzo[g,h,i]perylene	21.23	180589921	243.889	ng	
22)	H	C10-C12	2.70	288110202	473.915	ng	
23)	H	C12-C16	4.95	500410391	722.580	ng	
24)	H	C16-C21	9.60	923553580	1221.277	ng	
25)	H	C21-C36	17.20	1492115127	1925.794	ng	

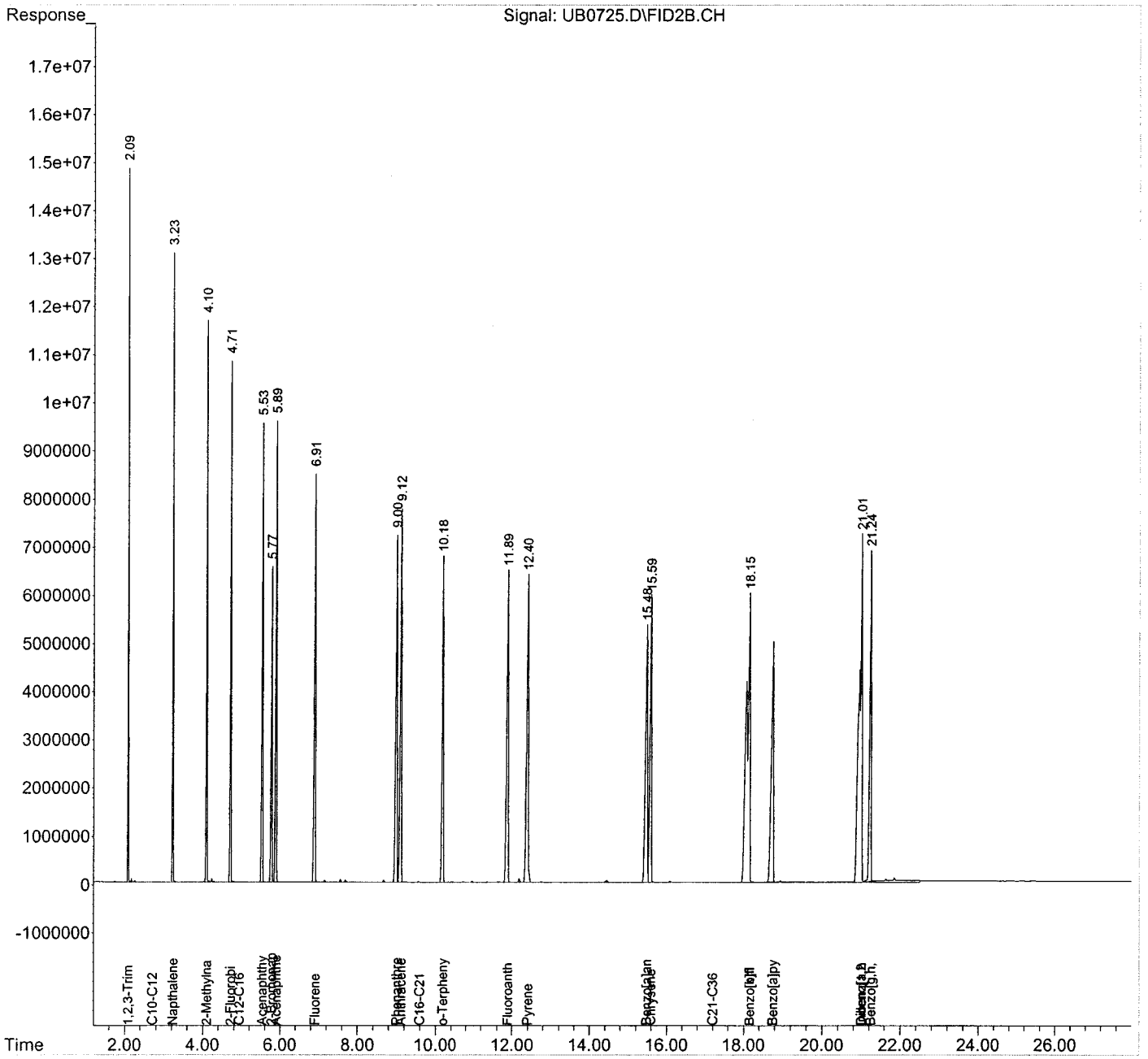
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0725.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 2:32
Operator : MJ
Sample : ARO_C_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 14 11:47:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0733.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 7:05
Operator : MJ
Sample : ARO_C_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 80 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 14 11:47:58 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
1) S	2-Fluorobiphenyl	4.71	168857834	250.087	ng	
Spiked Amount	50.000		Recovery	= 500.17%		
2) S	2-Bromonaphthalene	5.77	117071641	251.726	ng	
Spiked Amount	50.000		Recovery	= 503.45%		
3) S	o-Terphenyl	10.18	153378050	248.016	ng	
Spiked Amount	50.000		Recovery	= 496.03%		
Target Compounds						
4) T	1,2,3-Trimethylbenzene	2.09	139499366	245.299	ng	
5) T	Napthalene	3.23	158737241	249.444	ng	
6) T	2-Methylnaphthalene	4.10	167929481	250.661	ng	
7) T	Acenaphthylene	5.53	172369870	251.245	ng	
8) T	Acenaphthene	5.89	175786240	250.625	ng	
9) T	Fluorene	6.90	181347334	250.808	ng	
10) T	Phenanthrene	9.00	182971009	248.319	ng	
11) T	Anthracene	9.11	183963343	247.649	ng	
12) T	Fluoroanthene	11.88	186269689	244.524	ng	
13) T	Pyrene	12.39	186375230	243.947	ng	
14) T	Benzo[a]anthracene	15.48	182572411	240.782	ng	
15) T	Chrysene	15.59	175062390	243.618	ng	
16) T	Benzo[b]fluoranthene	18.15	368466128	243.829	ng	m
17) T	Benzo[k]fluoranthene	18.15	368507673	243.834	ng	m
18) T	Benzo[a]pyrene	18.74	181855453	244.093	ng	
19) T	Indeno[1,2,3-cd]pyrene	21.00	352207229	238.855	ng	
20) T	Dibenz[a,h]anthracene	21.00	352207229	238.913	ng	
21) T	Benzo[g,h,i]perylene	21.24	174546468	235.727	ng	
22) H	C10-C12	2.70	301094574	495.273	ng	
23) H	C12-C16	4.95	519193207	749.702	ng	
24) H	C16-C21	9.60	932525839	1233.141	ng	
25) H	C21-C36	17.20	1530356185	1975.150	ng	

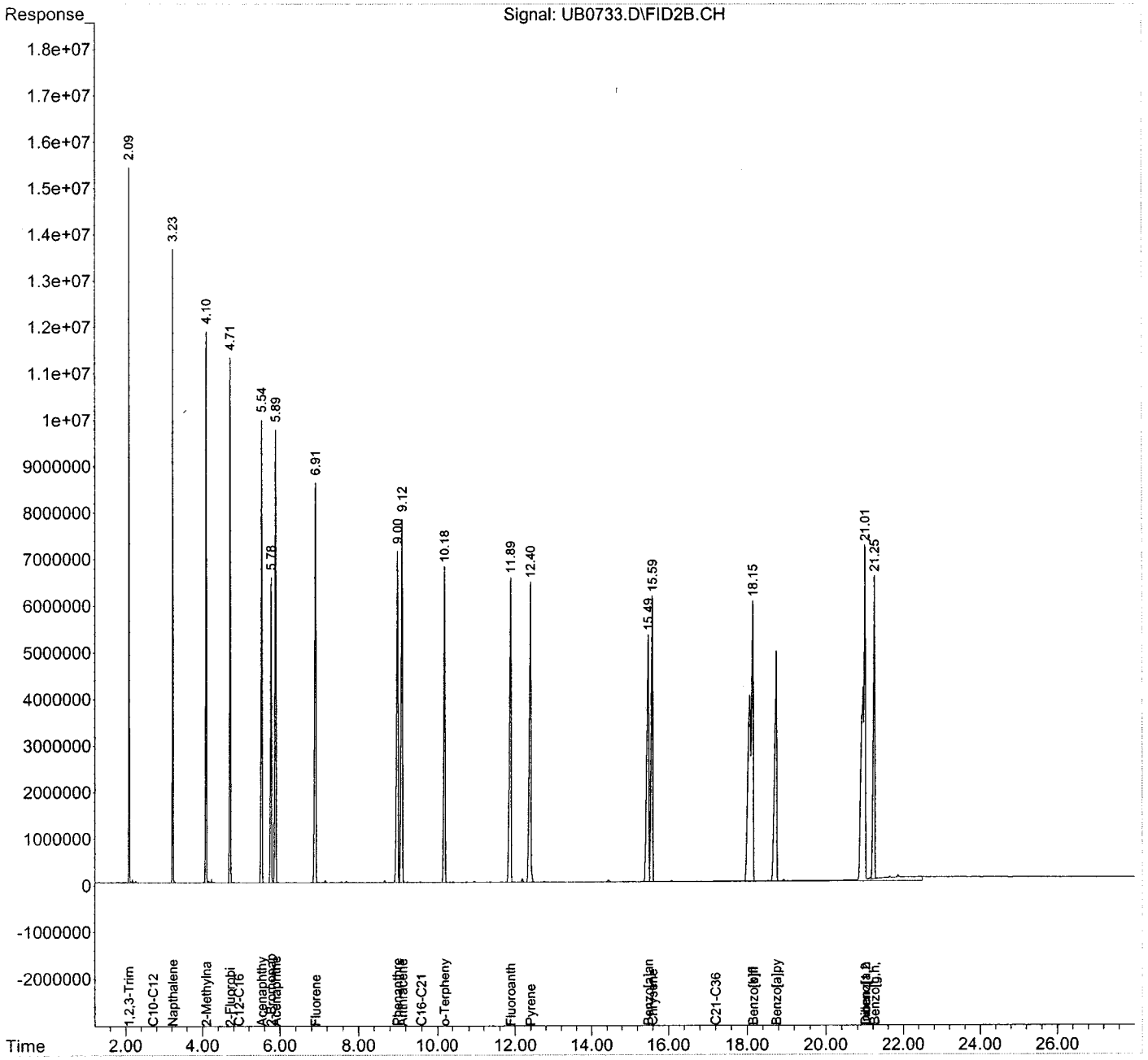
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0733.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 7:05
Operator : MJ
Sample : ARO_C_IAS_4499,250_PPM
Misc : ,NA,NA,1
ALS Vial : 80 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 14 11:47:58 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



FRACTIONATED
EXTRACTABLE PETROLEUM HYDROCARBON
RAW QC DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2542.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 3:40
Operator : MJ
Sample : ALI,LCSS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 11:49:41 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
1) S	1-Chlorooctadecane	12.05	19581162	43.143	ng	
Spiked Amount	50.000		Recovery =	86.29%		
Target Compounds						
2) T	n-Nonane (C9)	1.37	10210376	20.616	ng	
3) T	n-Decane (C10)	1.89	10348507	20.091	ng	m
4) T	n-Dodecane (C12)	3.21	13102600	24.359	ng	
5) T	n-Tetradecane (C14)	4.88	16598979	29.258	ng	
6) T	n-Hexadecane (C16)	6.92	19354362	33.607	ng	
7) T	n-Octadecane (C18)	9.09	21211668	34.526	ng	
8) T	n-Eicosane (C20)	11.19	22690744	37.355	ng	
9) T	n-Heneicosane (C21)	12.20	41661769	69.677	ng	
10) T	n-Docosane (C22)	13.16	25616585	42.723	ng	
11) T	n-Tetracosane (C24)	14.98	24096872	41.113	ng	
12) T	n-Hexacosane (C26)	16.68	24795140	43.724	ng	
13) T	n-Octacosane (C28)	18.26	24861924	45.353	ng	
14) T	n-Triacontane (C30)	19.74	24821582	46.535	ng	
15) T	n-Dotriacontane (C32)	21.01	23767038	45.286	ng	
16) T	n-Tetratriacontane (C34)	21.76	24141832	46.848	ng	
17) T	n-Hexatriacontane (C36)	22.57	21868078	42.973	ng	
18) T	n-Octatriacontane (C38)	23.58	19894620	40.258	ng	
19) T	n-Tetracontane (40)	24.92	19076602	39.795	ng	
20) H	C9-C12	2.40	38866604	73.658	ng	
21) H	C12-C16	5.60	38857218	65.789	ng	
22) H	C16-C21	10.20	88204021	143.003	ng	
23) H	C21-C40	19.20	276915339	466.932	ng	

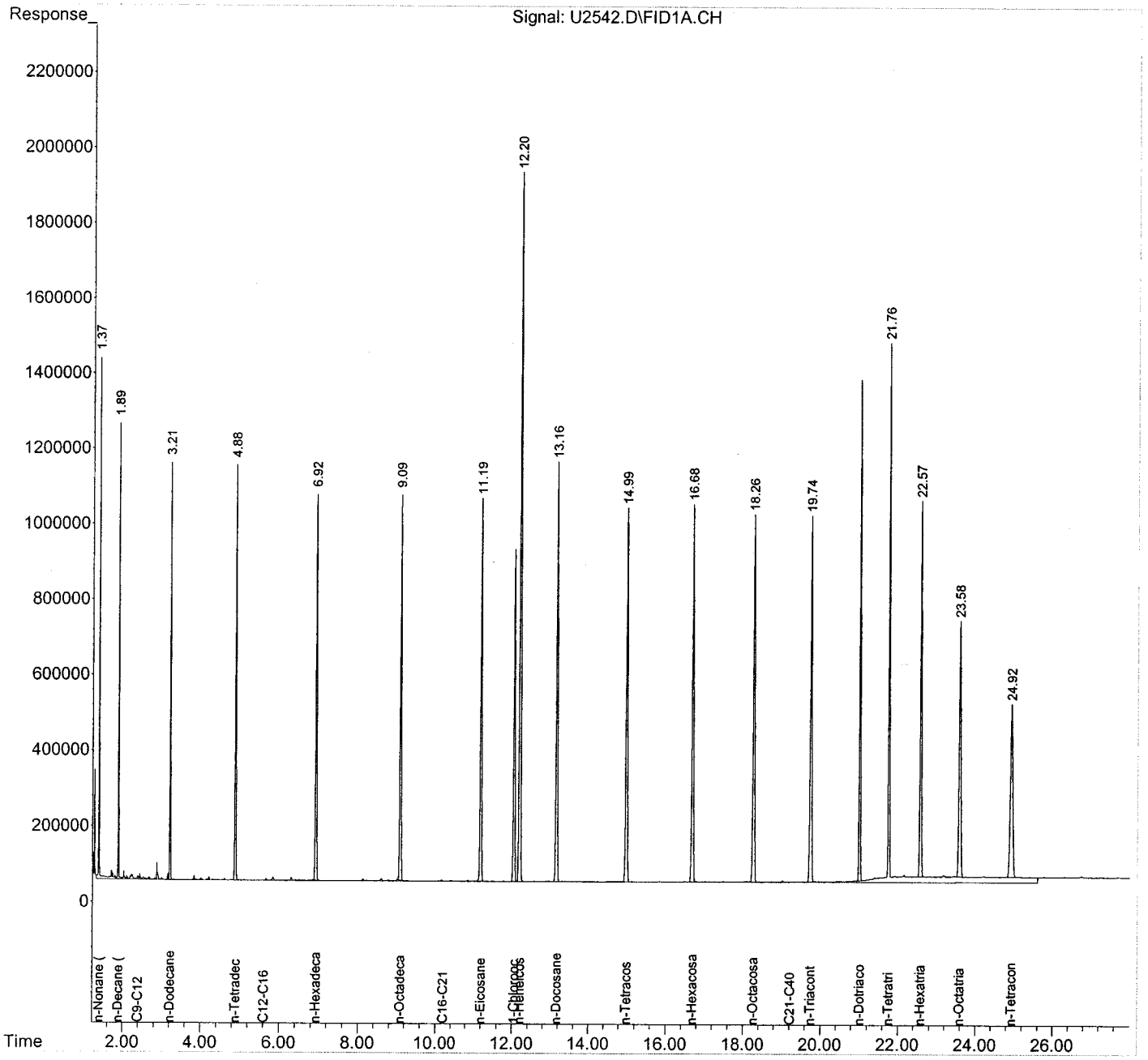
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2542.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 3:40
Operator : MJ
Sample : ALI,LCSS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 11:49:41 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2543.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 4:14
Operator : MJ
Sample : ALI,LCSDS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 15:30:53 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

		Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds							
1)	S	1-Chlorooctadecane	12.05	19822372	43.674	ng	
Spiked Amount		50.000		Recovery =	87.35%		
Target Compounds							
2)	T	n-Nonane (C9)	1.37	10433574	21.066	ng	
3)	T	n-Decane (C10)	1.89	10263454	19.926	ng	m
4)	T	n-Dodecane (C12)	3.21	13185660	24.513	ng	
5)	T	n-Tetradecane (C14)	4.88	16726643	29.483	ng	
6)	T	n-Hexadecane (C16)	6.92	19522323	33.899	ng	
7)	T	n-Octadecane (C18)	9.09	21386157	34.810	ng	
8)	T	n-Eicosane (C20)	11.19	22892083	37.686	ng	
9)	T	n-Heneicosane (C21)	12.20	41815854	69.935	ng	m
10)	T	n-Docosane (C22)	13.16	25943717	43.269	ng	
11)	T	n-Tetracosane (C24)	14.98	24330761	41.512	ng	
12)	T	n-Hexacosane (C26)	16.68	25049559	44.173	ng	
13)	T	n-Octacosane (C28)	18.26	25064018	45.722	ng	
14)	T	n-Triacontane (C30)	19.74	24982430	46.836	ng	
15)	T	n-Dotriacontane (C32)	21.01	23919943	45.577	ng	
16)	T	n-Tetratriacontane (C34)	21.76	24303209	47.161	ng	
17)	T	n-Hexatriacontane (C36)	22.57	22028932	43.289	ng	
18)	T	n-Octatriacontane (C38)	23.58	20047557	40.567	ng	
19)	T	n-Tetracontane (40)	24.93	19263454	40.184	ng	
20)	H	C9-C12	2.40	36503789	69.180	ng	
21)	H	C12-C16	5.60	39126444	66.245	ng	
22)	H	C16-C21	10.20	89199093	144.617	ng	
23)	H	C21-C40	19.20	277426187	467.794	ng	

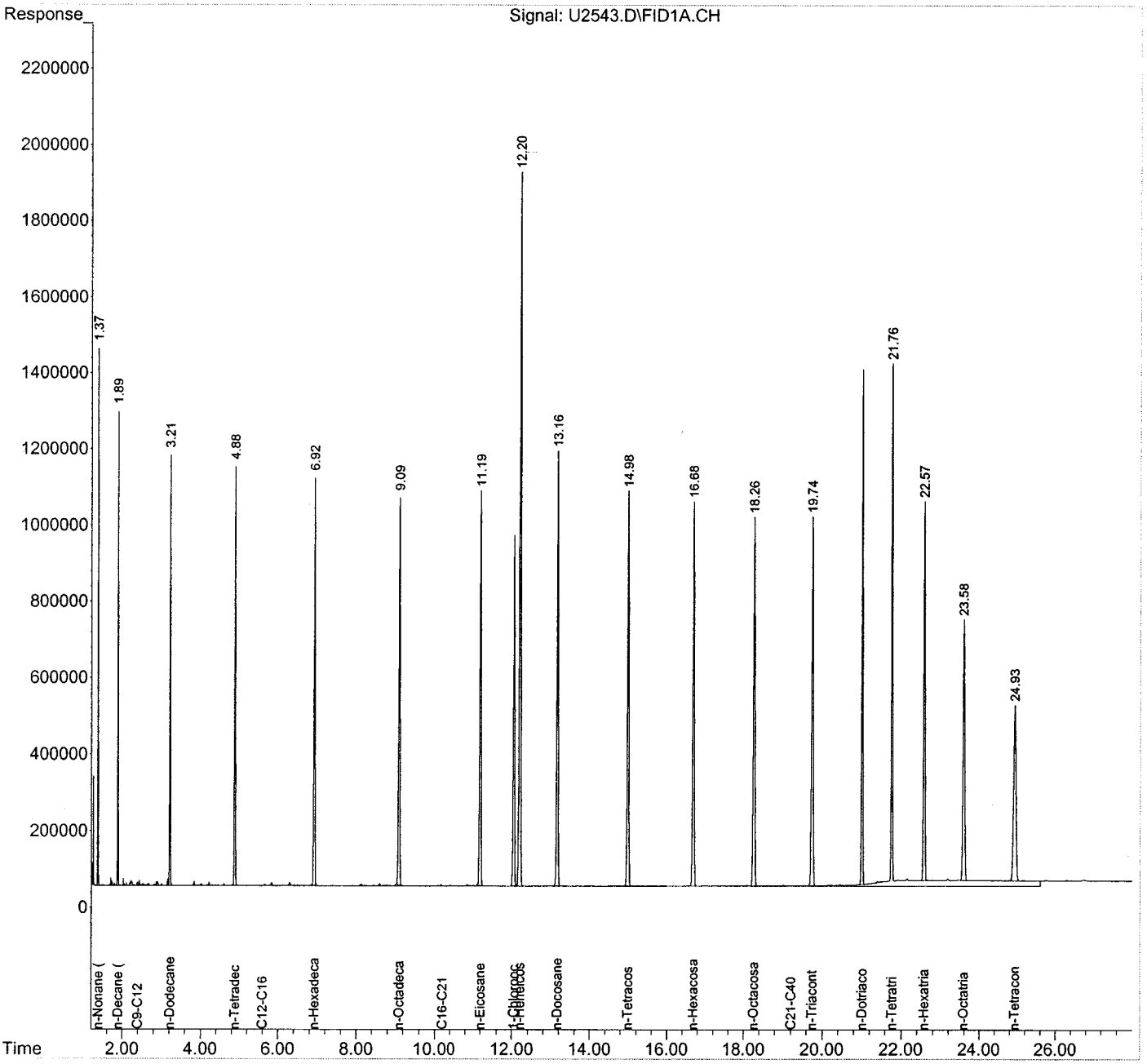
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2543.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 4:14
Operator : MJ
Sample : ALI,LCSDS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 15:30:53 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0727.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 3:40
Operator : MJ
Sample : ARO,LCSS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:26:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
System Monitoring Compounds					
1) S	2-Fluorobiphenyl	4.70	46980840	69.581 ng	m
Spiked Amount	50.000		Recovery	= 139.16%	
2) S	2-Bromonaphthalene	5.75	32535633	69.958 ng	m
Spiked Amount	50.000		Recovery	= 139.92%	
3) S	o-Terphenyl	10.15	42262029	68.339 ng	
Spiked Amount	50.000		Recovery	= 136.68%	
Target Compounds					
4) T	1,2,3-Trimethylbenzene	2.08	19222783	33.802 ng	
5) T	Napthalene	3.22	24523646	38.537 ng	
6) T	2-Methylnaphthalene	4.08	25950411	38.735 ng	
7) T	Acenaphthylene	5.51	28244960	41.170 ng	
8) T	Acenaphthene	5.86	29904227	42.636 ng	
9) T	Fluorene	6.87	30176046	41.734 ng	
10) T	Phenanthrene	8.96	31936961	43.343 ng	
11) T	Anthracene	9.07	31874655	42.909 ng	
12) T	Fluoroanthene	11.84	32962550	43.271 ng	
13) T	Pyrene	12.35	33020597	43.221 ng	
14) T	Benzo[a]anthracene	15.43	33034672	43.567 ng	
15) T	Chrysene	15.52	33339799	46.396 ng	
16) T	Benzo[b]fluoranthene	18.06	66655251	44.109 ng	m
17) T	Benzo[k]fluoranthene	18.06	66634794	44.091 ng	m
18) T	Benzo[a]pyrene	18.66	30724405	41.239 ng	
19) T	Indeno[1,2,3-cd]pyrene	20.94	65069316	44.128 ng	m
20) T	Dibenz[a,h]anthracene	20.94	65141290	44.187 ng	m
21) T	Benzo[g,h,i]perylene	21.17	32410123	43.770 ng	
22) H	C10-C12	2.70	49894268	82.072 ng	
23) H	C12-C16	4.95	88363268	127.594 ng	
24) H	C16-C21	9.60	166984863	220.815 ng	
25) H	C21-C36	17.20	292632060	377.685 ng	

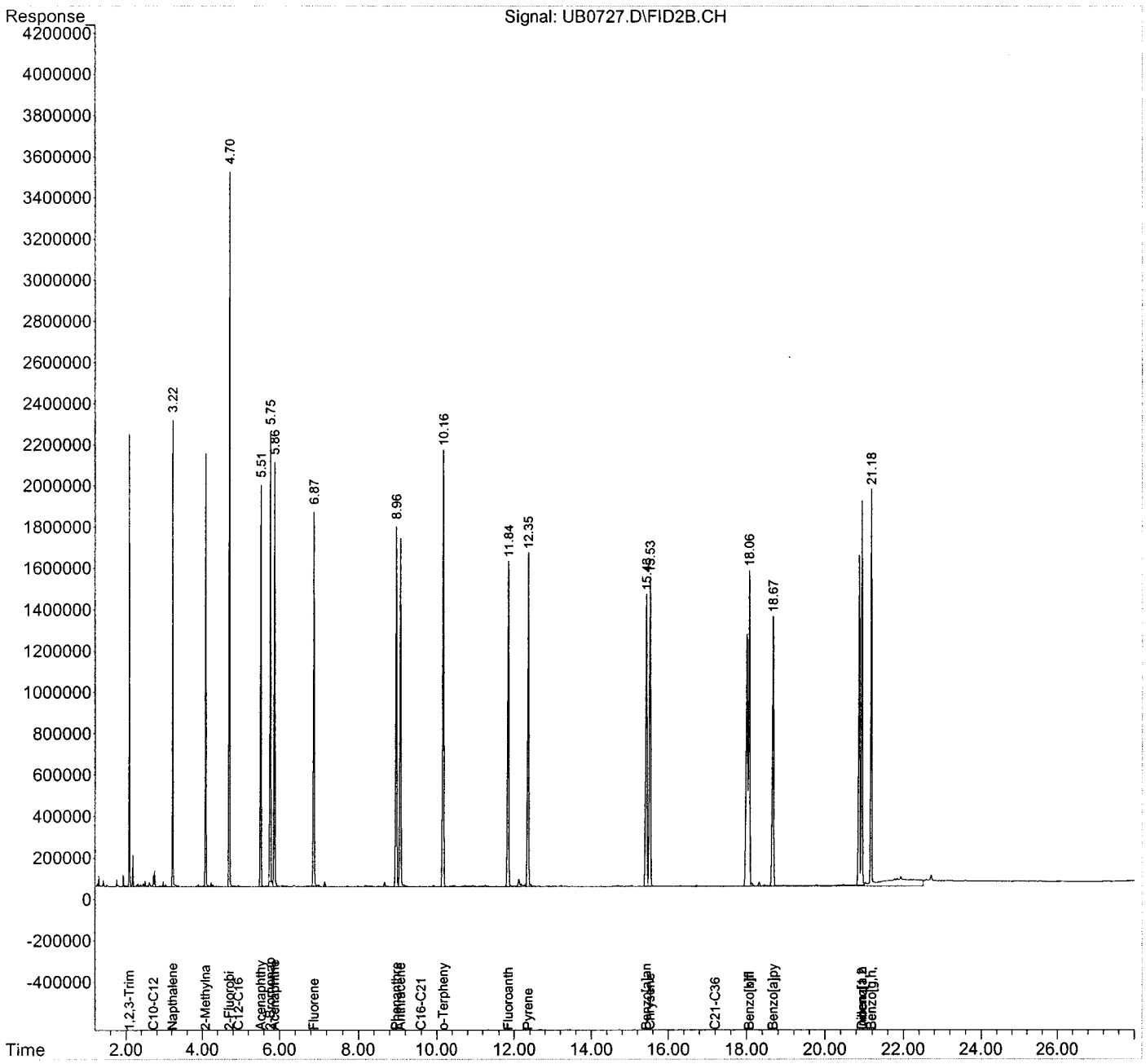
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0727.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 3:40
Operator : MJ
Sample : ARO,LCSS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:26:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0728.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 4:14
Operator : MJ
Sample : ARO,LCSDS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:25:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
1) S	2-Fluorobiphenyl	4.70	46593138	69.007	ng	m
Spiked Amount	50.000		Recovery =	138.01%		
2) S	2-Bromonaphthalene	5.75	32419093	69.707	ng	m
Spiked Amount	50.000		Recovery =	139.41%		
3) S	o-Terphenyl	10.15	42023398	67.953	ng	m
Spiked Amount	50.000		Recovery =	135.91%		
Target Compounds						
4) T	1,2,3-Trimethylbenzene	2.08	18917973	33.266	ng	
5) T	Napthalene	3.22	24266066	38.132	ng	
6) T	2-Methylnaphthalene	4.08	25766086	38.460	ng	
7) T	Acenaphthylene	5.51	27948126	40.737	ng	
8) T	Acenaphthene	5.86	29608373	42.214	ng	
9) T	Fluorene	6.87	29881642	41.327	ng	
10) T	Phenanthrene	8.96	31730465	43.063	ng	
11) T	Anthracene	9.07	31666430	42.629	ng	
12) T	Fluoroanthene	11.84	33014089	43.339	ng	
13) T	Pyrene	12.34	33135144	43.371	ng	
14) T	Benzo[a]anthracene	15.43	33364492	44.002	ng	
15) T	Chrysene	15.52	33682956	46.873	ng	
16) T	Benzo[b]fluoranthene	18.06	67621571	44.748	ng	
17) T	Benzo[k]fluoranthene	18.06	67621571	44.744	ng	
18) T	Benzo[a]pyrene	18.66	31000872	41.611	ng	
19) T	Indeno[1,2,3-cd]pyrene	20.94	65486673	44.411	ng	m
20) T	Dibenz[a,h]anthracene	20.94	65385685	44.353	ng	m
21) T	Benzo[g,h,i]perylene	21.17	32697517	44.158	ng	
22) H	C10-C12	2.70	49175566	80.889	ng	
23) H	C12-C16	4.95	87086666	125.751	ng	
24) H	C16-C21	9.60	166536117	220.222	ng	
25) H	C21-C36	17.20	293146941	378.349	ng	

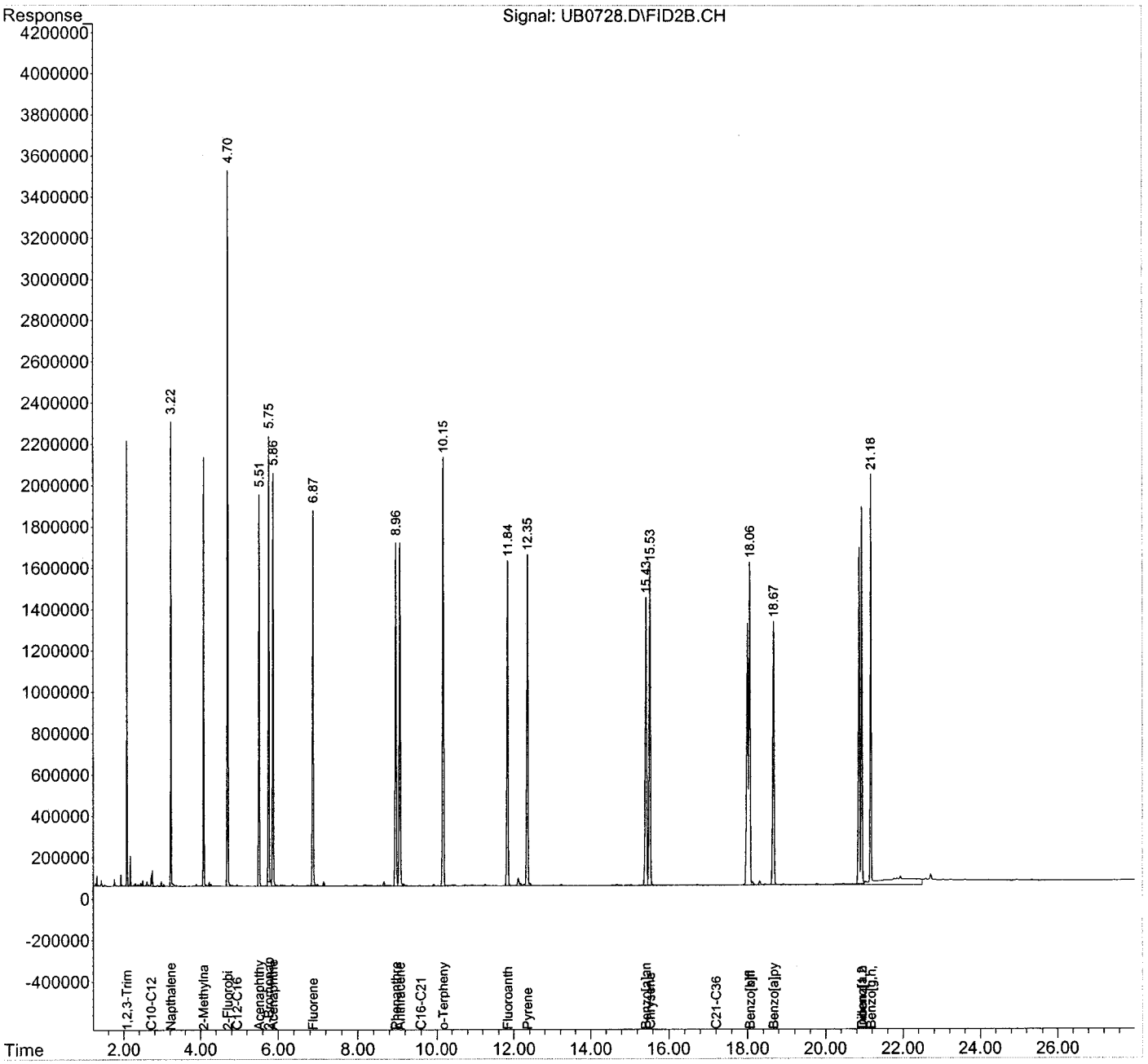
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0728.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 4:14
Operator : MJ
Sample : ARO,LCSDS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:25:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-15-13\
Data File : U2606.D
Signal(s) : FID1A.CH
Acq On : 16 Jan 2013 5:30
Operator : MJ
Sample : ALI,12805-019MS,S,5.09g,0,01/03/13,1
Misc : 130103-05,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 14:58:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.03	22027881	48.534 ng
Spiked Amount 50.000		Recovery =	97.07%
Target Compounds			
20) H C9-C12	2.40	55971246	106.073 ng
21) H C12-C16	5.60	51918337	87.902 ng
22) H C16-C21	10.20	106153389	172.104 ng
23) H C21-C40	19.20	278854306	470.202 ng

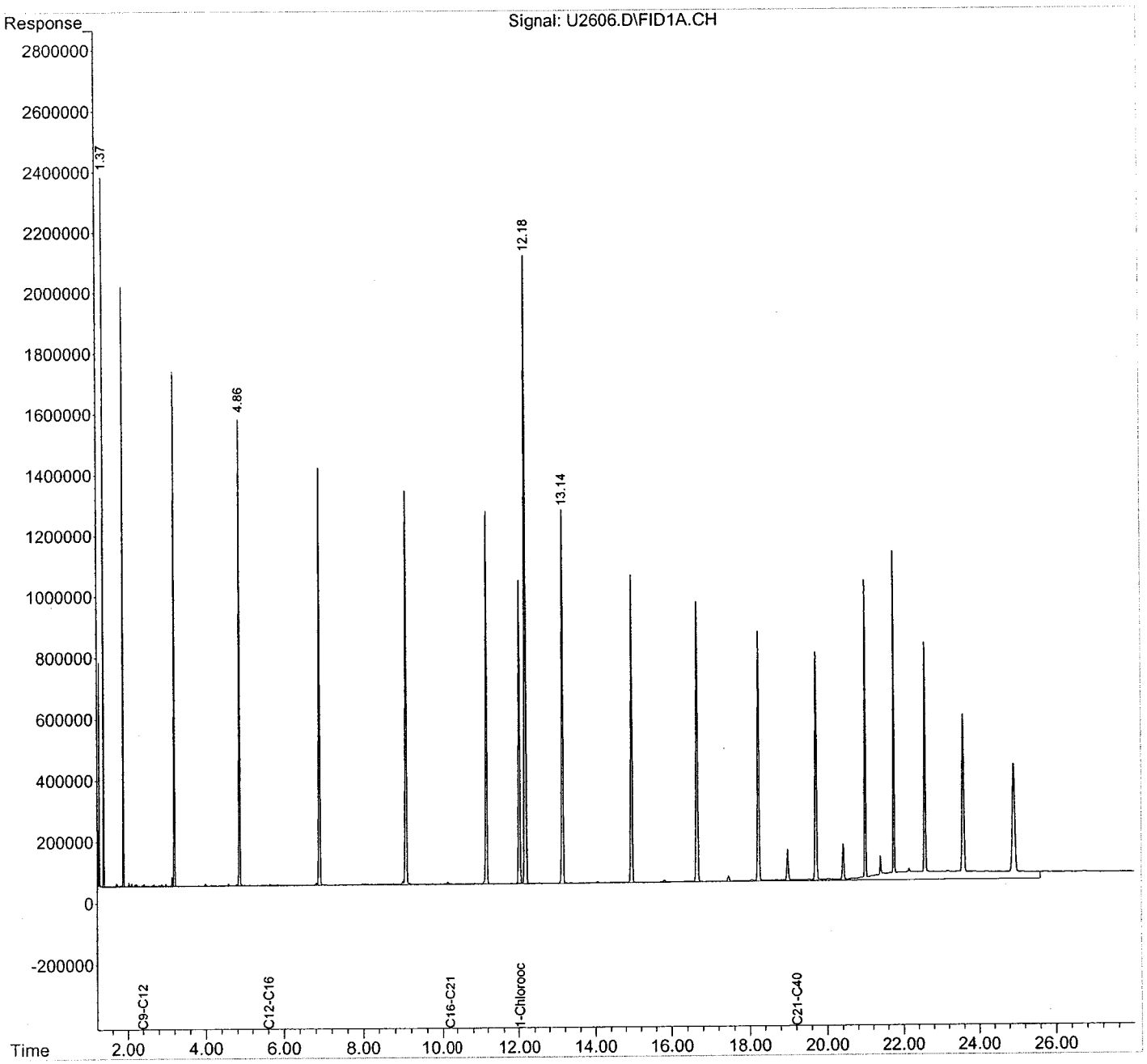
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-15-13\
Data File : U2606.D
Signal(s) : FID1A.CH
Acq On : 16 Jan 2013 5:30
Operator : MJ
Sample : ALI,12805-019MS,S,5.09g,0,01/03/13,1
Misc : 130103-05,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 14:58:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0757.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 20:44
Operator : MJ
Sample : ARO,12805-019MS,S,5.09g,0,01/03/13,1
Misc : 130103-05,NA,NA,1
ALS Vial : 100 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 15:18:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2-Fluorobiphenyl	4.69	43041149	63.746 ng
Spiked Amount 50.000		Recovery =	127.49%
2) S 2-Bromonaphthalene	5.75	31464293	67.654 ng
Spiked Amount 50.000		Recovery =	135.31%
3) S o-Terphenyl	10.15	39534985	63.929 ng
Spiked Amount 50.000		Recovery =	127.86%
Target Compounds			
22) H C10-C12	2.70	46630402	76.703 ng
23) H C12-C16	4.95	81714998	117.994 ng
24) H C16-C21	9.60	165380637	218.694 ng
25) H C21-C36	17.20	336492649	434.293 ng

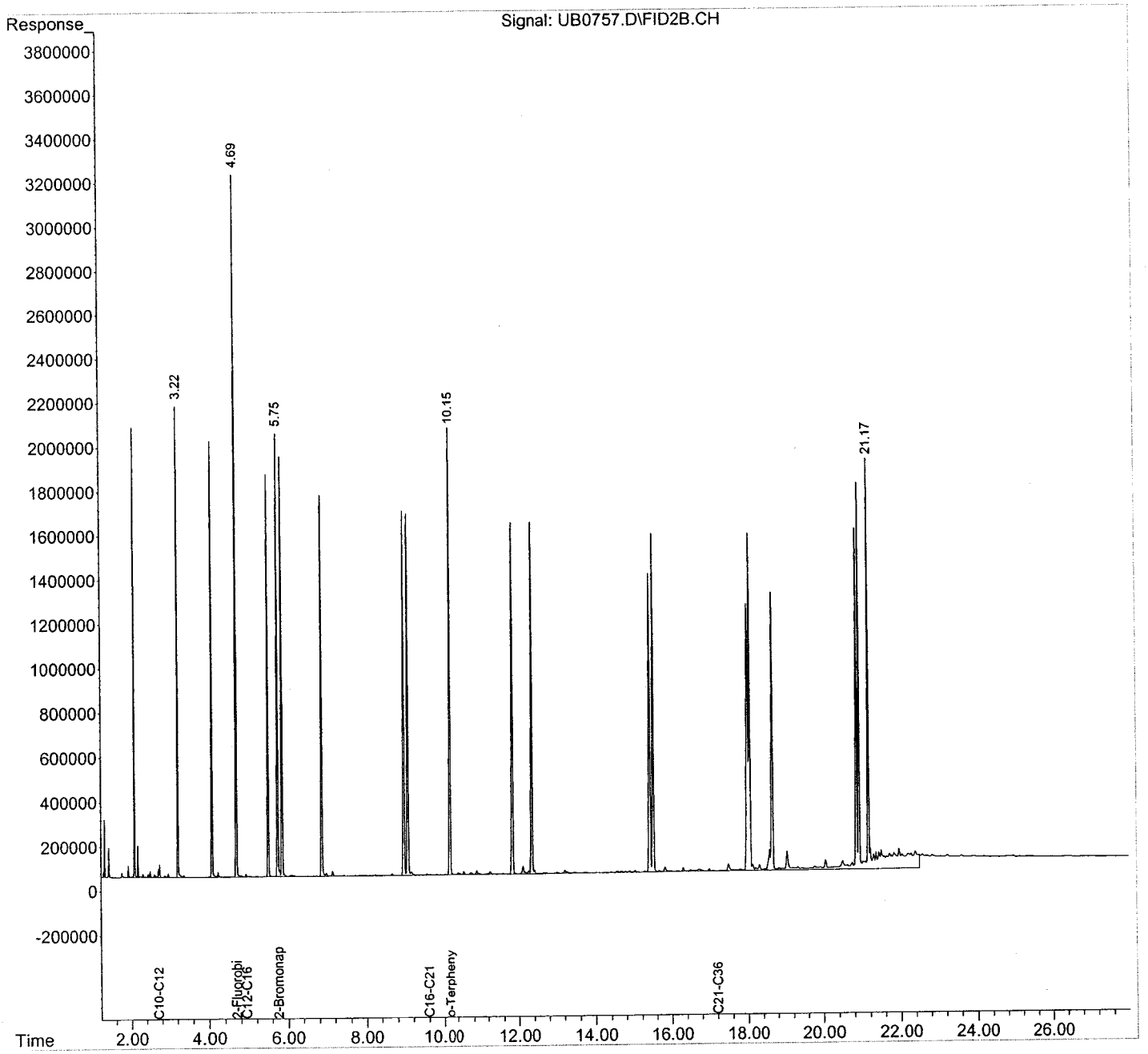
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0757.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 20:44
Operator : MJ
Sample : ARO,12805-019MS,S,5.09g,0,01/03/13,1
Misc : 130103-05,NA,NA,1
ALS Vial : 100 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 15:18:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-15-13\
Data File : U2605.D
Signal(s) : FID1A.CH
Acq On : 16 Jan 2013 4:56
Operator : MJ
Sample : S-19,12805-19D,S,5.09g,20.3,01/03/13,1
Misc : 130103-05,12/31/12,12/31/12,1
ALS Vial : 24 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 14:58:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.03	19218689	42.344 ng
Spiked Amount 50.000		Recovery =	84.69%
Target Compounds			
23) H C21-C40	19.20	85023672	143.366 ng

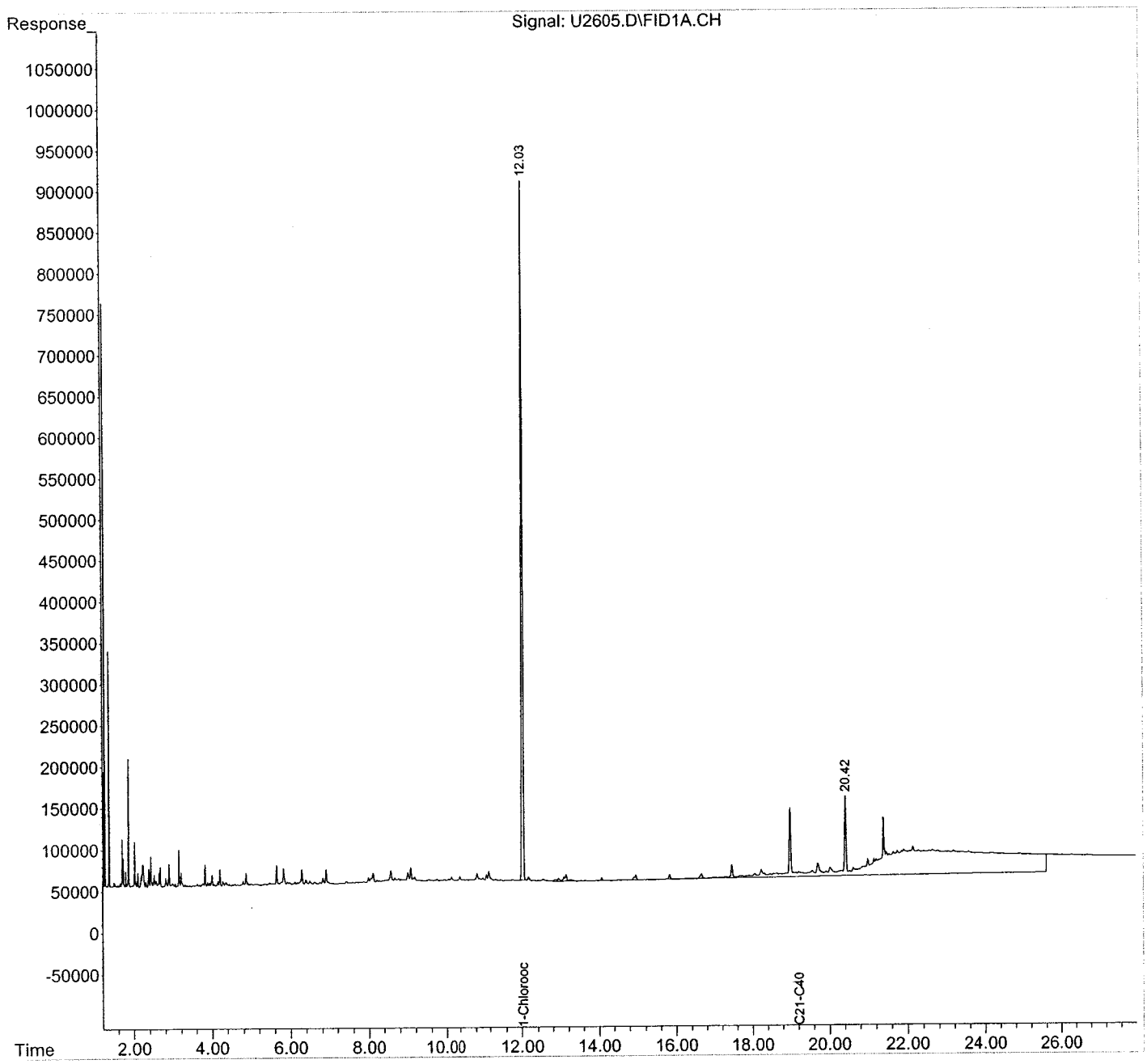
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-15-13\
Data File : U2605.D
Signal(s) : FID1A.CH
Acq On : 16 Jan 2013 4:56
Operator : MJ
Sample : S-19,12805-19D,S,5.09g,20.3,01/03/13,1
Misc : 130103-05,12/31/12,12/31/12,1
ALS Vial : 24 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 14:58:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0756.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 20:10
Operator : MJ
Sample : S-19,12805-19D,S,5.09g,20.3,01/03/13,1
Misc : 130103-05,12/31/12,12/31/12,1
ALS Vial : 99 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 15:17:51 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2-Fluorobiphenyl	4.69	40264782	59.634 ng
Spiked Amount 50.000		Recovery =	119.27%
2) S 2-Bromonaphthalene	5.75	29726275	63.917 ng
Spiked Amount 50.000		Recovery =	127.83%
3) S o-Terphenyl	10.15	37430598	60.526 ng
Spiked Amount 50.000		Recovery =	121.05%
Target Compounds			
25) H C21-C36	17.20	114465582	147.735 ng

(f)=RT Delta > 1/2 Window (m)=manual int.

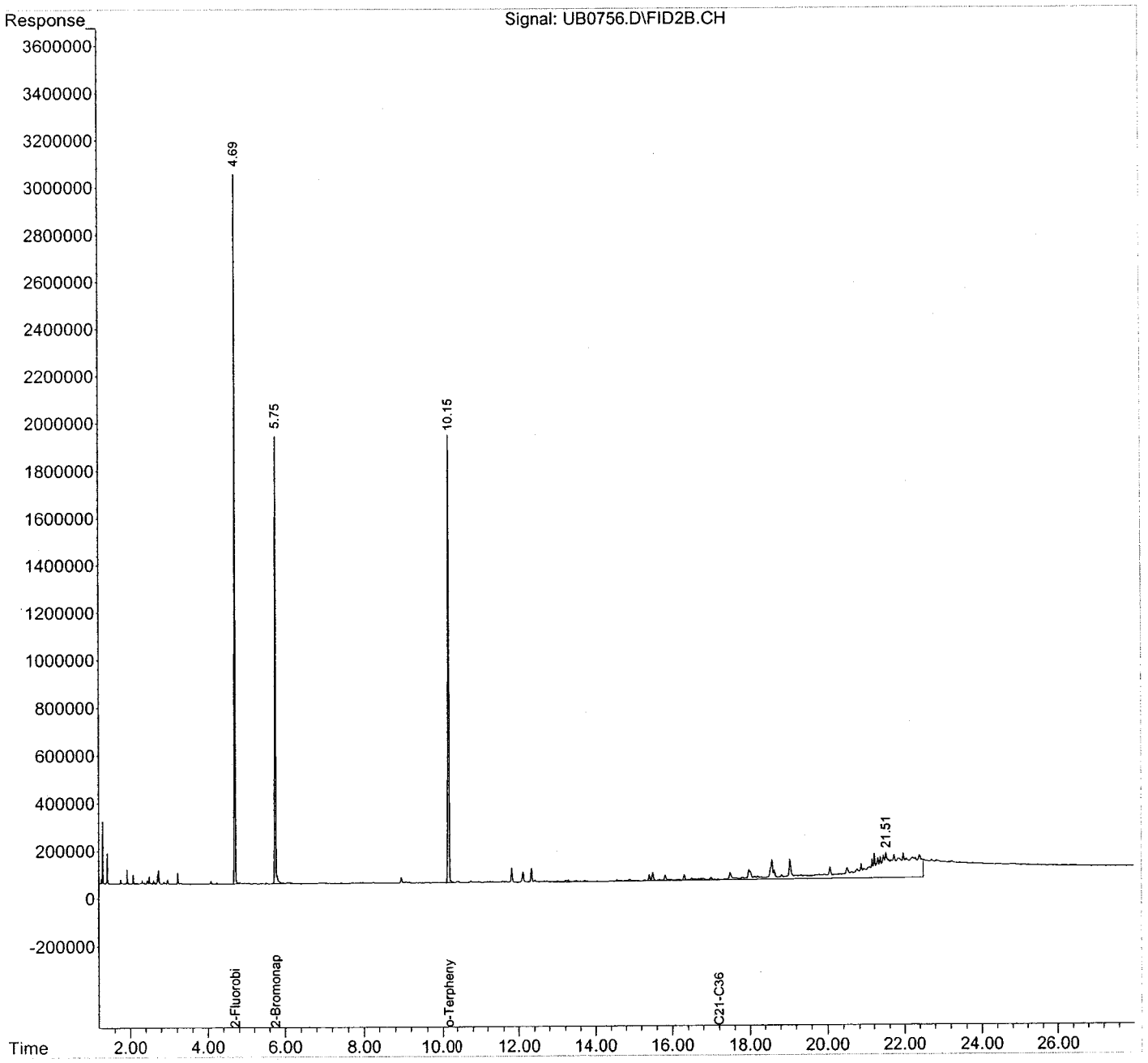
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0756.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 20:10
Operator : MJ
Sample : S-19,12805-19D,S,5.09g,20.3,01/03/13,1
Misc : 130103-05,12/31/12,12/31/12,1
ALS Vial : 99 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 16 15:17:51 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-Fractionated

Lab ID: BLKS130111-02
Client ID: ARO
Date Received: NA
Date Extracted: 01/11/2013
Ali Date Analyzed: 01/13/2013
Data file: U2541.D
Dilution Factor: 1

GC Column: HP-5
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: NA
Aro Date Analyzed: 01/13/2013
Data file: UB0726.D
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
C9-C12 Aliphatics	ND		12.0	2.00
C12-C16 Aliphatics	ND		8.00	2.00
C16-C21 Aliphatics	ND		12.0	2.00
C21-C40 Aliphatics	ND		40.0	4.00
Total Aliphatics	ND		40.0	4.00
C10-C12 Aromatics	ND		8.00	2.00
C12-C16 Aromatics	ND		12.0	2.00
C16-C21 Aromatics	ND		20.0	3.00
C21-C36 Aromatics	ND		32.0	4.00
Total Aromatics	ND		32.0	4.00
Total NJ-EPH	ND		40.0	4.00

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-Fractionated

Lab ID: BLKS130103-05
Client ID: ARO
Date Received: NA
Date Extracted: 01/03/2013
Ali Date Analyzed: 01/15/2013
Data file: U2585.D
Dilution Factor: 1

GC Column: HP-5
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: NA
Aro Date Analyzed: 01/13/2013
Data file: UB0736.D
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
C9-C12 Aliphatics	ND		12.0	2.00
C12-C16 Aliphatics	ND		8.00	2.00
C16-C21 Aliphatics	ND		12.0	2.00
C21-C40 Aliphatics	ND		40.0	4.00
Total Aliphatics	ND		40.0	4.00
C10-C12 Aromatics	ND		8.00	2.00
C12-C16 Aromatics	ND		12.0	2.00
C16-C21 Aromatics	ND		20.0	3.00
C21-C36 Aromatics	ND		32.0	4.00
Total Aromatics	ND		32.0	4.00
Total NJ-EPH	ND		40.0	4.00

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2541.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 3:06
Operator : MJ
Sample : ALI,BLKS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 23 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:10:34 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 1-Chlorooctadecane	12.05	18480671	40.718 ng
Spiked Amount 50.000		Recovery =	81.44%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

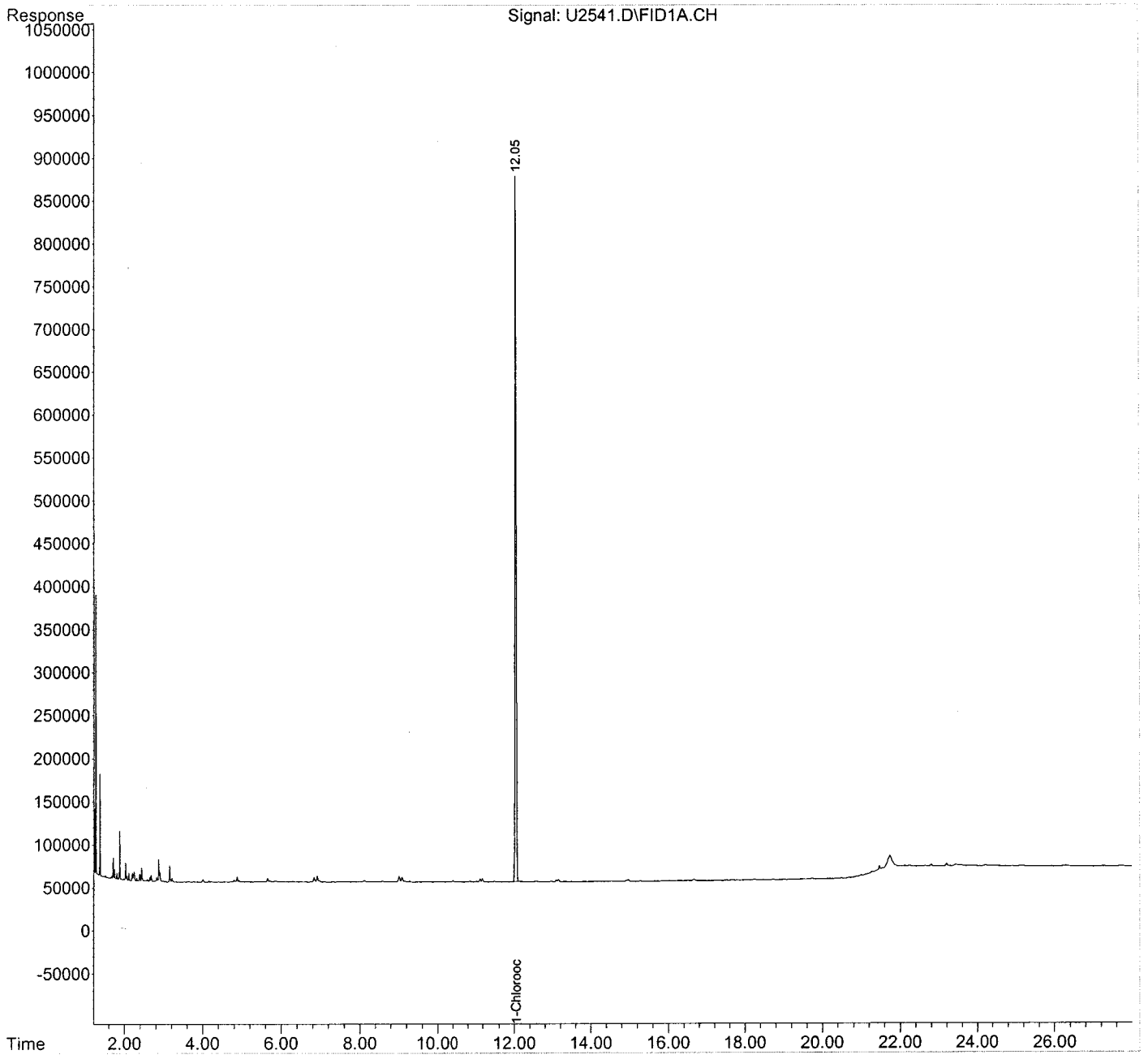
9.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\01-12-13\
Data File : U2541.D
Signal(s) : FID1A.CH
Acq On : 13 Jan 2013 3:06
Operator : MJ
Sample : ALI,BLKS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 23 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:10:34 2013
Quant Method : C:\MSDCHEM\1\METHODS\UALI0107.M
Quant Title :
QLast Update : Mon Jan 07 10:20:55 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0726.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 3:06
Operator : MJ
Sample : ARO,BLKS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:22:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2-Fluorobiphenyl	4.70	41911088	62.073 ng
Spiked Amount 50.000		Recovery =	124.15%
2) S 2-Bromonaphthalene	5.75	30201873	64.940 ng
Spiked Amount 50.000		Recovery =	129.88%
3) S o-Terphenyl	10.15	39424336	63.750 ng
Spiked Amount 50.000		Recovery =	127.50%
Target Compounds			

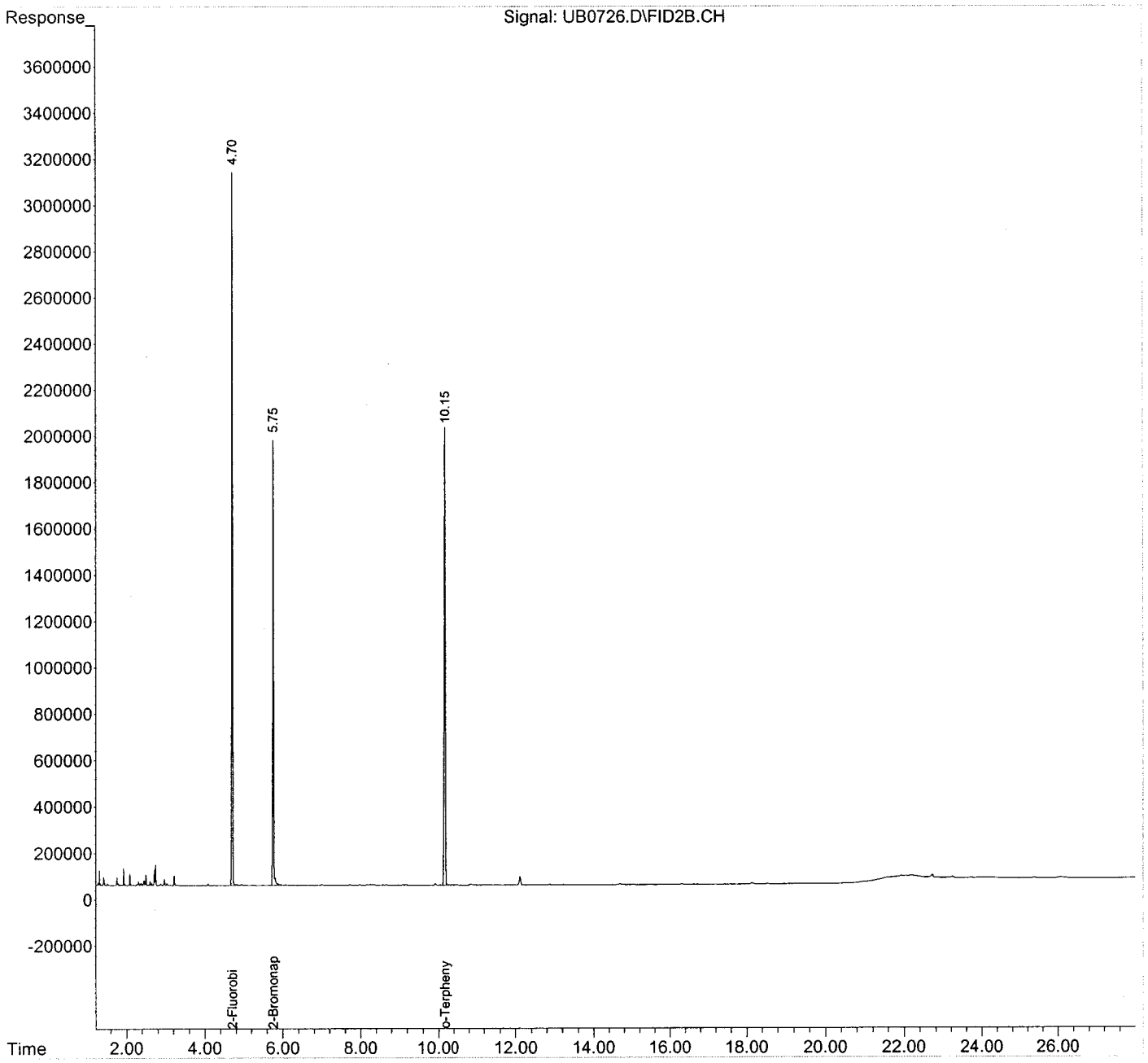
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA_2\01-12-13\
Data File : UB0726.D
Signal(s) : FID2B.CH
Acq On : 13 Jan 2013 3:06
Operator : MJ
Sample : ARO,BLKS130111-02,S,5.00g,0,01/11/13,1
Misc : 130111-02,NA,NA,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: AUTOINT1.E
Quant Time: Jan 15 12:22:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\U2AR0111.M
Quant Title :
QLast Update : Fri Jan 11 14:47:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 025
SDG #: 00500, 00167, 00426, 00597, 00542, 00541, 00339, 00596

Matrix: Soil Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	50.0	100	50.1	100	51.1	102	51.0	102
Antimony	0.250	50.0	53.2	106	52.3	105	52.6	105	52.0	104
Arsenic	0.250	50.0	53.4	107	52.6	105	52.7	105	52.2	104
Barium	2.50	50.0	53.1	106	53.2	106	53.0	106	52.4	105
Beryllium	0.200	50.0	51.2	102	51.6	103	52.2	104	51.9	104
Cadmium	0.125	50.0	52.8	106	52.5	105	51.8	104	51.4	103
Calcium	25.0	500	497	99.4	488	97.6	493	98.6	490	98.0
Chromium	0.500	50.0	53.5	107	52.9	106	53.3	107	52.8	106
Cobalt	0.500	50.0	53.5	107	53.3	107	53.2	106	52.5	105
Copper	0.500	50.0	53.5	107	53.3	107	53.2	106	52.7	105
Iron	12.5	500	532	106	525	105	532	106	526	105
Lead	0.125	50.0	53.0	106	52.2	104	52.3	105	51.7	103
Magnesium	12.5	500	537	107	531	106	528	106	528	106
Manganese	0.250	50.0	51.9	104	50.9	102	51.4	103	51.1	102
Mercury	0.120	5.00	5.34	107	5.40	108	5.43	109		
Nickel	0.500	50.0	54.8	110	54.3	109	54.4	109	53.8	108
Potassium	12.5	500	508	102	490	98.0	488	97.6	490	98.0
Selenium	1.00	50.0	50.6	101	49.0	98.0	48.5	97.0	49.6	99.2
Silver	0.125	10.0	10.4	104	10.2	102	10.3	103	10.2	102
Sodium	25.0	500	546	109	527	105	520	104	517	103
Thallium	0.125	50.0	54.0	108	53.3	107	53.5	107	52.6	105
Vanadium	0.500	50.0	53.3	107	53.0	106	53.2	106	52.8	106
Zinc	2.00	50.0	53.5	107	53.3	107	53.0	106	52.4	105

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 025
SDG #: 00500, 00167, 00426, 00597, 00542, 00541, 00339, 00596

Matrix: Soil Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	52.5	105						
Antimony	0.250	50.0	51.9	104						
Arsenic	0.250	50.0	52.2	104						
Barium	2.50	50.0	52.5	105						
Beryllium	0.200	50.0	51.5	103						
Cadmium	0.125	50.0	51.6	103						
Calcium	25.0	500	494	98.8						
Chromium	0.500	50.0	53.1	106						
Cobalt	0.500	50.0	52.9	106						
Copper	0.500	50.0	52.6	105						
Iron	12.5	500	526	105						
Lead	0.125	50.0	51.7	103						
Magnesium	12.5	500	531	106						
Manganese	0.250	50.0	51.4	103						
Nickel	0.500	50.0	54.0	108						
Potassium	12.5	500	492	98.4						
Selenium	1.00	50.0	50.1	100						
Silver	0.125	10.0	10.1	101						
Sodium	25.0	500	518	104						
Thallium	0.125	50.0	53.0	106						
Vanadium	0.500	50.0	52.8	106						
Zinc	2.00	50.0	52.8	106						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 025
SDG #: 00500, 00167, 00426, 00597, 00542, 00541, 00339, 00596

Matrix: Soil Method: 6020 Concentration/Units: ppm (mg/kg)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Aluminum	0.005	ND	ND	ND	ND	ND	
Antimony	0.00025	ND	ND	ND	ND	ND	
Arsenic	0.00025	ND	ND	ND	ND	ND	
Barium	0.0025	ND	ND	ND	ND	ND	
Beryllium	0.0002	ND	ND	ND	ND	ND	
Cadmium	0.000125	ND	ND	ND	ND	ND	
Calcium	0.025	ND	ND	ND	ND	ND	
Chromium	0.0005	ND	ND	ND	ND	ND	
Cobalt	0.0005	ND	ND	ND	ND	ND	
Copper	0.0005	ND	ND	ND	ND	ND	
Iron	0.013	ND	ND	ND	ND	ND	
Lead	0.000125	ND	ND	ND	ND	ND	
Magnesium	0.013	ND	ND	ND	ND	ND	
Manganese	0.00025	ND	ND	ND	ND	ND	
Mercury	0.00012	ND	ND	ND			
Nickel	0.0005	ND	ND	ND	ND	ND	
Potassium	0.013	ND	ND	ND	ND	ND	
Selenium	0.001	ND	ND	ND	ND	ND	
Silver	0.000125	ND	ND	ND	ND	ND	
Sodium	0.025	ND	ND	ND	ND	ND	
Thallium	0.000125	ND	ND	ND	ND	ND	
Vanadium	0.0005	ND	ND	ND	ND	ND	
Zinc	0.002	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

Batch (Page) #: 025
Associated Lab Case for Blank 1: 00167, 00339, 00426, 00500, 00541, 00542, 00596, 00597

Matrix: Soil Unit: ppm (mg/kg) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK
Aluminum	5.00	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	2.50	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	25.0	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	12.5	ND
Lead	0.125	ND
Magnesium	12.5	ND
Manganese	0.250	ND
Mercury	0.006	ND
Nickel	0.500	ND
Potassium	12.5	ND
Selenium	1.00	ND
Silver	0.125	ND
Sodium	25.0	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	2.00	ND

Associated Sample for Blank 1:
00167-002; 00339-004; 00426-001~002; 00500-002,004,006
00500-009,012,015; 00541-001; 00542-001~002
00596-001~005; 00597-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 025
SDG #: 00500, 00167, 00426, 00597, 00542, 00541, 00339, 00596

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	106000	87400	87.4	NA
Calcium	100000	-	106000	104000	104	NA
Iron	100000	-	106000	106000	106	NA
Potassium	100000	-	107000	106000	106	NA
Magnesium	100000	-	107000	106000	106	NA
Sodium	100000	-	109000	108000	108	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	1910	2570	129	NA
Titanium	2000	-	2140	2110	106	NA
Silver	-	20.0	-	22.6	113	80-120
Arsenic	-	20.0	-	23.6	118	80-120
Cadmium	-	20.0	-	23.3	117	80-120
Cobalt	-	20.0	-	22.9	115	80-120
Chromium	-	20.0	-	22.7	114	80-120
Copper	-	20.0	-	22.1	111	80-120
Manganese	-	20.0	-	22.8	114	80-120
Nickel	-	20.0	-	23.5	118	80-120
Zinc	-	20.0	-	22.8	114	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 025
SDG #: 00167, 00339, 00426, 00500, 00541, 00542, 00596, 00597

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS130121-01					
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	200	182	91.0			
Antimony	40.0	38.2	95.5			
Arsenic	40.0	38.3	95.8			
Barium	40.0	39.1	97.8			
Beryllium	40.0	38.4	96.0			
Cadmium	40.0	41.7	104			
Calcium	200	171	85.5			
Chromium	40.0	38.7	96.8			
Cobalt	40.0	39.2	98.0			
Copper	40.0	40.2	101			
Iron	200	195	97.5			
Lead	40.0	40.8	102			
Magnesium	200	192	96.0			
Manganese	40.0	37.4	93.5			
Mercury	0.250	0.235	94.0			
Nickel	40.0	40.0	100			
Potassium	200	179	89.5			
Selenium	40.0	35.8	89.5			
Silver	40.0	45.4	114			
Sodium	200	176	88.0			
Thallium	40.0	39.7	99.3			
Vanadium	40.0	39.0	97.5			
Zinc	40.0	38.4	96.0			

(1) Control Limits % Recovery = 85-115%

LCSS130121-01

)0167-002; 00339-004; 00426-001~002; 00500-002,004,006
00500-009,012,015; 00541-001; 00542-001~002
00596-001~005; 00597-001

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 025
SDG #: 00167, 00339, 00426, 00500, 00541, 00542, 00596, 00597

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	9020	8540	NC	248					75-125
Antimony	46.6	ND	94.0	49.6					75-125
Arsenic	49.1	2.21	94.5	49.6					75-125
Barium	162	115	94.8	49.6					75-125
Beryllium	47.5	0.594	94.6	49.6					75-125
Cadmium	50.5	ND	102	49.6					75-125
Calcium	1780	1510	109	248					75-125
Chromium	62.3	14.6	96.2	49.6					75-125
Cobalt	53.5	5.97	95.8	49.6					75-125
Copper	60.5	12.5	96.8	49.6					75-125
Iron	16600	15900	NC	248					75-125
Lead	54.9	6.00	98.6	49.6					75-125
Magnesium	2210	1940	109	248					75-125
Manganese	124	77.0	94.8	49.6					75-125
Mercury	0.295	0.013	91.0	0.310					75-125
Nickel	62.8	13.9	98.6	49.6					75-125
Potassium	585	366	88.3	248					75-125
Selenium	46.6	ND	94.0	49.6					75-125
Silver	55.8	ND	113	49.6					75-125
Sodium	331	96.9	94.4	248					75-125
Thallium	49.2	ND	99.2	49.6					75-125
Vanadium	68.2	19.5	98.2	49.6					75-125
Zinc	82.4	35.1	95.4	49.6					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 00500-009
% Solids: 80.8
QC Sample 1 for following samples:
00167-002; 00339-004; 00426-001~002; 00500-002,004,006
00500-009,012,015; 00541-001; 00542-001~002
00596-001~005; 00597-001

QC Sample 2 _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 025
SDG #: 00167, 00339, 00426, 00500, 00541, 00542, 00596, 00597

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	8540	8510	0.352				
Antimony	NA	ND	ND	NC				
Arsenic	20	2.21	2.26	2.24				
Barium	20	115	115	0				
Beryllium	20	0.594	0.612	2.99				
Cadmium	NA	ND	ND	NC				
Calcium	20	1510	1510	0				
Chromium	20	14.6	14.5	0.687				
Cobalt	20	5.97	5.95	0.336				
Copper	20	12.5	12.5	0				
Iron	20	15900	15800	0.631				
Lead	20	6.00	5.95	0.837				
Magnesium	20	1940	1930	0.517				
Manganese	20	77.0	76.5	0.651				
Mercury	20	0.013	0.015	14.3				
Nickel	20	13.9	13.7	1.45				
Potassium	20	366	364	0.548				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Sodium	20	96.9	98.1	1.23				
Thallium	NA	ND	ND	NC				
Vanadium	20	19.5	19.4	0.514				
Zinc	20	35.1	34.9	0.571				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1 00500-009
% Solids: 80.8
QC Sample 1 for following samples:
00167-002; 00339-004; 00426-001~002; 00500-002,004,006
00500-009,012,015; 00541-001; 00542-001~002
00596-001~005; 00597-001

QC Sample 2 _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 025
SDG #: 00167, 00339, 00426, 00500, 00541, 00542, 00596, 00597

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	8540	8720	2.09			
Antimony	ND	ND	NC	50.3	49.6	101
Arsenic	2.21	2.06	7.03	59.5	49.6	116.0
Barium	115	117	1.72			
Beryllium	0.594	0.595	0.168	53.9	49.6	107.0
Cadmium	ND	ND	NC	55.1	49.6	111
Calcium	1510	1480	2.01			
Chromium	14.6	14.7	0.683			
Cobalt	5.97	6.09	1.99	65.7	49.6	120.0
Copper	12.5	12.5	0			
Iron	15900	16200	1.87			
Lead	6.00	6.19	3.12			
Magnesium	1940	2020	4.04			
Manganese	77.0	78.3	1.67			
Nickel	13.9	14.9	6.94			
Potassium	366	339	7.66			
Selenium	ND	ND	NC	55.4	49.6	112
Silver	ND	ND	NC	58.3	49.6	118
Sodium	96.9	ND	NC	1300	992	121.0
Thallium	ND	ND	NC	55.3	49.6	111
Vanadium	19.5	18.2	6.90			
Zinc	35.1	35.3	0.568	84.4	49.6	99.4

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample1 : 00500-009
QC Sample 1 for following samples:
00167-002; 00339-004; 00426-001~002; 00500-002,004,006
00500-009,012,015; 00541-001; 00542-001~002
00596-001~005; 00597-001

SAMPLE TRACKING

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO	REPORTING INFO
Company: Peak Environmental	REPORT TO: See Cust Info
Address: 74 Main St	Address:
Woodbridge, NJ	
Telephone #: 732 326 1010	Attn:
Fax #: " " 1012	FAX #
Project Manager: S. Salmon	INVOICE TO: See Cust Info
EMAIL Address:	Address:
Sampler: J. Rizzo	
Project Name: 4202 18th Ave	
Project Location (State): NY	Attn:
Bottle Order #: BO-0189	PO #
Quote # :	

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify): 2 wk

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **	Report Format	EDDs
24 hr - 100%...	Results Only	NJ SRP format
48 hr - 75%....	Reduced	NYSDEC
72 hr - 50%....	Regulatory - 15% Surcharge applies	lab approved custom EDD
96 hr - 35%....	Other (describe)	NO EDD/CD REQ'D
5 day - 25%....		
6-9 day 10%		

Cooler Temp 4 °C

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

SAMPLE INFORMATION

ANALYTICAL PARAMETERS / **# BOTTLES & PRESERVATIVES**

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	TAL #	EPH w/ contingent VO/SVOC/PCB/metals	NYS DEC Table 2 (VO)	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
SB-1	5.5/6.0	1/8/13	0820	S	5	1	X								2	3
2	9.0/9.5		0920		4	2		X							1	3
3	5.0/5.5		0955		4	3		X							1	3
4	12.5/13.0		1020		4	4		X							1	3
5	11/11.5		1045		4	5		X							1	3
6	12.0/12.5		1110		4	6		X							1	3
7	1.0/1.5		1155		5	7 2	X								2	3
8	1.0/1.5		1240		5	8 3	X								2	3

Known Hazard: Yes or No Describe: Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): ____ IAL Courier ____ Client Courier X FedEx/UPS

	Signature/Company	Date	Time		Signature/Company	Date	Time
Relinquished by:	Joe Rizzo	1/5/13	1600	Received by:		1/5/13	1630
Relinquished by:		1/5/13	1800	Received by:		1/4/13	1800
Relinquished by:				Received by:			
Relinquished by:				Received by:			
Relinquished by:				Received by:			

Comments:

Lab Case # 00144 00167

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2012 REV COC

01/2012 rev

E13-001167 0284

PROJECT INFORMATION

** RUSH **

E13-00167

Case No. E13-00167 **Project** 4202 18TH AVE.

Customer	**Peak Environmental Inc.**	**P.O. #**	
Contact	Scott Salmon	**Received**	1/4/2013 18:00
EMail	scott@peak-environmental.com ☑ EMail EDDs	**Verbal Due**	1/25/2013
Phone	(732) 326-1010 **Fax**	**Report Due**	2/1/2013

Report To

74 Main Street
2nd Floor
Woodbridge, NJ 07095
Attn: Scott Salmon

Bill To

74 Main Street
2nd Floor
Woodbridge, NJ 07095
Attn: Mary Ellen Timmes

Report Format **Reduced**

Additional Info ☐ State Form ☐ Field Sampling ☑ Conditional

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
00167-001	SB-1	5.5 / 6	1/4/2013@08:20	Soil	mg/Kg	5
00167-002	SB-7	1 / 1.5	1/4/2013@11:55	Soil	mg/Kg	5
00167-003	SB-8	1 / 1.5	1/4/2013@12:40	Soil	mg/Kg	5

Sample #	Tests	Status	QA Method
001	TCL VO + 15	Cancel	8260B
"	TCL BN + 15	Cancel	8270C
"	NJ-EPH-C40	Complete	Method 10.08 Rev 3
"	NJ-EPH-Fractionated	Cancel	Method 10.08 Rev 3
"	TCL PCB	Cancel	8082
"	TAL Metals	Cancel	6020/7471A
002	TCL VO + 15	Run	8260B
"	TCL BN + 15	In Process	8270C
"	NJ-EPH-C40	Cancel	Method 10.08 Rev 3
"	NJ-EPH-Fractionated	Complete	Method 10.08 Rev 3
"	TCL PCB	In Process	8082
"	TAL Metals	Run	6020/7471A
003	TCL VO + 15	Cancel	8260B
"	TCL BN + 15	Cancel	8270C
"	NJ-EPH-C40	Complete	Method 10.08 Rev 3
"	NJ-EPH-Fractionated	Cancel	Method 10.08 Rev 3
"	TCL PCB	Cancel	8082
"	TAL Metals	Cancel	6020/7471A

01/07/2013 13:38 by Ellen - NOTE 1

3 ENCORS RECEIVED - 1 INTO MEOH/2 INTO H2O

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

January 18, 2013

PROJECT INFORMATION

** RUSH **

E13-00167

Case No. E13-00167 **Project** 4202 18TH AVE.

01/07/2013 13:42 by Ellen - NOTE 2

SAMPLES RECEIVED FOR EPH W/ CONDITIONAL ANALYSES REQUESTING NJ IGW MDLs & VO FOR NY CP-51 MDLs ON SAME COC. AS PER MARK'S CONVERSATION W/ JOE R., PLEASE SPLIT INTO TWO SEPARATE JOBS SO RCS CAN BE CREATED FOR EACH SET OF SAMPLES. CP-51 VOs SAMPLES LOGGED IN UNDER JOB #E13-00144.

01/10/2013 15:02 by melissa - REV 1

DUE TO HIGH EPH-C40 RESULTS, SAMPLE 002 NEEDS TO BE ANALYZED FOR EPH-FRACTIONATED

01/18/2013 11:24 by melissa - REV 2

REV 02 DUE 1/22

AS PER JOE RIZZO, ACTIVATE SAMPLE 002 FOR VO, BN, PCB AND METALS ON A 48 HOUR TURN.

01/18/2013 16:33 by kim - REV 3

REV 03 DUE 1/25

CHANGE REV 2 TO 1 WEEK TURNAROUND, PER SCOTT SALMON.

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **00167** CLIENT: Peak

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = **YES/NA**
✗ = **NO**

✓ Bottles Intact
✓ no-Missing Bottles
✓ no-Extra Bottles

✓ Sufficient Sample Volume
✓ no-headspace/bubbles in VOs
✓ Labels intact/correct
✓ pH Check (exclude VOs)[1]
✓ Correct bottles/preservative
✓ Sufficient Holding/Prep Time[1]
[ ] Sample to be Subcontracted
✓ **Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 1/4/13

CORRECTIVE ACTION REQUIRED: **YES** [ ] (SEE BELOW) **NO** [ ]

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 1.7.13

Laboratory Custody Chronicle

IAL Case No.

E13-00167

Client Peak Environmental Inc.

Project 4202 18TH AVE.

Received On 1/ 4/2013@18:00

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO + 15	00167-002	Soil	n/a	n/a	1/18/13	Xing

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BN + 15	-002	Soil	1/18/13	Kou-Liang	1/21/13	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NJ-EPH-C40	-001	Soil	1/ 8/13	Archimede	1/10/13	Margaret
"	-003	"	1/ 8/13	Archimede	1/10/13	Margaret
NJ-EPH-Fractionated	-002	Soil	1/11/13	Archimede	1/13/13	Margaret
TCL PCB	-002	Soil	1/18/13	Archimede	1/18/13	Julia

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TAL Metals	-002	Soil	1/21/13	Lisa	1/21/13	RPittenger

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

Peak Environmental Inc.
74 Main Street
2nd Floor
Woodbridge, NJ 07095

Project Name: **4202 18TH AVE.**
IAL Case Number: **E13-00144**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

Sample Summary

IAL Case No.

E13-00144

Client Peak Environmental Inc.

Project 4202 18TH AVE.

Received On 1/ 4/2013@18:00

Lab ID	Client Sample ID	Depth Top/Bottom	Sampling Time	Matrix	# of Container
00144-001	SB-2	9/9.5	1/ 4/2013@08:20	Soil	5
00144-002	SB-3	5/5.5	1/ 4/2013@09:20	Soil	4
00144-003	SB-4	12.5/13	1/ 4/2013@09:55	Soil	4
00144-004	SB-5	11/11.5	1/ 4/2013@10:20	Soil	4
00144-005	SB-6	12/12.5	1/ 4/2013@10:45	Soil	3

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on January 23, 2013

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicated analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument for that specific analysis.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received five (5) soil sample(s) from Peak Environmental Inc. (IAL SDG # E13-00144, Project: 4202 18TH AVE.) on January 4, 2013 for the analysis of:

(5) NYCP51T2

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

1/22/13
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-00144

Volatiles By 8260B

Batch ID: J130109	**Matrix: Soil**

QC

- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E13-00144

- All samples were analyzed within holding time.
- 00144-002 was run at 1000x dilution due to high concentration of 1,2,4-Trimethylbenzene.

1/10/13

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Peak Environmental Inc.
Project: 4202 18TH AVE.
Lab Case No.: E13-00144

Lab ID:	00144-001			00144-002			00144-003			00144-004		
Client ID:	SB-2			SB-3			SB-4			SB-5		
Depth:	9/9.5			5/5.5			12.5/13			11/11.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	1/4/13			1/4/13			1/4/13			1/4/13		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*		
Methyl tert-butyl ether (MTBE)	ND		0.000971	ND		1.12	ND		0.00138	ND		0.00127
Benzene	ND		0.00101	ND		0.962	ND		0.00144	ND		0.00132
Toluene	ND		0.00106	4.01		0.921	ND		0.0015	ND		0.00138
Ethylbenzene	ND		0.00131	12.0		1.44	ND		0.00186	ND		0.00171
Total Xylenes	ND		0.0045	199		2.80	ND		0.0064	ND		0.0058
Isopropylbenzene	ND		0.00173	4.95		1.08	ND		0.00246	ND		0.00226
n-Propylbenzene	ND		0.00148	14.8		1.48	ND		0.0021	ND		0.00193
1,3,5-Trimethylbenzene	ND		0.0016	208		1.40	ND		0.00228	ND		0.00209
tert-Butylbenzene	ND		0.00143	ND		1.24	ND		0.00204	ND		0.00187
1,2,4-Trimethylbenzene	ND		0.0016	590		1.36	ND		0.00228	ND		0.00209
sec-Butylbenzene	ND		0.00169	ND		1.52	ND		0.0024	ND		0.0022
4-Isopropyltoluene	ND		0.0019	5.00		1.56	ND		0.0027	ND		0.00248
n-Butylbenzene	ND		0.00198	29.9		1.92	ND		0.00282	ND		0.00259
Naphthalene	ND		0.00177	86.3		1.04	ND		0.00252	ND		0.00231

Lab ID:	00144-005		
Client ID:	SB-6		
Depth:	12/12.5		
Matrix:	Soil		
Sampled Date	1/4/13		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg-ppm)*		
Methyl tert-butyl ether (MTBE)	ND		0.000922
Benzene	ND		0.000962
Toluene	ND		0.001
Ethylbenzene	ND		0.00124
Total Xylenes	ND		0.0043
Isopropylbenzene	ND		0.00164
n-Propylbenzene	ND		0.0014
1,3,5-Trimethylbenzene	ND		0.00152
tert-Butylbenzene	ND		0.00136
1,2,4-Trimethylbenzene	ND		0.00152
sec-Butylbenzene	ND		0.0016
4-Isopropyltoluene	ND		0.0018
n-Butylbenzene	ND		0.00188
Naphthalene	ND		0.00168

ND = Analyzed for but Not Detected at the MDL

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00144-001
Client ID: SB-2/9-9.5
Date Received: 01/04/2013
Date Analyzed: 01/09/2013
Data file: F1663.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 0.9
% Moisture: 79.2

Compound	Concentration	Q	RL	MDL
Methyl tert-butyl ether (MTBE)	ND		0.00422	0.000971
Benzene	ND		0.00422	0.00101
Toluene	ND		0.00422	0.00106
Ethylbenzene	ND		0.00422	0.00131
Total Xylenes	ND		0.00844	0.0045
Isopropylbenzene	ND		0.00422	0.00173
n-Propylbenzene	ND		0.00422	0.00148
1,3,5-Trimethylbenzene	ND		0.00422	0.0016
tert-Butylbenzene	ND		0.00422	0.00143
1,2,4-Trimethylbenzene	ND		0.00422	0.0016
sec-Butylbenzene	ND		0.00422	0.00169
4-Isopropyltoluene	ND		0.00422	0.0019
n-Butylbenzene	ND		0.00422	0.00198
Naphthalene	ND		0.00422	0.00177

Total Target Compounds (14): 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00144-002
Client ID: SB-3/5-5.5
Date Received: 01/04/2013
Date Analyzed: 01/09/2013
Data file: J6241.D

GC/MS Column: DB-624
Sample wt/vol: 0.006g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 10
% Moisture: 79.2

Compound	Concentration	Q	RL	MDL
Methyl tert-butyl ether (MTBE)	ND		4.01	1.12
Benzene	ND		4.01	0.962
Toluene	4.01		4.01	0.921
Ethylbenzene	12.0		4.01	1.44
Total Xylenes	199		8.01	2.80
Isopropylbenzene	4.95		4.01	1.08
n-Propylbenzene	14.8		4.01	1.48
1,3,5-Trimethylbenzene	208		4.01	1.40
tert-Butylbenzene	ND		4.01	1.24
1,2,4-Trimethylbenzene	590		4.01	1.36
sec-Butylbenzene	ND		4.01	1.52
4-Isopropyltoluene	5.00		4.01	1.56
n-Butylbenzene	29.9		4.01	1.92
Naphthalene	86.3		4.01	1.04

Total Target Compounds (14): 1150

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00144-003
Client ID: SB-4/12.5-13
Date Received: 01/04/2013
Date Analyzed: 01/09/2013
Data file: F1664.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1.1
% Moisture: 81.5

Compound	Concentration	Q	RL	MDL
Methyl tert-butyl ether (MTBE)	ND		0.00601	0.00138
Benzene	ND		0.00601	0.00144
Toluene	ND		0.00601	0.0015
Ethylbenzene	ND		0.00601	0.00186
Total Xylenes	ND		0.012	0.0064
Isopropylbenzene	ND		0.00601	0.00246
n-Propylbenzene	ND		0.00601	0.0021
1,3,5-Trimethylbenzene	ND		0.00601	0.00228
tert-Butylbenzene	ND		0.00601	0.00204
1,2,4-Trimethylbenzene	ND		0.00601	0.00228
sec-Butylbenzene	ND		0.00601	0.0024
4-Isopropyltoluene	ND		0.00601	0.0027
n-Butylbenzene	ND		0.00601	0.00282
Naphthalene	ND		0.00601	0.00252

Total Target Compounds (14): 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00144-004
Client ID: SB-5/11-11.5
Date Received: 01/04/2013
Date Analyzed: 01/09/2013
Data file: F1665.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1.1
% Moisture: 80.7

Compound	Concentration	Q	RL	MDL
Methyl tert-butyl ether (MTBE)	ND		0.00551	0.00127
Benzene	ND		0.00551	0.00132
Toluene	ND		0.00551	0.00138
Ethylbenzene	ND		0.00551	0.00171
Total Xylenes	ND		0.011	0.0058
Isopropylbenzene	ND		0.00551	0.00226
n-Propylbenzene	ND		0.00551	0.00193
1,3,5-Trimethylbenzene	ND		0.00551	0.00209
tert-Butylbenzene	ND		0.00551	0.00187
1,2,4-Trimethylbenzene	ND		0.00551	0.00209
sec-Butylbenzene	ND		0.00551	0.0022
4-Isopropyltoluene	ND		0.00551	0.00248
n-Butylbenzene	ND		0.00551	0.00259
Naphthalene	ND		0.00551	0.00231

Total Target Compounds (14): 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00144-005
Client ID: SB-6/12-12.5
Date Received: 01/04/2013
Date Analyzed: 01/09/2013
Data file: F1666.D

GC/MS Column: DB-624
Sample wt/vol: 6.4g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 0.8
% Moisture: 80.5

Compound	Concentration	Q	RL	MDL
Methyl tert-butyl ether (MTBE)	ND		0.00401	0.000922
Benzene	ND		0.00401	0.000962
Toluene	ND		0.00401	0.001
Ethylbenzene	ND		0.00401	0.00124
Total Xylenes	ND		0.00802	0.0043
Isopropylbenzene	ND		0.00401	0.00164
n-Propylbenzene	ND		0.00401	0.0014
1,3,5-Trimethylbenzene	ND		0.00401	0.00152
tert-Butylbenzene	ND		0.00401	0.00136
1,2,4-Trimethylbenzene	ND		0.00401	0.00152
sec-Butylbenzene	ND		0.00401	0.0016
4-Isopropyltoluene	ND		0.00401	0.0018
n-Butylbenzene	ND		0.00401	0.00188
Naphthalene	ND		0.00401	0.00168

Total Target Compounds (14): 0

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/08/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS130108	SOIL	F1654.D	94	99	108
LCSS130108	SOIL	F1655.D	95	104	110
LCSDS130108	SOIL	F1656.D	93	102	125
12686-001	SOIL	F1657.D	69	100	106
12686-002	SOIL	F1658.D	72	101	106
12686-003	SOIL	F1659.D	61	101	102
12686-004	SOIL	F1660.D	65	100	105
12686-005	SOIL	F1661.D	73	101	105
12686-006	SOIL	F1662.D	71	101	106
00144-001	SOIL	F1663.D	77	102	110
00144-003	SOIL	F1664.D	72	102	108
00144-004	SOIL	F1665.D	70	102	107
00144-005	SOIL	F1666.D	64	103	106
00172-001	SOIL	F1667.D	78	101	108
00172-002	SOIL	F1668.D	68	101	108
00172-003	SOIL	F1669.D	75	101	109
00172-004	SOIL	F1670.D	67	103	105

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	55-153	37-158
SMC2 = Toluene-d8	50 ppb	56-151	45-154
SMC3 = Bromofluorobenzene	50 ppb	67-140	46-150

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 01/09/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS130109	SOIL	J6230.D	100	101	101
00084-002	MEOH	J6231.D	99	106	104
00138-001	SOIL	J6233.D	103	100	106
LCSS130109	MEOH	J6234.D	79	77	82
00231-001MS	MEOH	J6235.D	96	101	102
00231-001MSD	MEOH	J6236.D	80	75	81
00202-001	MEOH	J6240.D	100	100	91
00144-002	MEOH	J6241.D	101	102	103
00151-006	SOIL	J6242.D	104	100	101
00175-001	SOIL	J6243.D	103	100	101
00171-001	SOIL	J6244.D	96	100	102

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	59-138	43-133
SMC2 = Toluene-d8	50 ppb	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	42-152	45-145

Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

8260LCS

LCS ACCURACY REPORT

Lab ID: LCSS130109
Date Received:
Date Analyzed: 01/09/2013
LCS Data file: J6234.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-μg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.00	47.9	96
Chloromethane	50.0	0.00	47.2	94
Vinyl chloride	50.0	0.00	48.9	98
Bromomethane	50.0	0.00	48.5	97
Chloroethane	50.0	0.00	51.3	103
Trichlorofluoromethane	50.0	0.00	56.4	113
Acrolein	150	0.00	142.6	95
1,1-Dichloroethene	50.0	0.00	56.6	113
Acetone	50.0	0.00	61.3	123
Carbon disulfide	50.0	0.00	51.2	102
Vinyl acetate	50.0	0.00	50.7	101
Methylene chloride	50.0	0.00	51.6	103
Acrylonitrile	150.0	0.00	175.2	117
tert-Butyl alcohol (TBA)	100.0	0.00	127.8	128
trans-1,2-Dichloroethene	50.0	0.00	54.7	109
Methyl tert-butyl ether (MTBE)	50.0	0.00	54.1	108
1,1-Dichloroethane	50.0	0.00	52.5	105
Diisopropyl ether (DIPE)	50.0	0.00	53.5	107
cis-1,2-Dichloroethene	50.0	0.00	54.6	109
2,2-Dichloropropane	50.0	0.00	63.1	126
2-Butanone (MEK)	50.0	0.00	59.9	120
Bromochloromethane	50.0	0.00	55.8	112
Chloroform	50.0	0.00	51.7	103
1,1,1-Trichloroethane	50.0	0.00	57.8	116
Carbon tetrachloride	50.0	0.00	58.3	117
1,1-Dichloropropene	50.0	0.00	55.1	110
1,2-Dichloroethane (EDC)	50.0	0.00	53.7	107
Benzene	50.0	0.00	49.0	98
Trichloroethene	50.0	0.00	51.2	102
1,2-Dichloropropane	50.0	0.00	49.7	99
Dibromomethane	50.0	0.00	51.0	102
1,4-Dioxane	1500	0.00	1714	114
Bromodichloromethane	50.0	0.00	50.6	101
2-Chloroethyl vinyl ether	50.0	0.00	54.1	108
cis-1,3-Dichloropropene	50.0	0.00	52.8	106
4-Methyl-2-pentanone (MIBK)	50.0	0.00	55.2	110
Toluene	50.0	0.00	49.6	99
trans-1,3-Dichloropropene	50.0	0.00	54.4	109
1,1,2-Trichloroethane	50.0	0.00	51.7	103
Tetrachloroethene	50.0	0.00	46.9	94
1,3-Dichloropropane	50.0	0.00	51.3	103

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130109
Date Received:
Date Analyzed: 01/09/2013
LCS Data file: J6234.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.
2-Hexanone	50.0	0.00	53.7	107
Dibromochloromethane	50.0	0.00	53.0	106
1,2-Dibromoethane (EDB)	50.0	0.00	54.0	108
Chlorobenzene	50.0	0.00	47.3	95
1,1,1,2-Tetrachloroethane	50.0	0.00	50.3	101
Ethylbenzene	50.0	0.00	50.1	100
m,p-Xylene	100.0	0.00	100.3	100
o-Xylene	50.0	0.00	54.2	108
Styrene	50.0	0.00	52.2	104
Bromoform	50.0	0.00	52.4	105
Isopropylbenzene	50.0	0.00	55.9	112
1,1,2,2-Tetrachloroethane	50.0	0.00	49.3	99
Bromobenzene	50.0	0.00	50.6	101
1,2,3-Trichloropropane	50.0	0.00	45.9	92
n-Propylbenzene	50.0	0.00	53.9	108
2-Chlorotoluene	50.0	0.00	54.6	109
1,3,5-Trimethylbenzene	50.0	0.00	56.8	114
4-Chlorotoluene	50.0	0.00	53.0	106
tert-Butylbenzene	50.0	0.00	60.9	122
1,2,4-Trimethylbenzene	50.0	0.00	59.5	119
sec-Butylbenzene	50.0	0.00	58.7	117
1,3-Dichlorobenzene	50.0	0.00	54.6	109
4-Isopropyltoluene	50.0	0.00	61.5	123
1,4-Dichlorobenzene	50.0	0.00	54.4	109
n-Butylbenzene	50.0	0.00	61.4	123
1,2-Dichlorobenzene	50.0	0.00	55.6	111
1,2-Dibromo-3-chloropropane	50.0	0.00	56.9	114
1,2,4-Trichlorobenzene	50.0	0.00	63.7	127
Hexachlorobutadiene	50.0	0.00	63.6	127
Naphthalene	50.0	0.00	60.4	121
1,2,3-Trichlorobenzene	50.0	0.00	57.5	115
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.00	55.5	111
Methyl acetate	50.0	0.00	45.3	91
Cyclohexane	50.0	0.00	44.0	88
Methylcyclohexane	50.0	0.00	56.3	113

	Aqueous	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits
Up to 10% of the compounds may be out , but must be within 40-160%

INTEGRATED ANALYTICAL LABORATORIES

8260MS/MSD **MS/MSD SPIKE REPORT**

Lab ID: BLKS130108
Client ID: BLKS130108
Date Received:
Date Analyzed: 01/08/2013
MS Data file: F1655.D
MSD Data file: F1656.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50	0.0	35.7	71		36.5	73		2	
Chloromethane	50	0.0	50.1	100		46.5	93		7	
Vinyl chloride	50	0.0	60.1	120		53.3	107		12	
Bromomethane	50	0.0	62.1	124		61.7	123		1	
Chloroethane	50	0.0	63.5	127		62.3	125		2	
Trichlorofluoromethane	50	0.0	61.8	124		58.0	116		6	
Acrolein	150	0.0	164	109		177	118		8	
1,1-Dichloroethene	50	0.0	64.1	128		62.3	125		3	
Acetone	50	0.0	46.3	93		46.2	92		0	
Carbon disulfide	50	0.0	64.2	128		52.6	105		20	
Vinyl acetate	50	0.0	49.3	99		42.1	84		16	
Methylene chloride	50	0.0	64.1	128		56.7	113		12	
Acrylonitrile	150	0.0	195	130		163	109		18	
tert-Butyl alcohol (TBA)	100	0.0	96.6	97		97.9	98		1	
trans-1,2-Dichloroethene	50	0.0	59.2	118		51.3	103		14	
Methyl tert-butyl ether (MTE	50	0.0	46.4	93		46.9	94		1	
1,1-Dichloroethane	50	0.0	56.6	113		50.8	102		11	
Diisopropyl ether (DIPE)	50	0.0	53.1	106		49.5	99		7	
cis-1,2-Dichloroethene	50	0.0	56.8	114		51.1	102		11	
2,2-Dichloropropane	50	0.0	51.2	102		46.7	93		9	
2-Butanone (MEK)	50	0.0	50.2	100		47.9	96		5	
Bromochloromethane	50	0.0	52.4	105		49.8	100		5	
Chloroform	50	0.0	53.1	106		47.5	95		11	
1,1,1-Trichloroethane	50	0.0	55.1	110		47.9	96		14	
Carbon tetrachloride	50	0.0	48.5	97		41.8	84		15	
1,1-Dichloropropene	50	0.0	59.5	119		48.1	96		21	
1,2-Dichloroethane (EDC)	50	0.0	51.7	103		47.3	95		9	
Benzene	50	0.0	58.0	116		51.1	102		13	
Trichloroethene	50	0.0	59.3	119		49.6	99		18	
1,2-Dichloropropane	50	0.0	56.5	113		50.1	100		12	
Dibromomethane	50	0.0	51.5	103		48.9	98		5	
1,4-Dioxane	1,500	0.0	1729	115		1706	114		1	
Bromodichloromethane	50	0.0	52.2	104		45.8	92		13	
2-Chloroethyl vinyl ether	50	0.0	52.1	104		44.8	90		15	
cis-1,3-Dichloropropene	50	0.0	51.3	103		42.6	85		19	
4-Methyl-2-pentanone (MIBI	50	0.0	48.4	97		47.4	95		2	
Toluene	50	0.0	59.9	120		46.3	93		26	
trans-1,3-Dichloropropene	50	0.0	49.2	98		40.3	81		20	
1,1,2-Trichloroethane	50	0.0	53.1	106		51.6	103		3	
Tetrachloroethene	50	0.0	51.1	102		41.6	83		20	
1,3-Dichloropropane	50	0.0	53.1	106		46.4	93		13	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: BLKS130108
Client ID: BLKS130108
Date Received:
Date Analyzed: 01/08/2013
MS Data file: F1655.D
MSD Data file: F1656.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50	0.00	50.6	101		46.3	93		9	
Dibromochloromethane	50	0.00	48.3	97		41.4	83		15	
1,2-Dibromoethane (EDB)	50	0.00	53.0	106		46.0	92		14	
Chlorobenzene	50	0.00	54.8	110		48.9	98		11	
1,1,1,2-Tetrachloroethane	50	0.00	50.9	102		52.1	104		2	
Ethylbenzene	50	0.00	61.2	122		50.5	101		19	
m,p-Xylene	100	0.00	120.3	120		99.5	100		19	
o-Xylene	50	0.00	57.6	115		51.1	102		12	
Styrene	50	0.00	57.4	115		49.2	98		15	
Bromoform	50	0.00	39.7	79		40.8	82		3	
Isopropylbenzene	50	0.00	61.4	123		49.5	99		21	
1,1,2,2-Tetrachloroethane	50	0.00	48.6	97		54.3	109		11	
Bromobenzene	50	0.00	54.0	108		47.9	96		12	
1,2,3-Trichloropropane	50	0.00	47.4	95		54.3	109		14	
n-Propylbenzene	50	0.00	53.8	108		45.0	90		18	
2-Chlorotoluene	50	0.00	57.4	115		46.0	92		22	
1,3,5-Trimethylbenzene	50	0.00	58.9	118		46.9	94		23	
4-Chlorotoluene	50	0.00	56.7	113		42.9	86		28	
tert-Butylbenzene	50	0.00	59.5	119		47.7	95		22	
1,2,4-Trimethylbenzene	50	0.00	56.3	113		44.4	89		24	
sec-Butylbenzene	50	0.00	52.0	104		45.1	90		14	
1,3-Dichlorobenzene	50	0.00	54.1	108		43.2	86		22	
4-Isopropyltoluene	50	0.00	51.4	103		42.8	86		18	
1,4-Dichlorobenzene	50	0.00	52.7	105		41.7	83		23	
n-Butylbenzene	50	0.00	52.2	104		39.5	79		28	
1,2-Dichlorobenzene	50	0.00	50.6	101		46.0	92		10	
1,2-Dibromo-3-chloropropan	50	0.00	41.4	83		47.5	95		14	
1,2,4-Trichlorobenzene	50	0.00	44.8	90		42.1	84		6	
Hexachlorobutadiene	50	0.00	38.3	77		35.8	72		7	
Naphthalene	50	0.00	38.3	77		49.0	98		25	
1,2,3-Trichlorobenzene	50	0.00	44.3	89		47.6	95		7	
1,1,2-Trichloro-1,2,2-trifluor	50	0.00	62.0	124		64.9	130		5	
Methyl acetate	50	0.00	53.2	106		64.4	129		19	
Cyclohexane	50	0.00	61.7	123		64.4	129		4	
Methylcyclohexane	50	0.00	61.8	124		61.8	124		0	

	Aqueous	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

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

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

E13-00144 0020

INTEGRATED ANALYTICAL LABORATORIES

8260MS/MSD **MS/MSD SPIKE REPORT**

Lab ID: 00231-001
Client ID: 13-002
Date Received: 01/08/2013
Date Analyzed: 01/09/2013
MS Data file: J6235.D
MSD Data file: J6236.D

GC/MS Column: DB-624
Sample wt/vol: 0.048g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 6.60
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50	0.0	40.8	82		38.9	78		5	
Chloromethane	50	0.0	43.0	86		46.6	93		8	
Vinyl chloride	50	0.0	43.6	87		47.0	94		8	
Bromomethane	50	0.0	44.0	88		48.5	97		10	
Chloroethane	50	0.0	46.5	93		51.0	102		9	
Trichlorofluoromethane	50	0.0	50.2	100		50.6	101		1	
Acrolein	150	0.0	133	89		173	115		26	
1,1-Dichloroethene	50	0.0	52.7	105		55.2	110		5	
Acetone	50	0.0	61.6	123		55.3	111		11	
Carbon disulfide	50	0.0	47.1	94		50.5	101		7	
Vinyl acetate	50	0.0	45.2	90		49.0	98		8	
Methylene chloride	50	0.0	48.2	96		53.3	107		10	
Acrylonitrile	150	0.0	163	109		187	125		14	
tert-Butyl alcohol (TBA)	100	0.0	116.5	117		126.8	127		8	
trans-1,2-Dichloroethene	50	0.0	49.0	98		53.6	107		9	
Methyl tert-butyl ether (MTB	50	0.0	49.3	99		55.0	110		11	
1,1-Dichloroethane	50	0.0	47.7	95		52.8	106		10	
Diisopropyl ether (DIPE)	50	0.0	49.2	98		53.5	107		8	
cis-1,2-Dichloroethene	50	0.0	49.9	100		56.0	112		12	
2,2-Dichloropropane	50	0.0	55.6	111		61.6	123		10	
2-Butanone (MEK)	50	0.0	53.8	108		60.9	122		12	
Bromochloromethane	50	0.0	50.9	102		55.2	110		8	
Chloroform	50	0.0	47.4	95		52.3	105		10	
1,1,1-Trichloroethane	50	0.0	52.0	104		56.7	113		9	
Carbon tetrachloride	50	0.0	50.1	100		52.7	105		5	
1,1-Dichloropropene	50	0.0	49.6	99		52.1	104		5	
1,2-Dichloroethane (EDC)	50	0.0	49.6	99		54.7	109		10	
Benzene	50	0.0	48.9	98		48.8	98		0	
Trichloroethene	50	0.0	51.4	103		50.9	102		1	
1,2-Dichloropropane	50	0.0	49.8	100		49.6	99		0	
Dibromomethane	50	0.0	51.0	102		50.9	102		0	
1,4-Dioxane	1,500	0.0	1681	112		1900	127		12	
Bromodichloromethane	50	0.0	50.8	102		50.7	101		0	
2-Chloroethyl vinyl ether	50	0.0	53.5	107		53.3	107		0	
cis-1,3-Dichloropropene	50	0.0	52.8	106		53.1	106		1	
4-Methyl-2-pentanone (MIBK	50	0.0	55.2	110		54.8	110		1	
Toluene	50	0.0	49.8	100		49.2	98		1	
trans-1,3-Dichloropropene	50	0.0	54.1	108		53.3	107		1	
1,1,2-Trichloroethane	50	0.0	51.0	102		50.7	101		1	
Tetrachloroethene	50	0.0	46.3	93		46.5	93		0	
1,3-Dichloropropane	50	0.0	51.1	102		50.6	101		1	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 00231-001
Client ID: 13-002
Date Received: 01/08/2013
Date Analyzed: 01/09/2013
MS Data file: J6235.D
MSD Data file: J6236.D

GC/MS Column: DB-624
Sample wt/vol: 0.048g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 6.60
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50	0.00	53.1	106		52.2	104		2	
Dibromochloromethane	50	0.00	53.0	106		53.0	106		0	
1,2-Dibromoethane (EDB)	50	0.00	53.5	107		53.0	106		1	
Chlorobenzene	50	0.00	45.3	91		47.4	95		5	
1,1,1,2-Tetrachloroethane	50	0.00	47.4	95		49.9	100		5	
Ethylbenzene	50	0.00	48.0	96		49.8	100		4	
m,p-Xylene	100	0.00	96.8	97		101.1	101		4	
o-Xylene	50	0.00	51.4	103		54.2	108		5	
Styrene	50	0.00	50.2	100		52.6	105		5	
Bromoform	50	0.00	49.4	99		52.0	104		5	
Isopropylbenzene	50	0.00	52.4	105		55.5	111		6	
1,1,2,2-Tetrachloroethane	50	0.00	46.1	92		48.3	97		5	
Bromobenzene	50	0.00	48.4	97		50.9	102		5	
1,2,3-Trichloropropane	50	0.00	42.8	86		44.8	90		5	
n-Propylbenzene	50	0.00	51.1	102		53.4	107		4	
2-Chlorotoluene	50	0.00	51.7	103		54.6	109		5	
1,3,5-Trimethylbenzene	50	0.00	53.6	107		56.4	113		5	
4-Chlorotoluene	50	0.00	49.8	100		53.1	106		6	
tert-Butylbenzene	50	0.00	57.9	116		60.5	121		4	
1,2,4-Trimethylbenzene	50	0.00	55.9	112		59.2	118		6	
sec-Butylbenzene	50	0.00	56.3	113		58.9	118		5	
1,3-Dichlorobenzene	50	0.00	51.7	103		55.3	111		7	
4-Isopropyltoluene	50	0.00	58.5	117		61.3	123		5	
1,4-Dichlorobenzene	50	0.00	51.9	104		54.5	109		5	
n-Butylbenzene	50	0.00	59.2	118		62.1	124		5	
1,2-Dichlorobenzene	50	0.00	52.8	106		56.3	113		6	
1,2-Dibromo-3-chloropropan	50	0.00	54.0	108		55.1	110		2	
1,2,4-Trichlorobenzene	50	0.00	62.6	125		61.9	124		1	
Hexachlorobutadiene	50	0.00	63.6	127		64.2	128		1	
Naphthalene	50	0.00	63.8	128		60.0	120		6	
1,2,3-Trichlorobenzene	50	0.00	64.0	128		62.3	125		3	
1,1,2-Trichloro-1,2,2-trifluo	50	0.00	42.3	85		44.9	90		6	
Methyl acetate	50	0.00	42.9	86		46.5	93		8	
Cyclohexane	50	0.00	41.1	82		39.4	79		4	
Methylcyclohexane	50	0.00	52.7	105		48.2	96		9	

	Aqueous	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

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

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F1654.D

Instrument ID: MSD_F

Date Analyzed: 01/08/2013

Time Analyzed: 19:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
LCS-50PPB	LCSS130108	01/08/2013	20:09
LCSD-50PPB	LCSDS130108	01/08/2013	20:39
AOC-1-1/6-6.5	12686-001	01/08/2013	21:09
AOC-1-2/6-6.5	12686-002	01/08/2013	21:39
AOC-2-1/6-6.5	12686-003	01/08/2013	22:09
AOC-2-2/6-6.5	12686-004	01/08/2013	22:39
AOC-3-1/7-7.5	12686-005	01/08/2013	23:10
AOC-3-2/7-7.5	12686-006	01/08/2013	23:40
SB-2/9-9.5	00144-001	01/09/2013	0:09
SB-4/12.5-13	00144-003	01/09/2013	0:40
SB-5/11-11.5	00144-004	01/09/2013	1:09
SB-6/12-12.5	00144-005	01/09/2013	1:39
AEI-B1/12	00172-001	01/09/2013	2:09
AEI-B2/12	00172-002	01/09/2013	2:39
AEI-B3/12	00172-003	01/09/2013	3:08
AEI-B4/12	00172-004	01/09/2013	3:38

FORM 4

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J6230.D

Instrument ID: MSD_J

Date Analyzed: 01/09/2013

Time Analyzed: 15:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
B4/7.5-8	00084-002	01/09/2013	16:06
WASTE_CLASS/6.	00138-001	01/09/2013	17:02
LCS-50PPB	LCSS130109	01/09/2013	17:30
MS	00231-001MS	01/09/2013	17:57
MSD	00231-001MSD	01/09/2013	18:25
AOC-H_WC-001	00202-001	01/09/2013	20:16
SB-3/5-5.5	00144-002	01/09/2013	20:44
COMPOSITE	00151-006	01/09/2013	21:11
STOCKPILE	00175-001	01/09/2013	21:39
13-001	00171-001	01/09/2013	22:06

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1309.D BFB Injection Date: 12/18/2012

Inst ID: MSD_F BFB Injection Time: 9:13

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	20.4			
75	30.0 - 60.0% of mass 95	49.4			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.6	(	0.9	)1
174	Great than 50.0% of mass 95	64.7			
175	5.0 - 9.0% of mass 174	4.8	(	7.4	)1
176	95.0 - 101.0% of mass 174	61.7	(	95.4	)1
177	5.0 - 9.0% of mass 176	4.1	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC1	ICC1	F1310.D	12/18/2012	10:11
ICC5	ICC5	F1311.D	12/18/2012	12:22
ICC2	ICC2	F1312.D	12/18/2012	13:22
ICC20	ICC20	F1313.D	12/18/2012	13:52
ICC100	ICC100	F1314.D	12/18/2012	14:22
ICC150	ICC150	F1315.D	12/18/2012	15:23
ICC200	ICC200	F1316.D	12/18/2012	15:53
ICV100	ICV100	F1317.D	12/18/2012	16:23

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1651.D BFB Injection Date: 01/08/2013

Inst ID: MSD_F BFB Injection Time: 18:07

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.8			
75	30.0 - 60.0% of mass 95	47.9			
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	0.6	(	0.9	)1
174	Great than 50.0% of mass 95	69.6			
175	5.0 - 9.0% of mass 174	5.0	(	7.2	)1
176	95.0 - 101.0% of mass 174	66.7	(	95.9	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.6	)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	F1652.D	01/08/2013	18:37
BLKS130108	BLKS130108	F1654.D	01/08/2013	19:38
LCS-50PPB	LCSS130108	F1655.D	01/08/2013	20:09
LCSD-50PPB	LCSDS130108	F1656.D	01/08/2013	20:39
AOC-1-1/6-6.5	12686-001	F1657.D	01/08/2013	21:09
AOC-1-2/6-6.5	12686-002	F1658.D	01/08/2013	21:39
AOC-2-1/6-6.5	12686-003	F1659.D	01/08/2013	22:09
AOC-2-2/6-6.5	12686-004	F1660.D	01/08/2013	22:39
AOC-3-1/7-7.5	12686-005	F1661.D	01/08/2013	23:10
AOC-3-2/7-7.5	12686-006	F1662.D	01/08/2013	23:40
SB-2/9-9.5	00144-001	F1663.D	01/09/2013	0:09
SB-4/12.5-13	00144-003	F1664.D	01/09/2013	0:40
SB-5/11-11.5	00144-004	F1665.D	01/09/2013	1:09
SB-6/12-12.5	00144-005	F1666.D	01/09/2013	1:39
AEI-B1/12	00172-001	F1667.D	01/09/2013	2:09
AEI-B2/12	00172-002	F1668.D	01/09/2013	2:39
AEI-B3/12	00172-003	F1669.D	01/09/2013	3:08
AEI-B4/12	00172-004	F1670.D	01/09/2013	3:38

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J6012.D BFB Injection Date: 12/21/2012

Inst ID: MSD J BFB Injection Time: 14:53

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.1			
75	30.0 - 60.0% of mass 95	49.6			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.1	(	0.2	)1
174	Great than 50.0% of mass 95	66.3			
175	5.0 - 9.0% of mass 174	5.2	(	7.8	)1
176	95.0 - 101.0% of mass 174	64.8	(	97.7	)1
177	5.0 - 9.0% of mass 176	4.2	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC5	ICC5	J6015.D	12/21/2012	16:16
ICC2	ICC2	J6016.D	12/21/2012	16:44
ICC1	ICC1	J6017.D	12/21/2012	17:12
ICC20	ICC20	J6018.D	12/21/2012	17:40
ICC100	ICC100	J6019.D	12/21/2012	18:08
ICC200	ICC200	J6020.D	12/21/2012	19:31
ICC150	ICC150	J6021.D	12/21/2012	20:27
ICV100	ICV100	J6024.D	12/21/2012	21:48

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J6225.D BFB Injection Date: 01/09/2013

Inst ID: MSD J BFB Injection Time: 13:05

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	20.3			
75	30.0 - 60.0% of mass 95	48.2			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.3	(	0.4	)1
174	Great than 50.0% of mass 95	73.9			
175	5.0 - 9.0% of mass 174	5.3	(	7.2	)1
176	95.0 - 101.0% of mass 174	70.7	(	95.7	)1
177	5.0 - 9.0% of mass 176	4.5	(	6.4	)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	J6227.D	01/09/2013	14:02
BLKS130109	BLKS130109	J6230.D	01/09/2013	15:38
B4/7.5-8	00084-002	J6231.D	01/09/2013	16:06
WASTE_CLASS/6	00138-001	J6233.D	01/09/2013	17:02
LCS-50PPB	LCSS130109	J6234.D	01/09/2013	17:30
MS	00231-001MS	J6235.D	01/09/2013	17:57
MSD	00231-001MSD	J6236.D	01/09/2013	18:25
AOC-H_WC-001	00202-001	J6240.D	01/09/2013	20:16
SB-3/5-5.5	00144-002	J6241.D	01/09/2013	20:44
COMPOSITE	00151-006	J6242.D	01/09/2013	21:11
STOCKPILE	00175-001	J6243.D	01/09/2013	21:39
13-001	00171-001	J6244.D	01/09/2013	22:06

Response Factor Report MSD_F

Method Path : C:\MSDCHEM\1\METHODS\
Method File : FS01218.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Thu Dec 20 11:04:06 2012
Response Via : Initial Calibration

Calibration Files
1 =F1310.D 2 =F1312.D 5 =F1311.D
20 =F1313.D 100 =F1314.D 200 =F1316.D 150 =F1315.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------	----------	----------	ISTD	----------	----------	----------	----------	
2)	T	Dichlorodifluorom	0.534	0.556	0.382	0.580	0.622	0.618	0.580	0.553	14.76
3)	P	Chloromethane	0.620	0.497	0.500	0.491	0.474	0.596	0.507	0.527	10.84
4)	C	Vinyl chloride	0.480	0.456	0.362	0.403	0.427	0.542	0.446	0.445	12.87
5)	T	Bromomethane	0.163	0.175	0.212	0.202	0.155	0.172	0.145	0.175	13.93
6)	T	Chloroethane	0.241	0.219	0.186	0.213	0.174	0.228	0.161	0.203	14.58
7)	T	Trichlorofluorome	0.496	0.409	0.406	0.451	0.510	0.587	0.506	0.481	13.33
8)	T	Acrolein	0.020	0.013	0.017	0.018	0.017	0.021	0.016	0.017	14.17
9)	MC	1,1-Dichloroethen	0.324	0.252	0.281	0.274	0.292	0.288	0.290	0.286	7.62
0)	T	Acetone			0.140	0.099	0.120	0.107	0.109	0.115	13.94
1)	T	Carbon disulfide	1.116	0.874	1.014	0.979	1.036	1.367	1.040	1.061	14.49
2)	T	Vinyl acetate	2.427	1.913	2.017	1.955	1.941	2.154	1.909	2.045	9.22
3)	T	Methylene chlorid		0.412	0.377	0.330	0.294	0.380	0.297	0.349	13.88
4)	T	Acrylonitrile	0.170	0.139	0.173	0.179	0.179	0.172	0.174	0.169	8.28
5)	T	tert-Butyl alcoho		0.049	0.041	0.042	0.041	0.042	0.044	0.043	6.77
6)	T	trans-1,2-Dichlor	0.600	0.505	0.486	0.526	0.545	0.563	0.533	0.537	6.98
7)	T	Methyl tert-butyl	2.020	1.601	1.697	1.604	1.547	1.513	1.575	1.651	10.45
8)	P	1,1-Dichloroethan	1.129	1.008	1.000	1.031	1.077	1.201	1.082	1.075	6.68
9)	T	Diisopropyl ether	2.467	1.983	2.156	2.054	1.997	2.274	1.982	2.130	8.61
0)	T	cis-1,2-Dichloroe	0.652	0.555	0.570	0.559	0.570	0.595	0.567	0.581	5.82
1)	T	2,2-Dichloropropa	0.778	0.631	0.548	0.666	0.686	0.766	0.668	0.677	11.62
2)	T	2-Butanone (MEK)	0.274	0.238	0.227	0.230	0.226	0.247	0.247	0.241	7.09
3)	T	Bromochloromethan	0.295	0.242	0.260	0.245	0.251	0.251	0.256	0.257	6.94
5)	C	Chloroform	1.136	1.014	0.966	0.906	0.919	0.969	0.923	0.976	8.18
6)	T	1,1,1-Trichloroet	0.755	0.701	0.591	0.763	0.856	0.896	0.863	0.775	13.82
7)	T	Carbon tetrachlor	0.548	0.648	0.569	0.568	0.693	0.676	0.613	0.617	9.26
8)	T	1,1-Dichloroprope	0.671	0.816	0.626	0.703	0.749	0.796	0.741	0.729	9.24
9)	T	1,2-Dichloroethan	0.864	0.769	0.798	0.754	0.729	0.771	0.746	0.776	5.75
0)	S	1,2-Dichloroethan	0.459	0.468	0.438	0.455	0.464	0.506	0.483	0.468	4.63
1)	I	1,4-Difluorobenzene	----------	----------	----------	ISTD	----------	----------	----------	----------	
2)	M	Benzene	1.351	1.162	1.173	1.225	1.194	1.216	1.168	1.213	5.41
3)	M	Trichloroethene	0.329	0.289	0.281	0.312	0.318	0.314	0.312	0.308	5.41
4)	C	1,2-Dichloropropa	0.358	0.299	0.327	0.317	0.317	0.341	0.317	0.325	5.93
5)	T	Dibromomethane	0.188	0.165	0.173	0.166	0.158	0.153	0.162	0.166	6.96
6)	T	1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	12.29
7)	T	Bromodichlorometh	0.379	0.287	0.327	0.335	0.370	0.368	0.378	0.349	9.83
8)	T	2-Chloroethyl vin	0.189	0.154	0.171	0.172	0.168	0.191	0.178	0.175	7.20
9)	T	cis-1,3-Dichlorop	0.481	0.394	0.453	0.447	0.456	0.476	0.462	0.453	6.33
0)	T	4-Methyl-2-pentan	0.377	0.301	0.294	0.294	0.288	0.308	0.308	0.310	9.85
1)	S	Toluene-d8	0.856	0.833	0.840	0.850	0.862	0.902	0.864	0.858	2.62
2)	MC	Toluene	0.836	0.704	0.704	0.750	0.745	0.764	0.733	0.748	6.00
3)	T	trans-1,3-Dichlor	0.418	0.321	0.380	0.381	0.390	0.414	0.401	0.386	8.40
4)	T	1,1,2-Trichloroet	0.213	0.166	0.184	0.177	0.171	0.178	0.176	0.181	8.49
5)	T	Tetrachloroethene	0.346	0.292	0.329	0.336	0.318	0.303	0.309	0.319	6.00
6)	T	1,3-Dichloropropa	0.471	0.367	0.405	0.389	0.374	0.394	0.384	0.398	8.74
7)	T	2-Hexanone	0.238	0.194	0.191	0.193	0.187	0.215	0.204	0.203	8.86
8)	T	Dibromochlorometh	0.201	0.170	0.173	0.191	0.231	0.231	0.249	0.206	14.99
9)	T	1,2-Dibromoethane	0.228	0.191	0.211	0.205	0.201	0.202	0.209	0.207	5.41
0)	I	Chlorobenzene-d5	----------	----------	----------	ISTD	----------	----------	----------	----------	
1)	MP	Chlorobenzene	1.182	0.981	1.065	1.023	0.991	0.959	0.974	1.0	
2)	T	1,1,1,2-Tetrachlo	0.336	0.265	0.327	0.331	0.350	0.312	0.348	0.324	9.00

3)	C	Ethylbenzene	1.952	1.691	1.711	1.862	1.785	1.747	1.707	1.779	5.39
4)	T	m,p-Xylene	0.748	0.624	0.669	0.704	0.652	0.595	0.605	0.657	8.42
5)	T	o-Xylene	0.766	0.663	0.695	0.703	0.666	0.611	0.629	0.676	7.62
6)	T	Styrene	1.210	1.010	1.154	1.123	1.049	1.004	1.010	1.080	7.64
7)	P	Bromoform	0.130	0.128	0.146	0.124	0.168	0.160	0.176	0.147	14.25
8)	T	Isopropylbenzene	1.765	1.623	1.610	1.852	1.816	1.701	1.747	1.730	5.30
9)	S	Bromofluorobenzen	0.594	0.581	0.583	0.587	0.579	0.598	0.588	0.587	1.18
0)	P	1,1,2,2-Tetrachlo	0.493	0.382	0.405	0.384	0.352	0.322	0.357	0.385	14.20
1)	T	Bromobenzene	0.496	0.398	0.439	0.408	0.386	0.355	0.379	0.409	11.34
2)	T	1,2,3-Trichloropr	0.390	0.311	0.314	0.311	0.286	0.274	0.301	0.313	11.99
3)	T	n-Propylbenzene	2.171	1.887	1.928	2.182	2.111	2.074	2.047	2.057	5.52
4)	T	2-Chlorotoluene	1.520	1.281	1.361	1.365	1.296	1.264	1.263	1.336	6.86
5)	T	1,3,5-Trimethylbe	1.640	1.381	1.505	1.631	1.517	1.387	1.437	1.500	7.09
6)	T	4-Chlorotoluene	1.811	1.477	1.624	1.587	1.460	1.414	1.412	1.541	9.39
7)	T	tert-Butylbenzene	1.277	1.181	1.193	1.411	1.359	1.247	1.316	1.284	6.61
8)	T	1,2,4-Trimethylbe	1.723	1.444	1.615	1.650	1.538	1.436	1.490	1.557	7.02
9)	T	sec-Butylbenzene	1.858	1.596	1.683	2.059	1.981	1.865	1.923	1.852	8.77
0)	T	1,3-Dichlorobenze	0.969	0.783	0.903	0.844	0.802	0.739	0.787	0.832	9.55
1)	T	4-Isopropyltoluen	1.617	1.355	1.523	1.759	1.676	1.521	1.615	1.581	8.21
2)	T	1,4-Dichlorobenze	1.039	0.818	0.927	0.859	0.811	0.746	0.801	0.857	11.37
3)	T	n-Butylbenzene	0.885	0.688	0.795	0.920	0.888	0.830	0.852	0.837	9.25
4)	T	1,2-Dichlorobenze	0.957	0.794	0.887	0.826	0.738	0.642	0.722	0.795	13.37
5)	T	1,2-Dibromo-3-chl	0.068	0.051	0.054	0.063	0.063	0.057	0.073	0.061	12.73
6)	T	1,2,4-Trichlorobe	0.690	0.564	0.561	0.596	0.521	0.436	0.520	0.555	14.09
7)	T	Hexachlorobutadie	0.334	0.242	0.292	0.345	0.283	0.240	0.288	0.289	14.03
8)	T	Naphthalene	1.565	1.456	1.421	1.377	1.145	1.176	1.209	1.336	11.99
9)	T	1,2,3-Trichlorobe		0.474	0.538	0.483	0.437	0.353	0.446	0.455	13.47
0)	T	1,1,2-Trichloro-1	0.228	0.191	0.196	0.215	0.236	0.241	0.232	0.220	9.07
1)	T	Methyl acetate		0.178	0.176	0.160	0.141	0.168	0.150	0.162	9.02
2)	T	Cyclohexane			0.768	0.870	0.938	0.974	0.909	0.892	8.88
3)	T	Methylcyclohexane		0.637	0.779	0.655	0.750	0.771	0.729	0.720	8.37

#) = Out of Range ### Number of calibration levels exceeded format ###

O1218.M Thu Dec 20 11:08:56 2012 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\12-18-12\
Data File : F1317.D
Acq On : 18 Dec 2012 16:23
Operator : XING
Sample : ICV100,ICV100,S,5g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 20 14:40:03 2012
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.553	0.444	19.7	72	0.00
3	P	Chloromethane	0.527	0.447	15.2	95	0.00
4	C	Vinyl chloride	0.445	0.363	18.4	85	0.00
5	T	Bromomethane	0.175	0.147	16.0	95	0.00
6	T	Chloroethane	0.203	0.164	19.2	94	0.00
7	T	Trichlorofluoromethane	0.481	0.396	17.7	78	0.00
8	T	Acrolein	0.017	0.016	5.9	94	0.00
9	MC	1,1-Dichloroethene	0.286	0.244	14.7	84	0.00
10	T	Acetone	0.115	0.095	17.4	79	0.00
11	T	Carbon disulfide	1.061	0.891	16.0	86	0.00
12	T	Vinyl acetate	2.045	1.821	11.0	94	0.00
13	T	Methylene chloride	0.349	0.288	17.5	98	0.00
14	T	Acrylonitrile	0.169	0.173	-2.4	97	0.00
15	T	tert-Butyl alcohol (TBA)	0.043	0.040	7.0	98	0.01
16	T	trans-1,2-Dichloroethene	0.537	0.486	9.5	90	-0.01
17	T	Methyl tert-butyl ether (MT	1.651	1.538	6.8	100	0.00
18	P	1,1-Dichloroethane	1.075	0.994	7.5	93	0.00
19	T	Diisopropyl ether (DIPE)	2.130	1.938	9.0	97	0.01
20	T	cis-1,2-Dichloroethene	0.581	0.533	8.3	94	0.00
21	T	2,2-Dichloropropane	0.677	0.600	11.4	88	0.00
22	T	2-Butanone (MEK)	0.241	0.221	8.3	98	-0.01
23	T	Bromochloromethane	0.257	0.243	5.4	97	0.00
25	C	Chloroform	0.976	0.863	11.6	94	0.00
26	T	1,1,1-Trichloroethane	0.775	0.746	3.7	88	0.00
27	T	Carbon tetrachloride	0.617	0.592	4.1	86	0.00
28	T	1,1-Dichloropropene	0.729	0.639	12.3	86	0.00
29	T	1,2-Dichloroethane (EDC)	0.776	0.708	8.8	97	0.00
30	S	1,2-Dichloroethane-d4	0.468	0.463	1.1	100	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
32	M	Benzene	1.213	1.106	8.8	92	0.00
33	M	Trichloroethene	0.308	0.287	6.8	90	0.00
34	C	1,2-Dichloropropane	0.325	0.301	7.4	95	0.00
35	T	Dibromomethane	0.166	0.158	4.8	99	0.00
36	T	1,4-Dioxane	0.002	0.002	0.0	99	0.00
37	T	Bromodichloromethane	0.349	0.361	-3.4	97	0.00
38	T	2-Chloroethyl vinyl ether	0.175	0.166	5.1	99	0.00
39	T	cis-1,3-Dichloropropene	0.453	0.439	3.1	96	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.310	0.288	7.1	100	0.00
41	S	Toluene-d8	0.858	0.860	-0.2	99	0.00
42	MC	Toluene	0.748	0.685	8.4	92	0.00
43	T	trans-1,3-Dichloropropene	0.386	0.382	1.0	98	0.00
44	T	1,1,2-Trichloroethane	0.181	0.168	7.2	98	0.00
45	T	Tetrachloroethene	0.319	0.275	13.8	86	0.00
46	T	1,3-Dichloropropane	0.398	0.367	7.8	98	0.00

7	T	2-Hexanone	0.203	0.184	9.4	98	-0.01
8	T	Dibromochloromethane	0.206	0.235	-14.1	102	0.00
9	T	1,2-Dibromoethane (EDB)	0.207	0.200	3.4	99	0.00
0	I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
1	MP	Chlorobenzene	1.025	0.939	8.4	94	0.00
2	T	1,1,1,2-Tetrachloroethane	0.324	0.339	-4.6	96	0.00
3	C	Ethylbenzene	1.779	1.633	8.2	91	0.00
4	T	m,p-Xylene	0.657	0.603	8.2	92	0.00
5	T	o-Xylene	0.676	0.628	7.1	94	0.00
6	T	Styrene	1.080	1.009	6.6	96	0.00
7	P	Bromoform	0.147	0.175	-19.0	104	0.00
8	T	Isopropylbenzene	1.730	1.650	4.6	90	0.00
9	S	Bromofluorobenzene	0.587	0.583	0.7	100	0.00
0	P	1,1,2,2-Tetrachloroethane	0.385	0.350	9.1	99	0.00
1	T	Bromobenzene	0.409	0.374	8.6	96	-0.01
2	T	1,2,3-Trichloropropane	0.313	0.287	8.3	100	0.00
3	T	n-Propylbenzene	2.057	1.908	7.2	90	0.00
4	T	2-Chlorotoluene	1.336	1.221	8.6	94	0.00
5	T	1,3,5-Trimethylbenzene	1.500	1.410	6.0	92	0.00
6	T	4-Chlorotoluene	1.541	1.379	10.5	94	0.00
7	T	tert-Butylbenzene	1.284	1.233	4.0	90	0.00
8	T	1,2,4-Trimethylbenzene	1.557	1.451	6.8	94	0.00
9	T	sec-Butylbenzene	1.852	1.762	4.9	88	0.00
0	T	1,3-Dichlorobenzene	0.832	0.769	7.6	95	0.00
1	T	4-Isopropyltoluene	1.581	1.517	4.0	90	0.00
2	T	1,4-Dichlorobenzene	0.857	0.782	8.8	96	-0.01
3	T	n-Butylbenzene	0.837	0.797	4.8	89	0.00
4	T	1,2-Dichlorobenzene	0.795	0.730	8.2	98	0.00
5	T	1,2-Dibromo-3-chloropropane	0.061	0.067	-9.8	105	0.00
6	T	1,2,4-Trichlorobenzene	0.555	0.520	6.3	99	0.00
7	T	Hexachlorobutadiene	0.289	0.256	11.4	90	0.00
8	T	Naphthalene	1.336	1.196	10.5	104	0.00
9	T	1,2,3-Trichlorobenzene	0.455	0.440	3.3	100	0.00
0	T	1,1,2-Trichloro-1,2,2-trifl	0.220	0.182	17.3	76	-0.01
1	T	Methyl acetate	0.162	0.144	11.1	101	0.00
2	T	Cyclohexane	0.892	0.734	17.7	78	0.01
3	T	Methylcyclohexane	0.720	0.577	19.9	76	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

O1218.M Thu Dec 20 14:40:07 2012 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1652.D
Acq On : 8 Jan 2013 18:37
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 08 14:28:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	79	0.00
2	T	Dichlorodifluoromethane	0.553	0.529	4.3	67	0.00
3	P	Chloromethane	0.527	0.498	5.5	83	0.00
4	C	Vinyl chloride	0.445	0.469	-5.4	86	0.00
5	T	Bromomethane	0.175	0.192	-9.7	97	0.00
6	T	Chloroethane	0.203	0.220	-8.4	99	-0.02
7	T	Trichlorofluoromethane	0.481	0.545	-13.3	84	0.00
8	T	Acrolein	0.017	0.019	-11.8	87	0.00
9	MC	1,1-Dichloroethene	0.286	0.328	-14.7	88	0.00
10	T	Acetone	0.115	0.099	13.9	65	0.00
11	T	Carbon disulfide	1.061	1.094	-3.1	83	0.00
12	T	Vinyl acetate	2.045	1.791	12.4	73	0.00
13	T	Methylene chloride	0.349	0.378	-8.3	101	0.00
14	T	Acrylonitrile	0.169	0.194	-14.8	85	0.00
15	T	tert-Butyl alcohol (TBA)	0.043	0.043	0.0	83	0.00
16	T	trans-1,2-Dichloroethene	0.537	0.545	-1.5	79	-0.01
17	T	Methyl tert-butyl ether (MT	1.651	1.551	6.1	79	0.00
18	P	1,1-Dichloroethane	1.075	1.114	-3.6	81	0.00
19	T	Diisopropyl ether (DIPE)	2.130	2.099	1.5	83	0.00
20	T	cis-1,2-Dichloroethene	0.581	0.599	-3.1	83	-0.01
21	T	2,2-Dichloropropane	0.677	0.618	8.7	71	0.00
22	T	2-Butanone (MEK)	0.241	0.248	-2.9	86	-0.01
23	T	Bromochloromethane	0.257	0.266	-3.5	84	-0.01
25	C	Chloroform	0.976	0.944	3.3	81	0.00
26	T	1,1,1-Trichloroethane	0.775	0.756	2.5	70	0.00
27	T	Carbon tetrachloride	0.617	0.536	13.1	61	0.00
28	T	1,1-Dichloropropene	0.729	0.728	0.1	76	0.00
29	T	1,2-Dichloroethane (EDC)	0.776	0.763	1.7	82	-0.01
30	S	1,2-Dichloroethane-d4	0.468	0.435	7.1	74	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	77	-0.01
32	M	Benzene	1.213	1.240	-2.2	80	-0.01
33	M	Trichloroethene	0.308	0.315	-2.3	76	0.00
34	C	1,2-Dichloropropane	0.325	0.339	-4.3	82	-0.01
35	T	Dibromomethane	0.166	0.168	-1.2	81	0.00
36	T	1,4-Dioxane	0.002	0.002	0.0	73	-0.01
37	T	Bromodichloromethane	0.349	0.347	0.6	72	0.00
38	T	2-Chloroethyl vinyl ether	0.175	0.174	0.6	79	0.00
39	T	cis-1,3-Dichloropropene	0.453	0.423	6.6	71	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.310	0.318	-2.6	85	-0.01
41	S	Toluene-d8	0.858	0.866	-0.9	77	-0.01
42	MC	Toluene	0.748	0.705	5.7	73	0.00
43	T	trans-1,3-Dichloropropene	0.386	0.344	10.9	68	0.00
44	T	1,1,2-Trichloroethane	0.181	0.183	-1.1	82	0.00
45	T	Tetrachloroethene	0.319	0.271	15.0	65	0.00
46	T	1,3-Dichloropropane	0.398	0.387	2.8	79	0.00

7	T	2-Hexanone	0.203	0.203	0.0	83	-0.01
8	T	Dibromochloromethane	0.206	0.199	3.4	66	0.00
9	T	1,2-Dibromoethane (EDB)	0.207	0.203	1.9	78	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	58	0.00
51	MP	Chlorobenzene	1.025	1.170	-14.1	69	0.00
52	T	1,1,1,2-Tetrachloroethane	0.324	0.375	-15.7	62	0.00
53	C	Ethylbenzene	1.779	2.065	-16.1	67	-0.01
54	T	m,p-Xylene	0.657	0.744	-13.2	66	0.00
55	T	o-Xylene	0.676	0.784	-16.0	68	0.00
56	T	Styrene	1.080	1.224	-13.3	68	0.00
57	P	Bromoform	0.147	0.169	-15.0	58	-0.01
58	T	Isopropylbenzene	1.730	1.989	-15.0	64	-0.01
59	S	Bromofluorobenzene	0.587	0.690	-17.5	69	0.00
60	P	1,1,2,2-Tetrachloroethane	0.385	0.410	-6.5	68	0.00
61	T	Bromobenzene	0.409	0.452	-10.5	68	-0.01
62	T	1,2,3-Trichloropropane	0.313	0.352	-12.5	71	-0.01
63	T	n-Propylbenzene	2.057	2.145	-4.3	59	0.00
64	T	2-Chlorotoluene	1.336	1.405	-5.2	63	0.00
65	T	1,3,5-Trimethylbenzene	1.500	1.608	-7.2	62	0.00
66	T	4-Chlorotoluene	1.541	1.548	-0.5	62	0.00
67	T	tert-Butylbenzene	1.284	1.424	-10.9	61	0.00
68	T	1,2,4-Trimethylbenzene	1.557	1.603	-3.0	60	0.00
69	T	sec-Butylbenzene	1.852	1.956	-5.6	57	0.00
70	T	1,3-Dichlorobenzene	0.832	0.847	-1.8	61	-0.01
71	T	4-Isopropyltoluene	1.581	1.599	-1.1	55	0.00
72	T	1,4-Dichlorobenzene	0.857	0.845	1.4	61	-0.01
73	T	n-Butylbenzene	0.837	0.798	4.7	52	0.00
74	T	1,2-Dichlorobenzene	0.795	0.834	-4.9	66	0.00
75	T	1,2-Dibromo-3-chloropropane	0.061	0.068	-11.5	63	-0.01
76	T	1,2,4-Trichlorobenzene	0.555	0.585	-5.4	65	0.00
77	T	Hexachlorobutadiene	0.289	0.233	19.4	55	-0.01
78	T	Naphthalene	1.336	1.375	-2.9	70	0.00
79	T	1,2,3-Trichlorobenzene	0.455	0.451	0.9	60	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.220	0.252	-14.5	62	-0.01
81	T	Methyl acetate	0.162	0.183	-13.0	75	0.00
82	T	Cyclohexane	0.892	1.021	-14.5	63	0.01
83	T	Methylcyclohexane	0.720	0.801	-11.3	62	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

'SO1218.M Tue Jan 08 14:28:18 2013 RP1

Response Factor Report MSD_J

Method Path : C:\MSDCHEM\1\METHODS\
Method File : JAM1221.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sat Dec 22 17:09:31 2012
Response Via : Initial Calibration

Calibration Files
1 =J6017.D 2 =J6016.D 5 =J6015.D
20 =J6018.D 100 =J6019.D 200 =J6020.D 150 =J6021.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.405	0.361	0.347	0.381	0.378	0.399	0.383	0.379	5.37
3)	P	Chloromethane	0.823	0.876	0.819	0.790	0.728	0.733	0.738	0.787	7.15
4)	C	Vinyl chloride	0.568	0.627	0.561	0.594	0.569	0.549	0.549	0.574	4.88
5)	T	Bromomethane	0.283	0.328	0.316	0.320	0.299	0.277	0.288	0.302	6.58
6)	T	Chloroethane	0.305	0.323	0.326	0.334	0.305	0.290	0.299	0.312	5.19
7)	T	Trichlorofluorome	0.496	0.502	0.389	0.551	0.530	0.489	0.473	0.490	10.49
8)	T	Acrolein	0.047	0.061	0.048	0.053	0.048	0.040	0.041	0.048	14.59
9)	MC	1,1-Dichloroethen	0.285	0.368	0.339	0.400	0.363	0.354	0.355	0.352	9.97
10)	T	Acetone			0.165	0.144	0.149	0.122	0.130	0.142	11.73
11)	T	Carbon disulfide	1.402	1.504	1.322	1.456	1.372	1.296	1.309	1.380	5.70
12)	T	Vinyl acetate	2.415	2.578	2.504	2.723	2.710	2.673	2.680	2.612	4.48
13)	T	Methylene chlorid		0.583	0.522	0.481	0.437	0.418	0.431	0.479	13.41
14)	T	Acrylonitrile	0.248	0.320	0.276	0.280	0.249	0.209	0.217	0.257	14.97
15)	T	tert-Butyl alcoho	0.044	0.045	0.049	0.047	0.044	0.033	0.036	0.043	13.79
16)	T	trans-1,2-Dichlor	0.437	0.486	0.438	0.466	0.426	0.402	0.409	0.438	6.87
17)	T	Methyl tert-butyl	1.592	1.685	1.557	1.535	1.500	1.438	1.463	1.539	5.44
18)	P	1,1-Dichloroethan	1.100	1.171	1.115	1.109	1.066	1.062	1.073	1.100	3.47
19)	T	Diisopropyl ether	2.268	2.428	2.432	2.511	2.483	2.475	2.505	2.443	3.42
20)	T	cis-1,2-Dichloroe	0.589	0.606	0.546	0.563	0.549	0.545	0.549	0.564	4.31
21)	T	2,2-Dichloropropa	0.407	0.330	0.343	0.409	0.368	0.328	0.329	0.359	10.06
22)	T	2-Butanone (MEK)	0.281	0.310	0.334	0.331	0.321	0.296	0.315	0.313	6.06
23)	T	Bromochloromethan	0.262	0.269	0.266	0.273	0.257	0.255	0.259	0.263	2.51
25)	C	Chloroform	1.087	1.113	0.992	0.917	0.886	0.870	0.876	0.963	10.63
26)	T	1,1,1-Trichloroet	0.606	0.648	0.553	0.634	0.599	0.574	0.587	0.600	5.52
27)	T	Carbon tetrachlor	0.495	0.503	0.461	0.514	0.517	0.501	0.501	0.499	3.68
28)	T	1,1-Dichloroprope	0.604	0.628	0.555	0.629	0.610	0.596	0.598	0.603	4.14
29)	T	1,2-Dichloroethan	0.795	0.832	0.819	0.832	0.788	0.781	0.795	0.806	2.62
30)	S	1,2-Dichloroethan	0.554	0.570	0.560	0.532	0.523	0.512	0.522	0.539	4.12
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.110	1.122	1.069	1.092	1.113	1.076	1.083	1.095	1.85
33)	M	Trichloroethene	0.240	0.267	0.241	0.258	0.259	0.251	0.257	0.253	3.91
34)	C	1,2-Dichloropropa	0.313	0.338	0.318	0.331	0.334	0.331	0.330	0.328	2.78
35)	T	Dibromomethane	0.170	0.173	0.172	0.183	0.180	0.174	0.175	0.175	2.53
36)	T	1,4-Dioxane	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	12.54
37)	T	Bromodichlorometh	0.357	0.361	0.367	0.377	0.377	0.378	0.374	0.370	2.29
38)	T	2-Chloroethyl vin	0.206	0.178	0.211	0.233	0.251	0.240	0.246	0.224	11.90
39)	T	cis-1,3-Dichlorop	0.375	0.400	0.413	0.450	0.465	0.460	0.461	0.432	8.26
40)	T	4-Methyl-2-pentan	0.346	0.345	0.370	0.412	0.422	0.403	0.400	0.385	8.16
41)	S	Toluene-d8	0.837	0.823	0.842	0.843	0.838	0.858	0.862	0.843	1.55
42)	MC	Toluene	0.611	0.619	0.604	0.622	0.619	0.614	0.607	0.614	1.07
43)	T	trans-1,3-Dichlor	0.332	0.360	0.370	0.401	0.425	0.436	0.435	0.394	10.38
44)	T	1,1,2-Trichloroet	0.188	0.215	0.209	0.215	0.213	0.205	0.205	0.207	4.55
45)	T	Tetrachloroethene	0.220	0.223	0.213	0.207	0.188	0.177	0.177	0.201	9.73
46)	T	1,3-Dichloropropa	0.398	0.418	0.427	0.443	0.447	0.445	0.443	0.432	4.26
47)	T	2-Hexanone	0.246	0.239	0.227	0.276	0.303	0.299	0.303	0.270	12.13
48)	T	Dibromochlorometh	0.240	0.257	0.253	0.267	0.281	0.279	0.278	0.265	5.95
49)	T	1,2-Dibromoethane	0.213	0.238	0.249	0.265	0.270	0.267	0.271	0.253	8.49
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	0.855	0.825	0.812	0.778	0.814	0.802	0.791	0.8	
52)	T	1,1,1,2-Tetrachlo	0.281	0.280	0.277	0.290	0.297	0.297	0.290	0.287	2.94

53)	C	Ethylbenzene	1.092	1.177	1.088	1.216	1.237	1.207	1.182	1.171	5.07
54)	T	m,p-Xylene	0.377	0.433	0.421	0.462	0.460	0.452	0.445	0.436	6.80
55)	T	o-Xylene	0.342	0.362	0.394	0.444	0.460	0.467	0.453	0.417	12.23
56)	T	Styrene	0.712	0.679	0.745	0.851	0.860	0.881	0.859	0.798	10.43
57)	P	Bromoform	0.204	0.206	0.199	0.229	0.238	0.240	0.234	0.222	7.92
58)	T	Isopropylbenzene	0.732	0.812	0.796	0.964	0.958	0.998	0.974	0.891	12.00
59)	S	Bromofluorobenzen	0.484	0.489	0.498	0.503	0.475	0.507	0.515	0.496	2.83
60)	P	1,1,2,2-Tetrachlo	0.445	0.460	0.471	0.476	0.453	0.461	0.444	0.458	2.71
61)	T	Bromobenzene	0.293	0.276	0.275	0.280	0.269	0.281	0.274	0.278	2.72
62)	T	1,2,3-Trichloropr	0.366	0.420	0.350	0.342	0.332	0.335	0.323	0.353	9.37
63)	T	n-Propylbenzene	0.940	1.037	0.934	1.074	1.026	1.070	1.037	1.017	5.63
64)	T	2-Chlorotoluene	0.650	0.684	0.678	0.724	0.653	0.698	0.680	0.681	3.74
65)	T	1,3,5-Trimethylbe	0.646	0.698	0.689	0.772	0.717	0.809	0.780	0.730	7.99
66)	T	4-Chlorotoluene	0.768	0.878	0.837	0.875	0.804	0.868	0.850	0.840	4.85
67)	T	tert-Butylbenzene	0.426	0.470	0.441	0.529	0.479	0.555	0.523	0.489	9.85
68)	T	1,2,4-Trimethylbe	0.611	0.668	0.687	0.803	0.719	0.835	0.799	0.732	11.31
69)	T	sec-Butylbenzene	0.650	0.757	0.707	0.840	0.759	0.902	0.855	0.782	11.36
70)	T	1,3-Dichlorobenze	0.395	0.406	0.407	0.420	0.376	0.425	0.416	0.407	4.11
71)	T	4-Isopropyltoluen	0.548	0.562	0.558	0.671	0.601	0.742	0.701	0.626	12.46
72)	T	1,4-Dichlorobenze	0.395	0.453	0.439	0.441	0.393	0.450	0.433	0.429	5.87
73)	T	n-Butylbenzene	0.287	0.271	0.265	0.318	0.302	0.385	0.363	0.313	14.62
74)	T	1,2-Dichlorobenze	0.411	0.430	0.422	0.431	0.371	0.436	0.413	0.416	5.30
75)	T	1,2-Dibromo-3-chl	0.060	0.066	0.078	0.078	0.066	0.075	0.070	0.070	9.65
76)	T	1,2,4-Trichlorobe	0.180	0.190	0.172	0.170	0.172	0.213	0.202	0.186	8.95
77)	T	Hexachlorobutadie	0.068	0.082	0.078	0.081	0.076	0.083	0.078	0.078	6.34
78)	T	Naphthalene	0.505	0.565	0.594	0.698	0.693	0.763	0.725	0.649	14.60
79)	T	1,2,3-Trichlorobe	0.184	0.190	0.172	0.172	0.171	0.183	0.181	0.179	4.16
80)	T	1,1,2-Trichloro-1	0.116	0.125	0.114	0.139	0.150	0.139	0.128	0.130	10.05
81)	T	Methyl acetate	0.462	0.456	0.384	0.406	0.393	0.346	0.348	0.399	11.63
82)	T	Cyclohexane		0.496	0.417	0.416	0.411	0.399	0.366	0.417	10.33
83)	T	Methylcyclohexane	0.249	0.241	0.217	0.222	0.231	0.269	0.253	0.240	7.74

(#) = Out of Range ### Number of calibration levels exceeded format ###

CAM1221.M Sat Dec 22 17:47:08 2012 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\12-21-12\
Data File : J6024.D
Acq On : 21 Dec 2012 21:48
Operator : XING
Sample : ICV100,ICV100,A,5mL,100
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 22 17:10:57 2012
Quant Method : C:\MSDCHEM\1\METHODS\JAM1221.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Sat Dec 22 17:09:31 2012
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	95	0.00
2	T	Dichlorodifluoromethane	0.379	0.327	13.7	82	0.00
3	P	Chloromethane	0.787	0.746	5.2	97	0.00
4	C	Vinyl chloride	0.574	0.551	4.0	92	-0.01
5	T	Bromomethane	0.302	0.292	3.3	93	0.00
6	T	Chloroethane	0.312	0.306	1.9	95	0.00
7	T	Trichlorofluoromethane	0.490	0.451	8.0	81	-0.01
8	T	Acrolein	0.048	0.043	10.4	85	0.00
9	MC	1,1-Dichloroethene	0.352	0.370	-5.1	97	0.00
10	T	Acetone	0.142	0.160	-12.7	102	0.00
11	T	Carbon disulfide	1.380	1.364	1.2	95	0.00
12	T	Vinyl acetate	2.612	2.290	12.3	80	0.00
13	T	Methylene chloride	0.479	0.460	4.0	100	0.00
14	T	Acrylonitrile	0.257	0.277	-7.8	106	0.00
15	T	tert-Butyl alcohol (TBA)	0.043	0.048	-11.6	104	0.00
16	T	trans-1,2-Dichloroethene	0.438	0.429	2.1	96	0.00
17	T	Methyl tert-butyl ether (MT	1.539	1.551	-0.8	98	0.00
18	P	1,1-Dichloroethane	1.100	1.080	1.8	96	0.00
19	T	Diisopropyl ether (DIPE)	2.443	2.542	-4.1	97	-0.01
20	T	cis-1,2-Dichloroethene	0.564	0.560	0.7	97	-0.01
21	T	2,2-Dichloropropane	0.359	0.302	15.9	78	-0.01
22	T	2-Butanone (MEK)	0.313	0.341	-8.9	101	0.00
23	T	Bromochloromethane	0.263	0.268	-1.9	99	-0.01
25	C	Chloroform	0.963	0.897	6.9	96	0.00
26	T	1,1,1-Trichloroethane	0.600	0.634	-5.7	101	0.00
27	T	Carbon tetrachloride	0.499	0.511	-2.4	94	0.00
28	T	1,1-Dichloropropene	0.603	0.595	1.3	93	0.00
29	T	1,2-Dichloroethane (EDC)	0.806	0.817	-1.4	99	0.00
30	S	1,2-Dichloroethane-d4	0.539	0.533	1.1	97	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
32	M	Benzene	1.095	1.106	-1.0	97	-0.01
33	M	Trichloroethene	0.253	0.260	-2.8	98	0.00
34	C	1,2-Dichloropropane	0.328	0.331	-0.9	97	0.00
35	T	Dibromomethane	0.175	0.182	-4.0	99	0.00
36	T	1,4-Dioxane	0.001	0.001	0.0	99	0.00
37	T	Bromodichloromethane	0.370	0.378	-2.2	98	0.00
38	T	2-Chloroethyl vinyl ether	0.224	0.254	-13.4	99	0.00
39	T	cis-1,3-Dichloropropene	0.432	0.429	0.7	90	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.385	0.448	-16.4	104	-0.01
41	S	Toluene-d8	0.843	0.850	-0.8	99	0.00
42	MC	Toluene	0.614	0.600	2.3	95	0.00
43	T	trans-1,3-Dichloropropene	0.394	0.400	-1.5	92	-0.01
44	T	1,1,2-Trichloroethane	0.207	0.211	-1.9	97	-0.01
45	T	Tetrachloroethene	0.201	0.172	14.4	90	-0.01
46	T	1,3-Dichloropropane	0.432	0.451	-4.4	99	0.00

47	T	2-Hexanone	0.270	0.290	-7.4	94	0.00
48	T	Dibromochloromethane	0.265	0.283	-6.8	99	0.00
49	T	1,2-Dibromoethane (EDB)	0.253	0.273	-7.9	99	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	99	-0.01
51	MP	Chlorobenzene	0.811	0.789	2.7	96	0.00
52	T	1,1,1,2-Tetrachloroethane	0.287	0.278	3.1	92	0.00
53	C	Ethylbenzene	1.171	1.176	-0.4	94	0.00
54	T	m,p-Xylene	0.436	0.440	-0.9	95	0.00
55	T	o-Xylene	0.417	0.440	-5.5	94	0.00
56	T	Styrene	0.798	0.838	-5.0	96	0.00
57	P	Bromoform	0.222	0.238	-7.2	99	0.00
58	T	Isopropylbenzene	0.891	0.898	-0.8	93	0.00
59	S	Bromofluorobenzene	0.496	0.475	4.2	99	0.00
60	P	1,1,2,2-Tetrachloroethane	0.458	0.424	7.4	93	-0.01
61	T	Bromobenzene	0.278	0.263	5.4	96	0.00
62	T	1,2,3-Trichloropropane	0.353	0.328	7.1	98	-0.01
63	T	n-Propylbenzene	1.017	0.943	7.3	91	0.00
64	T	2-Chlorotoluene	0.681	0.618	9.3	94	0.00
65	T	1,3,5-Trimethylbenzene	0.730	0.669	8.4	92	0.00
66	T	4-Chlorotoluene	0.840	0.758	9.8	93	0.00
67	T	tert-Butylbenzene	0.489	0.441	9.8	91	0.00
68	T	1,2,4-Trimethylbenzene	0.732	0.684	6.6	94	0.00
69	T	sec-Butylbenzene	0.782	0.668	14.6	87	0.00
70	T	1,3-Dichlorobenzene	0.407	0.360	11.5	95	0.00
71	T	4-Isopropyltoluene	0.626	0.541	13.6	89	0.00
72	T	1,4-Dichlorobenzene	0.429	0.376	12.4	95	0.00
73	T	n-Butylbenzene	0.313	0.257	17.9	84	-0.01
74	T	1,2-Dichlorobenzene	0.416	0.353	15.1	94	-0.01
75	T	1,2-Dibromo-3-chloropropane	0.070	0.067	4.3	101	-0.01
76	T	1,2,4-Trichlorobenzene	0.186	0.169	9.1	97	0.00
77	T	Hexachlorobutadiene	0.078	0.067	14.1	86	0.00
78	T	Naphthalene	0.649	0.701	-8.0	100	0.00
79	T	1,2,3-Trichlorobenzene	0.179	0.171	4.5	99	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.130	0.107	17.7	70	0.00
81	T	Methyl acetate	0.399	0.412	-3.3	103	0.00
82	T	Cyclohexane	0.417	0.413	1.0	99	0.00
83	T	Methylcyclohexane	0.240	0.227	5.4	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JAM1221.M Thu Jan 03 13:53:38 2013 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\01-09-13\
Data File : J6227.D
Acq On : 9 Jan 2013 14:02
Operator : XING
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 09 14:36:30 2013
Quant Method : C:\MSDCHEM\1\METHODS\JAM1221.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Sat Dec 22 17:09:31 2012
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	92	0.00
2	T	Dichlorodifluoromethane	0.379	0.420	-10.8	102	0.00
3	P	Chloromethane	0.787	0.784	0.4	99	0.00
4	C	Vinyl chloride	0.574	0.579	-0.9	93	-0.01
5	T	Bromomethane	0.302	0.285	5.6	87	-0.01
6	T	Chloroethane	0.312	0.321	-2.9	96	-0.01
7	T	Trichlorofluoromethane	0.490	0.558	-13.9	97	-0.01
8	T	Acrolein	0.048	0.046	4.2	87	0.00
9	MC	1,1-Dichloroethene	0.352	0.401	-13.9	102	-0.01
10	T	Acetone	0.142	0.168	-18.3	103	0.00
11	T	Carbon disulfide	1.380	1.418	-2.8	95	0.00
12	T	Vinyl acetate	2.612	2.494	4.5	84	0.00
13	T	Methylene chloride	0.479	0.508	-6.1	107	0.00
14	T	Acrylonitrile	0.257	0.302	-17.5	111	-0.01
15	T	tert-Butyl alcohol (TBA)	0.043	0.041	4.7	85	0.00
16	T	trans-1,2-Dichloroethene	0.438	0.454	-3.7	98	0.00
17	T	Methyl tert-butyl ether (MT	1.539	1.732	-12.5	106	-0.01
18	P	1,1-Dichloroethane	1.100	1.143	-3.9	98	-0.01
19	T	Diisopropyl ether (DIPE)	2.443	2.684	-9.9	99	-0.01
20	T	cis-1,2-Dichloroethene	0.564	0.614	-8.9	103	-0.01
21	T	2,2-Dichloropropane	0.359	0.387	-7.8	97	-0.01
22	T	2-Butanone (MEK)	0.313	0.362	-15.7	104	0.00
23	T	Bromochloromethane	0.263	0.298	-13.3	107	-0.01
25	C	Chloroform	0.963	0.978	-1.6	101	0.00
26	T	1,1,1-Trichloroethane	0.600	0.658	-9.7	101	0.00
27	T	Carbon tetrachloride	0.499	0.569	-14.0	101	0.00
28	T	1,1-Dichloropropene	0.603	0.649	-7.6	98	0.00
29	T	1,2-Dichloroethane (EDC)	0.806	0.897	-11.3	104	-0.01
30	S	1,2-Dichloroethane-d4	0.539	0.521	3.3	91	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
32	M	Benzene	1.095	1.147	-4.7	99	-0.01
33	M	Trichloroethene	0.253	0.271	-7.1	101	0.00
34	C	1,2-Dichloropropane	0.328	0.361	-10.1	104	-0.01
35	T	Dibromomethane	0.175	0.198	-13.1	106	0.00
36	T	1,4-Dioxane	0.001	0.001	0.0	89	-0.01
37	T	Bromodichloromethane	0.370	0.416	-12.4	107	-0.01
38	T	2-Chloroethyl vinyl ether	0.224	0.261	-16.5	100	-0.01
39	T	cis-1,3-Dichloropropene	0.432	0.498	-15.3	103	-0.01
40	T	4-Methyl-2-pentanone (MIBK)	0.385	0.449	-16.6	103	-0.01
41	S	Toluene-d8	0.843	0.841	0.2	97	0.00
42	MC	Toluene	0.614	0.638	-3.9	99	-0.01
43	T	trans-1,3-Dichloropropene	0.394	0.466	-18.3	106	-0.01
44	T	1,1,2-Trichloroethane	0.207	0.235	-13.5	107	-0.01
45	T	Tetrachloroethene	0.201	0.194	3.5	99	-0.01
46	T	1,3-Dichloropropane	0.432	0.490	-13.4	106	[illegible]

47	T	2-Hexanone	0.270	0.314	-16.3	100	0.00
48	T	Dibromochloromethane	0.265	0.315	-18.9	108	0.00
49	T	1,2-Dibromoethane (EDB)	0.253	0.301	-19.0	108	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	105	-0.01
51	MP	Chlorobenzene	0.811	0.799	1.5	103	0.00
52	T	1,1,1,2-Tetrachloroethane	0.287	0.304	-5.9	107	-0.01
53	C	Ethylbenzene	1.171	1.201	-2.6	102	0.00
54	T	m,p-Xylene	0.436	0.444	-1.8	101	0.00
55	T	o-Xylene	0.417	0.460	-10.3	105	0.00
56	T	Styrene	0.798	0.879	-10.2	107	0.00
57	P	Bromoform	0.222	0.258	-16.2	114	0.00
58	T	Isopropylbenzene	0.891	0.969	-8.8	106	-0.01
59	S	Bromofluorobenzene	0.496	0.500	-0.8	111	0.00
60	P	1,1,2,2-Tetrachloroethane	0.458	0.467	-2.0	108	-0.01
61	T	Bromobenzene	0.278	0.289	-4.0	113	0.00
62	T	1,2,3-Trichloropropane	0.353	0.350	0.8	111	-0.01
63	T	n-Propylbenzene	1.017	1.065	-4.7	109	0.00
64	T	2-Chlorotoluene	0.681	0.738	-8.4	119	0.00
65	T	1,3,5-Trimethylbenzene	0.730	0.800	-9.6	117	0.00
66	T	4-Chlorotoluene	0.840	0.886	-5.5	116	0.00
67	T	tert-Butylbenzene	0.489	0.567	-16.0	124	0.00
68	T	1,2,4-Trimethylbenzene	0.732	0.827	-13.0	121	0.00
69	T	sec-Butylbenzene	0.782	0.880	-12.5	122	0.00
70	T	1,3-Dichlorobenzene	0.407	0.439	-7.9	123	0.00
71	T	4-Isopropyltoluene	0.626	0.724	-15.7	127	-0.01
72	T	1,4-Dichlorobenzene	0.429	0.458	-6.8	123	0.00
73	T	n-Butylbenzene	0.313	0.367	-17.3	128	-0.01
74	T	1,2-Dichlorobenzene	0.416	0.443	-6.5	126	-0.01
75	T	1,2-Dibromo-3-chloropropane	0.070	0.075	-7.1	119	-0.01
76	T	1,2,4-Trichlorobenzene	0.186	0.221	-18.8	134	0.00
77	T	Hexachlorobutadiene	0.078	0.093	-19.2	128	0.00
78	T	Naphthalene	0.649	0.763	-17.6	116	0.00
79	T	1,2,3-Trichlorobenzene	0.179	0.197	-10.1	121	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.130	0.153	-17.7	108	0.00
81	T	Methyl acetate	0.399	0.419	-5.0	112	0.00
82	T	Cyclohexane	0.417	0.373	10.6	95	0.00
83	T	Methylcyclohexane	0.240	0.275	-14.6	125	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JAM1221.M Wed Jan 09 14:36:35 2013 RT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1314.D

Date Analyzed: 12/18/2012

Instrument ID: MSD_F

Time Analyzed: 14:22

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	300071	6.11	516735	6.93	394996	10.27
	UPPER LIMIT	600142	6.61	1033470	7.43	789992	10.77
	LOWER LIMIT	150035.5	5.61	258367.5	6.43	197498	9.77
	LAB SAMPLE ID						
01	ICC1	311223	6.11	511425	6.93	397053	10.27
02	ICC5	291474	6.11	485647	6.93	363615	10.27
03	ICC2	281285	6.11	471727	6.93	354750	10.27
04	ICC20	302280	6.11	505588	6.93	380729	10.27
05	ICC150	297318	6.11	524916	6.92	405024	10.27
06	ICC200	301405	6.11	558885	6.93	442585	10.27
07	ICV100	301407	6.11	515186	6.93	392672	10.27
08							
09							
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19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1652.D

Date Analyzed: 01/08/2013

Instrument ID: MSD_F

Time Analyzed: 18:37

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	236157	6.10	396509	6.92	229257	10.27
	UPPER LIMIT	472314	6.60	793018	7.42	458514	10.77
	LOWER LIMIT	118078.5	5.60	198254.5	6.42	114628.5	9.77
	LAB SAMPLE ID						
01	BLKS130108	216076	6.11	350711	6.93	268813	10.27
02	LCSS130108	243000	6.11	413140	6.93	324468	10.27
03	LCSDS130108	227770	6.11	372976	6.92	246445	10.27
04	12686-001	218324	6.11	334824	6.92	246939	10.27
05	12686-002	214238	6.11	332609	6.93	245531	10.27
06	12686-003	212456	6.11	320823	6.92	232804	10.27
07	12686-004	208795	6.11	322438	6.92	234123	10.27
08	12686-005	209127	6.11	324752	6.92	241619	10.27
09	12686-006	203915	6.11	315168	6.93	234405	10.27
10	00144-001	202761	6.11	315082	6.92	237879	10.27
11	00144-003	210244	6.11	325048	6.93	243867	10.27
12	00144-004	203156	6.11	310866	6.93	232562	10.27
13	00144-005	204478	6.11	308922	6.93	230212	10.27
14	00172-001	194845	6.11	300108	6.93	231189	10.27
15	00172-002	196722	6.11	304410	6.93	225258	10.27
16	00172-003	201056	6.11	312963	6.93	235985	10.27
17	00172-004	193396	6.11	293578	6.93	221093	10.27
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J6019.D

Date Analyzed: 12/21/2012

Instrument ID: MSD_J

Time Analyzed: 18:08

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	243717	5.93	446554	6.75	341169	10.09
	UPPER LIMIT	487434	6.43	893108	7.25	682338	10.59
	LOWER LIMIT	121858.5	5.43	223277	6.25	170584.5	9.59
	LAB SAMPLE ID						
01	ICC5	235350	5.93	450035	6.75	352824	10.09
02	ICC2	229500	5.93	450267	6.75	349315	10.09
03	ICC1	229205	5.93	426452	6.75	330982	10.09
04	ICC20	234929	5.93	444541	6.75	350866	10.09
05	ICC200	250350	5.93	464800	6.75	357993	10.09
06	ICC150	254609	5.93	478488	6.75	376186	10.09
07	ICV100	231972	5.93	436984	6.75	337050	10.08
08							
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10							
11							
12							
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16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J6227.D

Date Analyzed: 01/09/2013

Instrument ID: MSD_J

Time Analyzed: 14:02

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	223713	5.93	430422	6.75	358420	10.08
	UPPER LIMIT	447426	6.43	860844	7.25	716840	10.58
	LOWER LIMIT	111856.5	5.43	215211	6.25	179210	9.58
	LAB SAMPLE ID						
01	BLKS130109	197625	5.93	372881	6.75	330250	10.08
02	00084-002	185168	5.93	354570	6.75	315795	10.08
03	00138-001	180229	5.93	358350	6.75	309079	10.08
04	LCSS130109	245148	5.93	502594	6.75	415105	10.08
05	00231-001MS	255892	5.93	482161	6.75	416525	10.08
06	00231-001MSD	231556	5.93	480165	6.75	393665	10.08
07	00202-001	178289	5.92	338704	6.74	306113	10.08
08	00144-002	267687	5.93	513004	6.75	442657	10.08
09	00151-006	191187	5.93	374701	6.75	328728	10.08
10	00175-001	237133	5.93	452958	6.74	398630	10.08
11	00171-001	196980	5.92	363899	6.74	318270	10.08
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk
* Values outside of QC limits.

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1663.D
Acq On : 9 Jan 2013 00:09
Operator : XING
Sample : SB-2/9-9.5,00144-001,S,5.7g,79.2
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 08 14:51:34 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	202761	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.922	114	315082	50.00	UG	0.00
50) Chlorobenzene-d5	10.272	117	237879	50.00	UG	0.00

System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.434	65	72945	38.47	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 76.94%			
41) Toluene-d8	8.597	98	274646	50.79	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.58%			
59) Bromofluorobenzene	11.673	95	153196	54.84	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 109.68%			

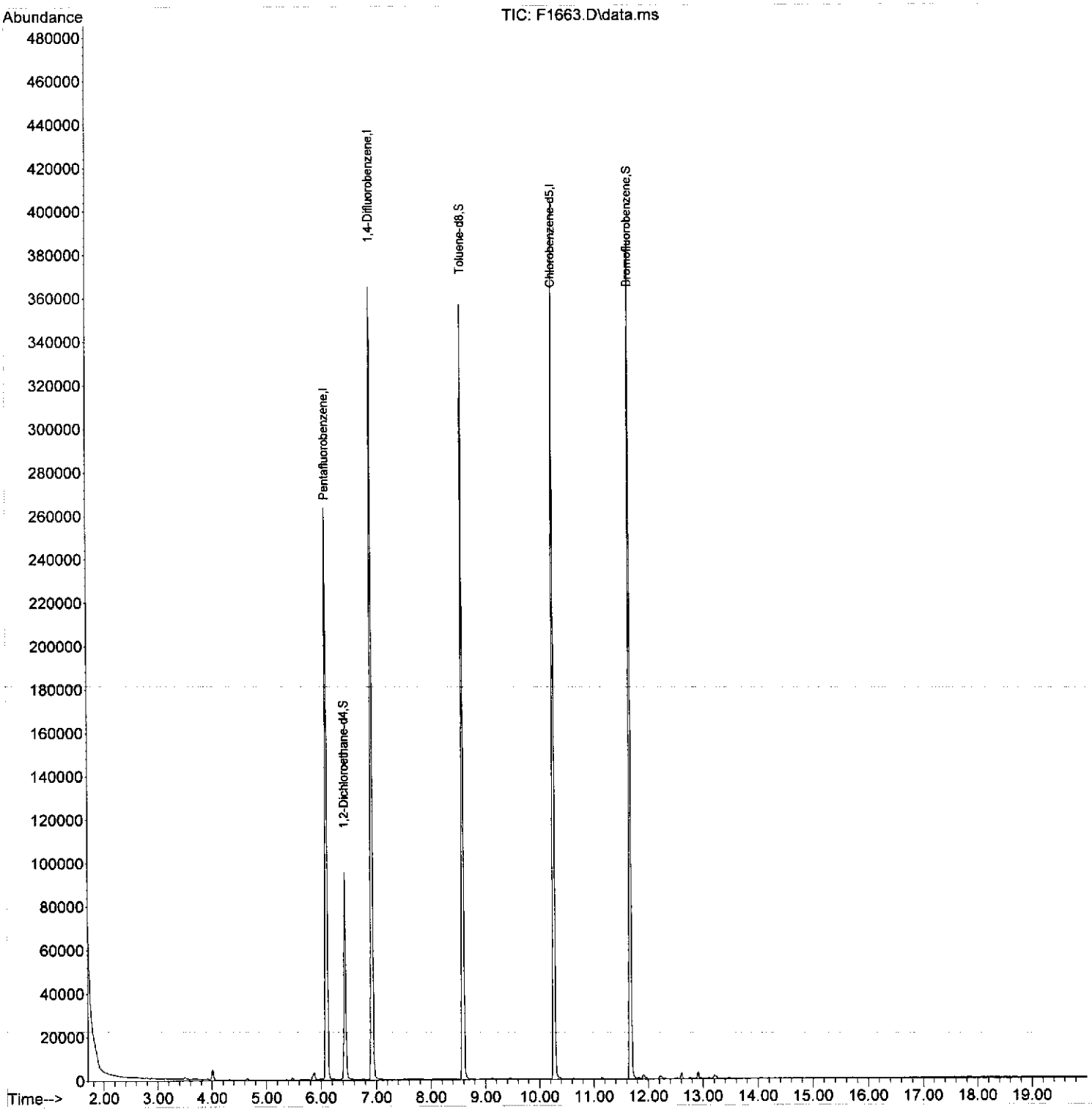
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1663.D
Acq On : 9 Jan 2013 00:09
Operator : XING
Sample : SB-2/9-9.5,00144-001,S,5.7g,79.2
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Jan 08 14:51:34 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-09-13\
Data File : J6241.D
Acq On : 9 Jan 2013 20:44
Operator : XING
Sample : SB-3/5-5.5,00144-002,M,0.006g,79.2
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,10
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 10 16:31:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\JAM1221.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Sat Dec 22 17:09:31 2012
Response via : Initial Calibration

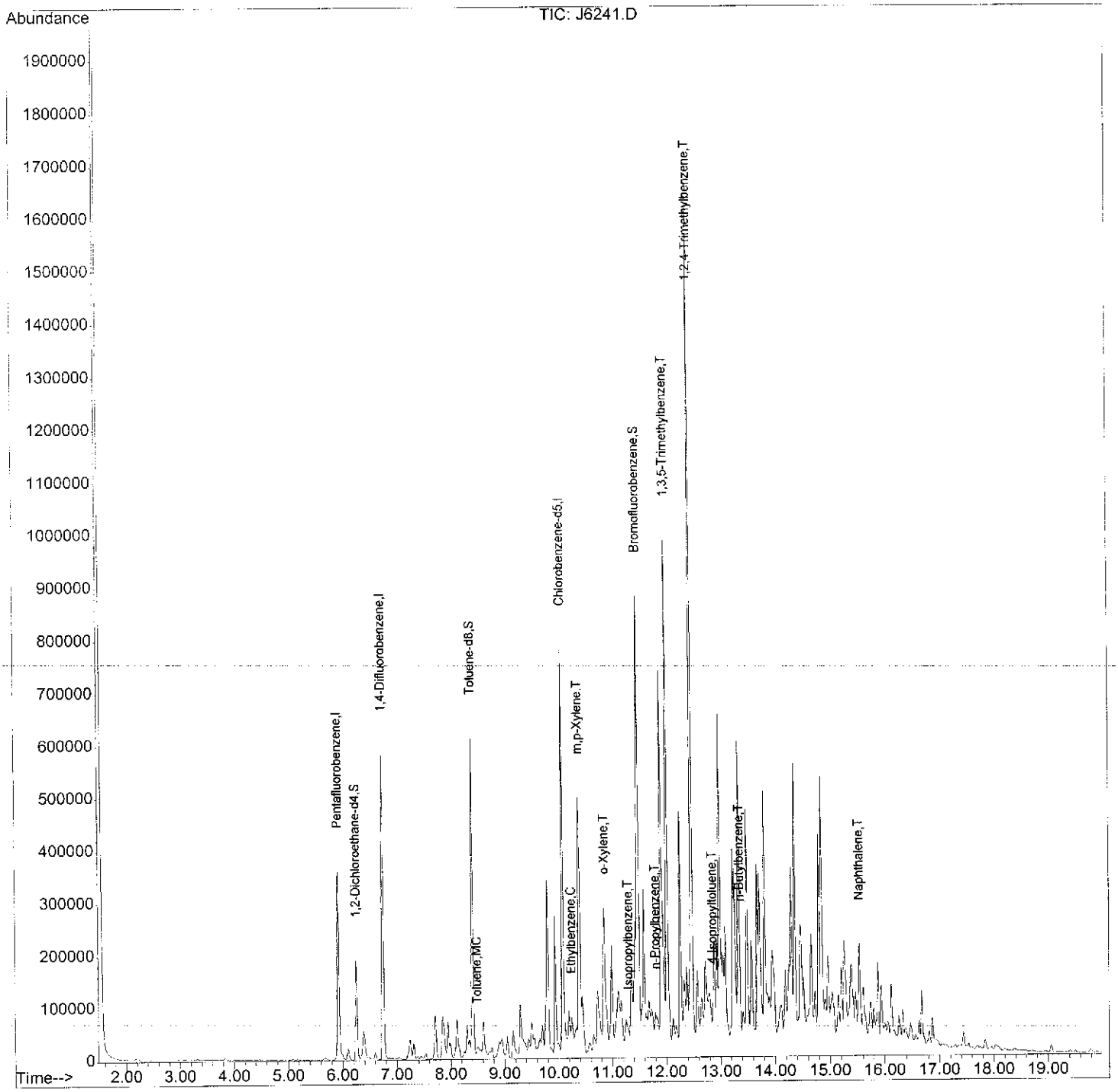
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.93	168	267687	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.75	114	513004	50.00	UG	0.00
50) Chlorobenzene-d5	10.08	117	442657	50.00	UG	-0.01
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.25	65	145357	50.38	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.76%			
41) Toluene-d8	8.41	98	439833	50.83	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.66%			
59) Bromofluorobenzene	11.49	95	226357	51.57	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 103.14%			
Target Compounds						Qvalue
42) Toluene	8.49	92	6309	1.00	UG	98
53) Ethylbenzene	10.24	91	30939	2.98	UG	99
54) m,p-Xylene	10.39	106	126341	32.74	UG	93
55) o-Xylene	10.86	106	62208	16.84	UG	92
58) Isopropylbenzene	11.31	105	9739	1.24	UG	99
63) n-Propylbenzene	11.80	91	33307	3.70	UG	99
65) 1,3,5-Trimethylbenzene	12.02	105	335317	51.88	UG	97
68) 1,2,4-Trimethylbenzene	12.47	105	954319	147.33	UG	99
71) 4-Isopropyltoluene	12.86	119	6915	1.25	UG #	100
73) n-Butylbenzene	13.36	92	20678	7.46	UG #	74
78) Naphthalene	15.54	128	123700	21.53	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-09-13\
Data File : J6241.D
Acq On : 9 Jan 2013 20:44
Operator : XING
Sample : SB-3/5-5.5,00144-002,M,0.006g,79.2
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,10
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 10 16:31:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\JAM1221.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Sat Dec 22 17:09:31 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1664.D
Acq On : 9 Jan 2013 00:40
Operator : XING
Sample : SB-4/12.5-13,00144-003,S,4.5g,81.5
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 08 14:53:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	210244	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.932	114	325048	50.00	UG	0.00
50) Chlorobenzene-d5	10.272	117	243867	50.00	UG	0.00

System Monitoring Compounds

30) 1,2-Dichloroethane-d4	6.434	65	70429	35.82	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 71.64%			
41) Toluene-d8	8.597	98	283522	50.83	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.66%			
59) Bromofluorobenzene	11.673	95	154109	53.81	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 107.62%			

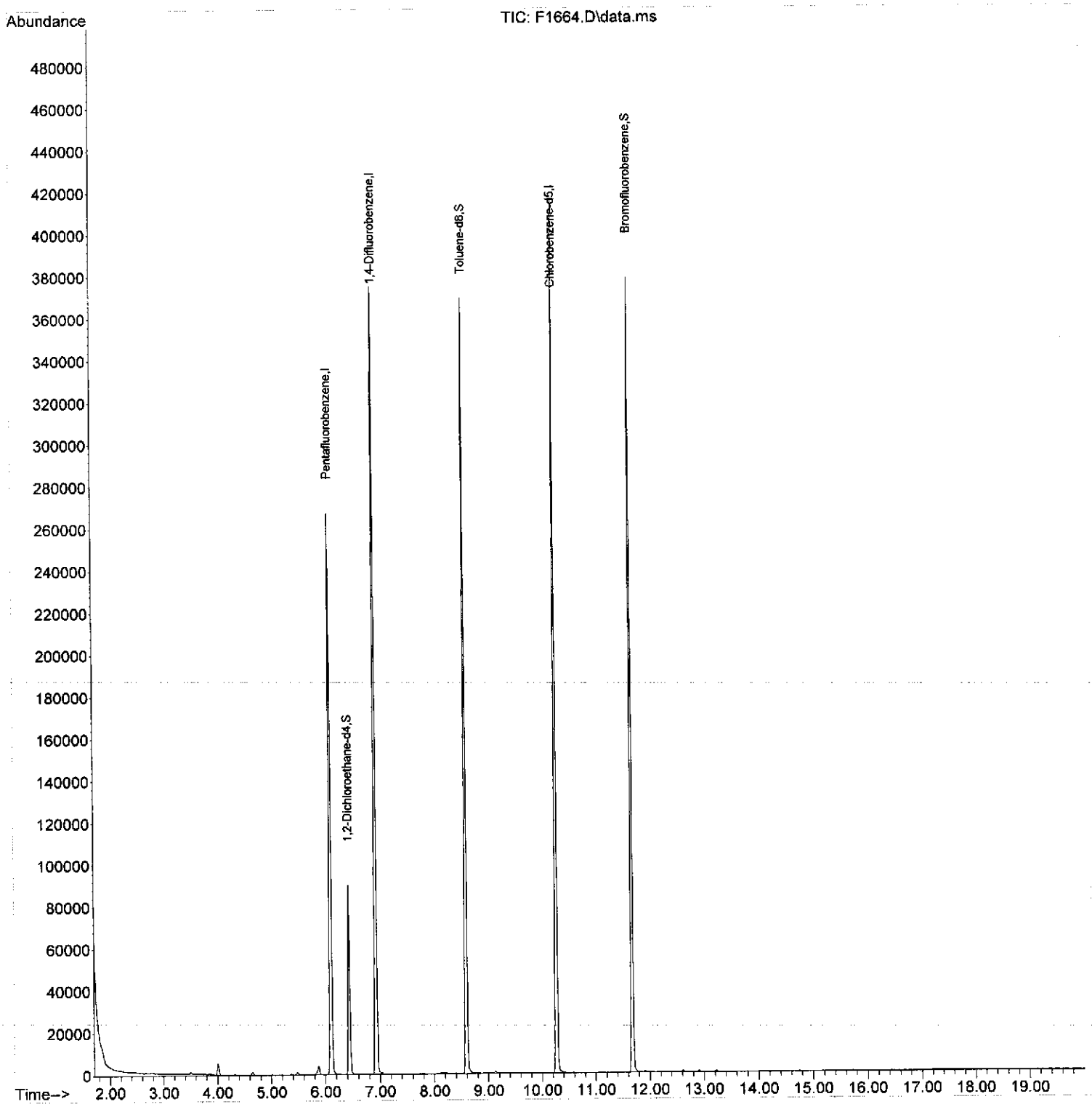
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1664.D
Acq On : 9 Jan 2013 00:40
Operator : XING
Sample : SB-4/12.5-13,00144-003,S,4.5g,81.5
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jan 08 14:53:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1665.D
Acq On : 9 Jan 2013 1:09
Operator : XING
Sample : SB-5/11-11.5,00144-004,S,4.7g,80.7
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 08 14:54:23 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	203156	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.932	114	310866	50.00	UG	0.00
50) Chlorobenzene-d5	10.271	117	232562	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.434	65	66355	34.92	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 69.84%			
41) Toluene-d8	8.596	98	270937	50.79	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.58%			
59) Bromofluorobenzene	11.672	95	145457	53.26	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 106.52%			

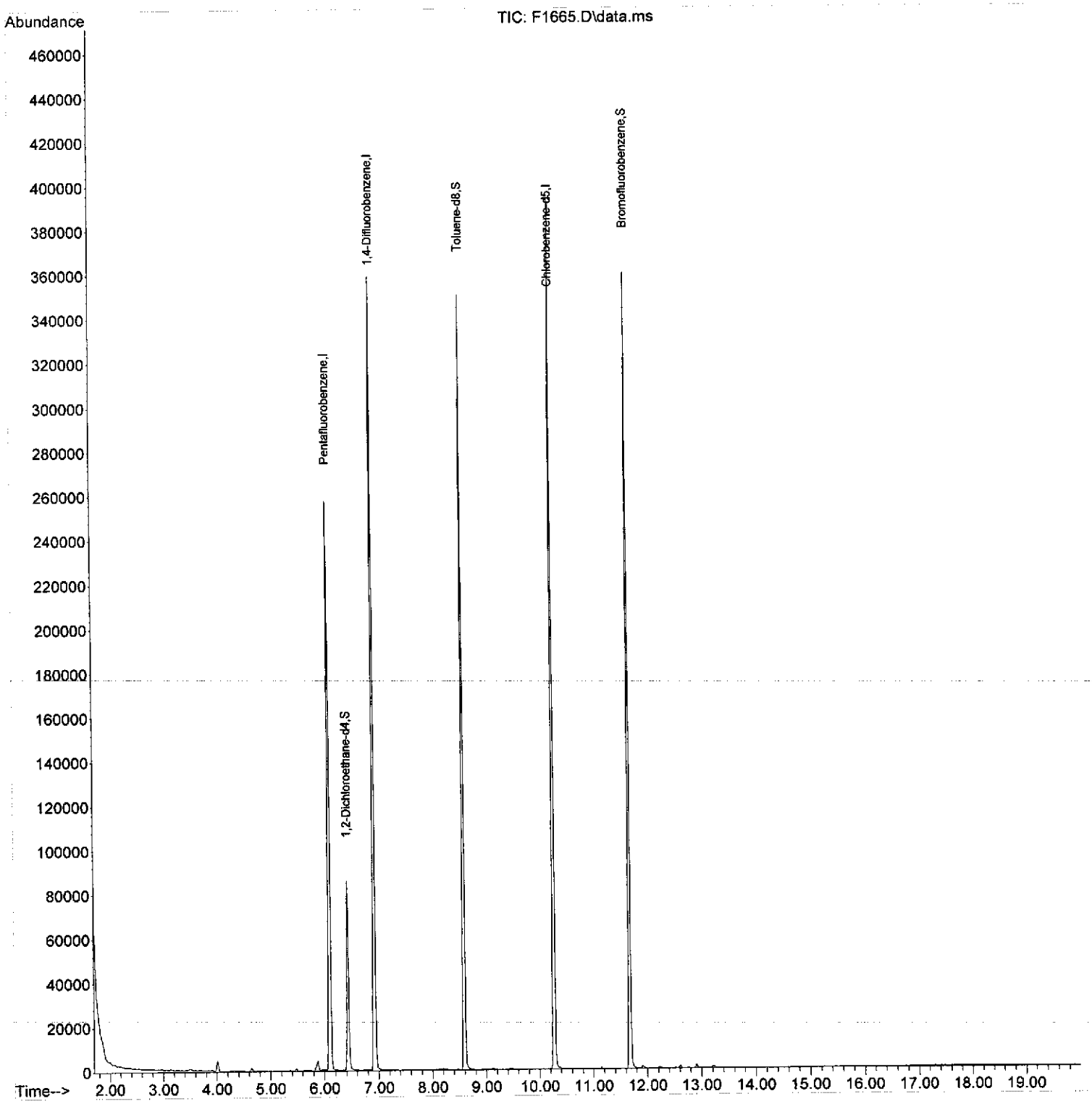
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1665.D
Acq On : 9 Jan 2013 1:09
Operator : XING
Sample : SB-5/11-11.5,00144-004,S,4.7g,80.7
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 08 14:54:23 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1666.D
Acq On : 9 Jan 2013 1:39
Operator : XING
Sample : SB-6/12-12.5,00144-005,S,6.4g,80.5
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 08 14:56:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	204478	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.932	114	308922	50.00	UG	0.00
50) Chlorobenzene-d5	10.272	117	230212	50.00	UG	0.00

System Monitoring Compounds

30) 1,2-Dichloroethane-d4	6.434	65	61348	32.08	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 64.16%			
41) Toluene-d8	8.597	98	271913	51.29	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 102.58%			
59) Bromofluorobenzene	11.673	95	142863	52.84	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 105.68%			

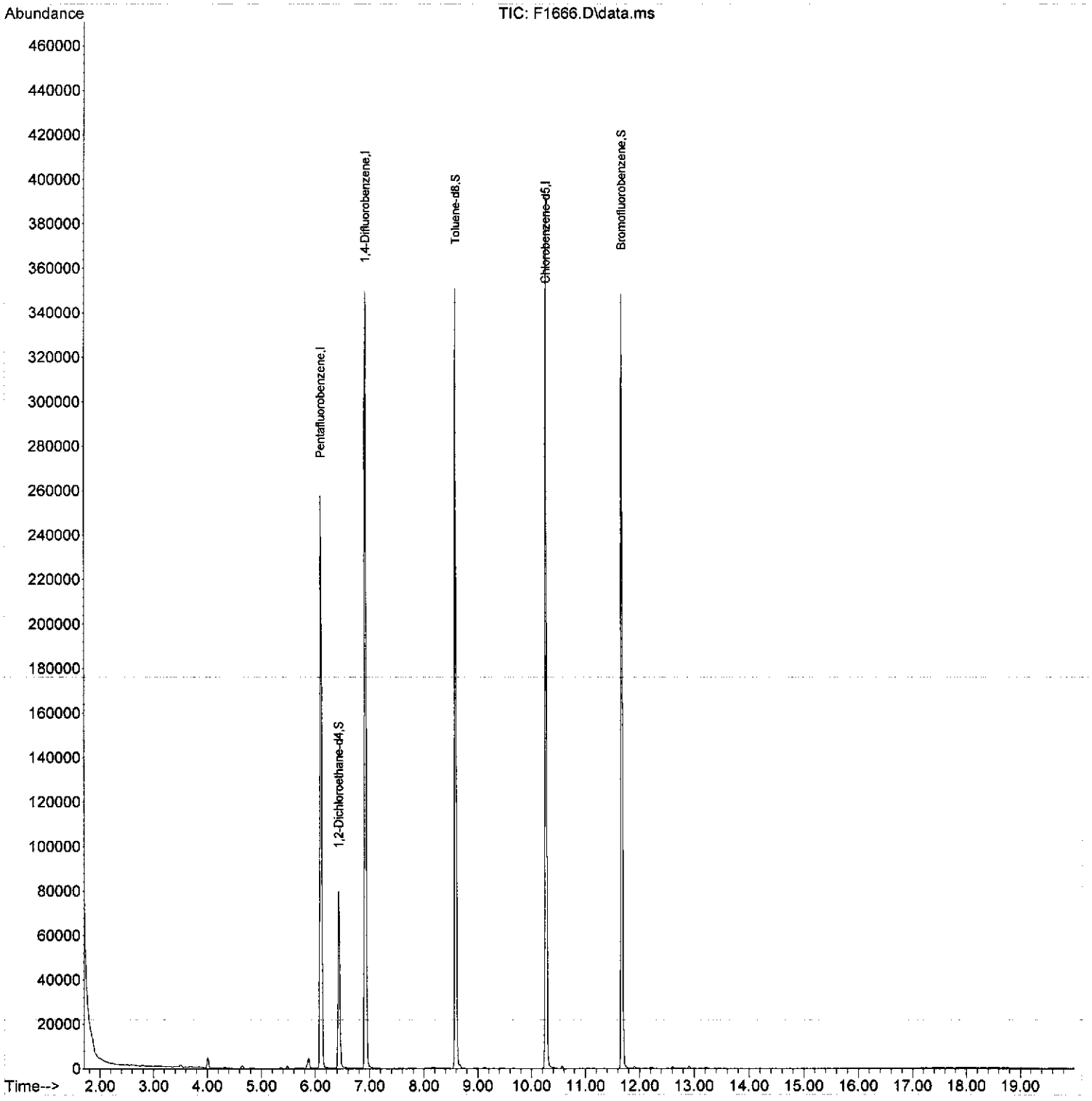
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1666.D
Acq On : 9 Jan 2013 1:39
Operator : XING
Sample : SB-6/12-12.5,00144-005,S,6.4g,80.5
Misc : PEAK/4202_18TH_AVE,01/04/13,01/04/13,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 08 14:56:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration



FSO1218.M Tue Jan 08 14:56:18 2013 RP1

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS130108
Client ID: BLKS130108
Date Received:
Date Analyzed: 01/08/2013
Data file: F1654.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Methyl tert-butyl ether (MTBE)	ND		0.001	0.00023
Benzene	ND		0.001	0.00024
Toluene	ND		0.001	0.00025
Ethylbenzene	ND		0.001	0.00031
Total Xylenes	ND		0.002	0.0011
Isopropylbenzene	ND		0.001	0.00041
n-Propylbenzene	ND		0.001	0.00035
1,3,5-Trimethylbenzene	ND		0.001	0.00038
tert-Butylbenzene	ND		0.001	0.00034
1,2,4-Trimethylbenzene	ND		0.001	0.00038
sec-Butylbenzene	ND		0.001	0.0004
4-Isopropyltoluene	ND		0.001	0.00045
n-Butylbenzene	ND		0.001	0.00047
Naphthalene	ND		0.001	0.00042

Total Target Compounds (14): 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1654.D
Acq On : 8 Jan 2013 19:38
Operator : XING
Sample : BLKS130108,BLKS130108,S,5g,0
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 14:17:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.109	168	216076	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.932	114	350711	50.00	UG	0.00
50) Chlorobenzene-d5	10.272	117	268813	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.434	65	95385	47.20	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.40%			
41) Toluene-d8	8.586	98	299319	49.73	UG	-0.01
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.46%			
59) Bromofluorobenzene	11.672	95	171161	54.22	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 108.44%			

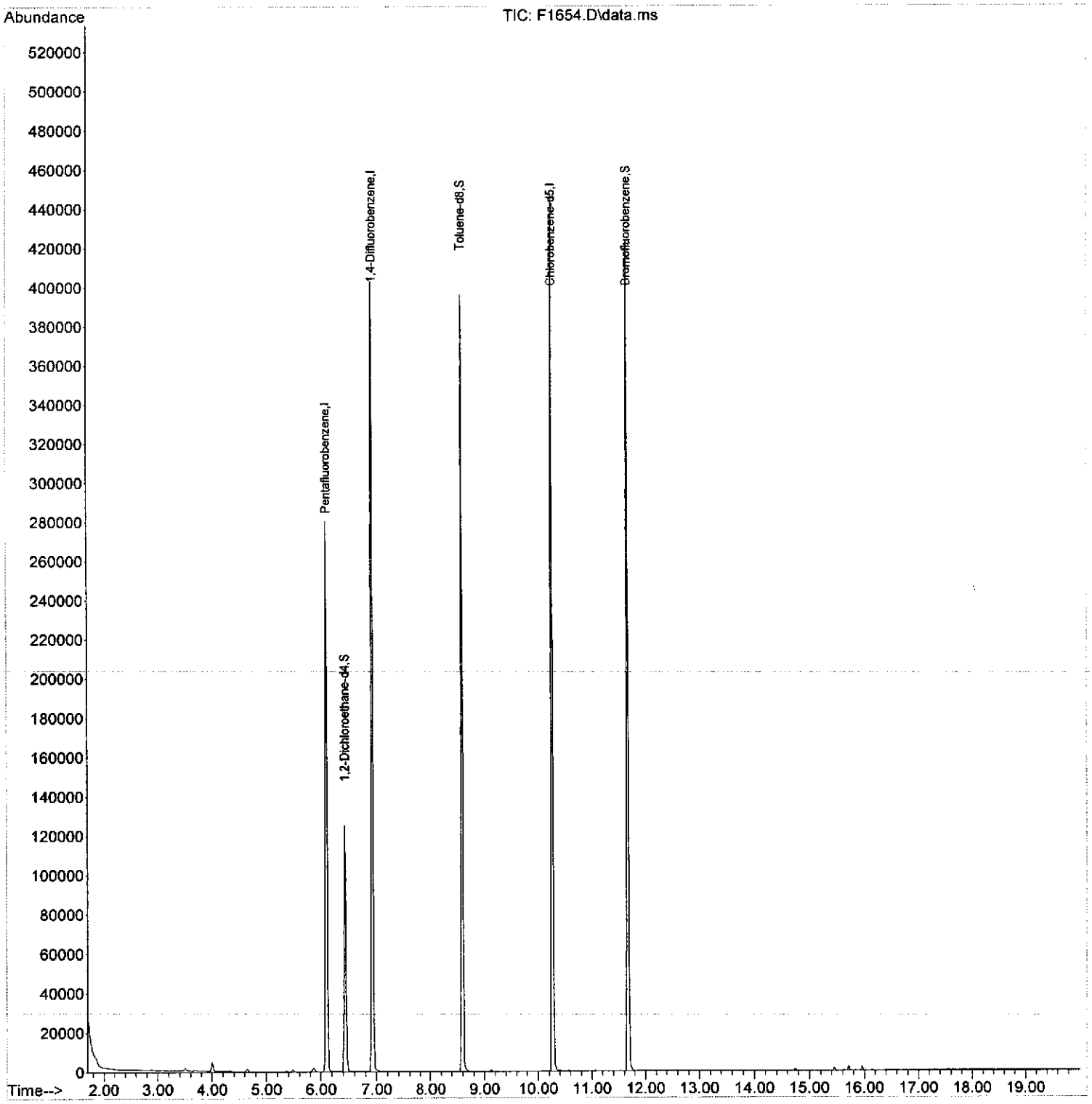
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\01-08-13\
Data File : F1654.D
Acq On : 8 Jan 2013 19:38
Operator : XING
Sample : BLKS130108,BLKS130108,S,5g,0
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 08 14:17:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO1218.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Dec 20 14:20:47 2012
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS130109
Client ID: BLKS130109
Date Received:
Date Analyzed: 01/09/2013
Data file: J6230.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 50
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Benzene	ND		0.050	0.012
Ethylbenzene	ND		0.050	0.018
Total Xylenes	ND		0.100	0.035
Isopropylbenzene	ND		0.050	0.014
n-Propylbenzene	ND		0.050	0.019
1,3,5-Trimethylbenzene	ND		0.050	0.018
tert-Butylbenzene	ND		0.050	0.015
1,2,4-Trimethylbenzene	ND		0.050	0.017
sec-Butylbenzene	ND		0.050	0.019
4-Isopropyltoluene	ND		0.050	0.020
n-Butylbenzene	ND		0.050	0.024
Naphthalene	ND		0.050	0.013

Total Target Compounds (12): 0

Data Path : C:\MSDChem\1\DATA\01-09-13\
Data File : J6230.D
Acq On : 9 Jan 2013 15:38
Operator : XING
Sample : BLKS130109,BLKS130109,S,0.1g,0
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 09 16:03:24 2013
Quant Method : C:\MSDCHEM\1\METHODS\JAM1221.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Sat Dec 22 17:09:31 2012
Response via : Initial Calibration

Internal Standards

	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	5.93	168	197625	50.00 UG	0.00
31) 1,4-Difluorobenzene	6.75	114	372881	50.00 UG	0.00
50) Chlorobenzene-d5	10.08	117	330250	50.00 UG	-0.01

System Monitoring Compounds

30) 1,2-Dichloroethane-d4	6.25	65	106811	50.14 UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.28%		
41) Toluene-d8	8.41	98	317443	50.47 UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.94%		
59) Bromofluorobenzene	11.49	95	165224	50.46 UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.92%		

Target Compounds

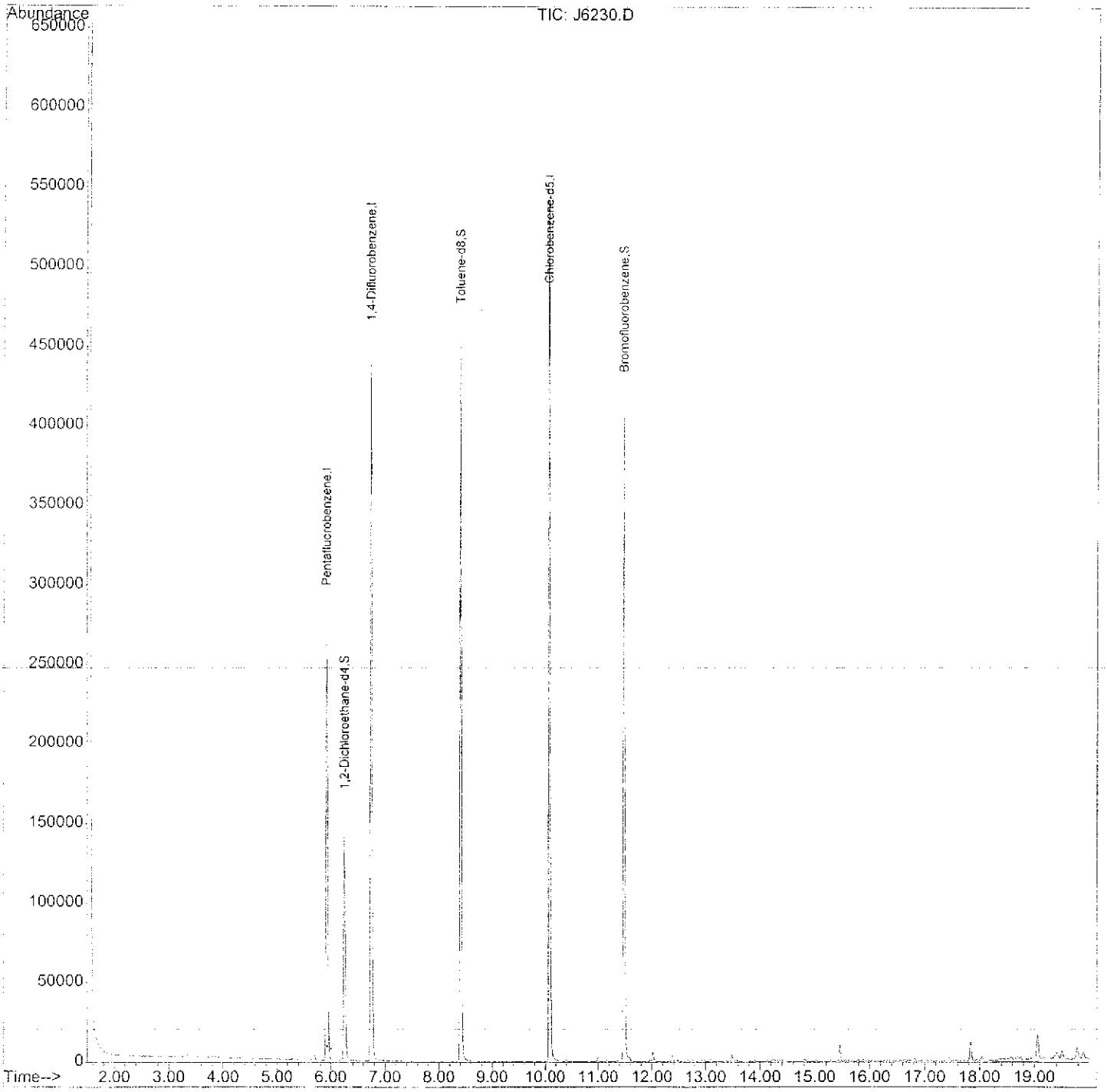
Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\01-09-13\
Data File : J6230.D
Acq On : 9 Jan 2013 15:38
Operator : XING
Sample : BLKS130109,BLKS130109,S,0.1g,0
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 09 16:03:24 2013
Quant Method : C:\MSDCHEM\1\METHODS\JAM1221.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Sat Dec 22 17:09:31 2012
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 00144-002
Client ID: SB-3/5-5.5
Date Received: 01/04/2013
Date Analyzed: 01/09/2013
Data file: J6241.D

GC/MS Column: DB-624
Sample wt/vol: 0.006g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 10
% Moisture: 79.2

Compound	Concentration	Q	RL	MDL
Benzene	ND		4.01	0.962
Ethylbenzene	12.0		4.01	1.44
Total Xylenes	199		8.01	2.80
Isopropylbenzene	4.95		4.01	1.08
n-Propylbenzene	14.8		4.01	1.48
1,3,5-Trimethylbenzene	208		4.01	1.40
tert-Butylbenzene	ND		4.01	1.24
1,2,4-Trimethylbenzene	590		4.01	1.36
sec-Butylbenzene	ND		4.01	1.52
4-Isopropyltoluene	5.00		4.01	1.56
n-Butylbenzene	29.9		4.01	1.92
Naphthalene	86.3		4.01	1.04

Total Target Compounds (12): 1150

SAMPLE TRACKING

IAL
Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO	REPORTING INFO
Company: Pak Environmental	REPORT TO: See Cust Info
Address: 74 Main St	Address:
Woodbridge, NJ	
Telephone #: 732 326 1010	Attn:
Fax #: " " 1012	FAX #
Project Manager: S. Salmon	INVOICE TO: See Cust Info
EMAIL Address:	Address:
Sampler: J. Rizzo	
Project Name: 4202 18th Ave	
Project Location (State): NY	Attn:
Bottle Order #: BO-0189	PO #
Quote # :	

Turnaround time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify): 2 wk

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **: 24 hr - 100%.... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day 10%

Report Format: Results Only; Reduced; Regulatory - 15% Surcharge applies; Other (describe)

EDDs: NJ SRP format; NYSDEC; lab approved custom EDD; NO EDD/CD REQ'D

Cooler Temp 4 °C

Sample Matrix: DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil LIQ - Liquid (Specify) OT - Other (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

SAMPLE INFORMATION

ANALYTICAL PARAMETERS / # BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	EPH w/contingent VOC/SVOC/PBI/metals	NYS DEC Table 2 (VO)	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
SB-1	5.5/6.0	1/8/13	0820	S	5		X								2	3
2	9.0/9.5		0920		4	21		X							1	3
3	5.0/5.5		0955		4	32		X							1	3
4	12.5/13.0		1020		4	43		X							1	3
5	11/11.5		1045		4	54		X							1	3
6	12.0/12.5		1110		4	65		X							1	3
7	1.0/1.5		1155		5	7	X								2	3
8	1.0/1.5		1240		5	8	X								2	3

Known Hazard: Yes or No Describe: Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): ___ IAL Courier ___ Client Courier X FedEx/UPS

	Signature/Company	Date	Time		Signature/Company	Date	Time
Relinquished by:	Joe Rizzo	1/5/13	1600	Received by:	[illegible]	1/5/13	1630
Relinquished by:	[illegible]	1/5/13	[illegible]	Received by:	[illegible]	1/4/13	1800
Relinquished by:				Received by:			
Relinquished by:				Received by:			
Relinquished by:				Received by:			

Comments:

Lab Case # 00144

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2012 REV COC

01/2012 rev

PROJECT INFORMATION

E13-00144

Case No. E13-00144 **Project** 4202 18TH AVE.

Customer	**Peak Environmental Inc.**	**P.O. #**	
Contact	Scott Salmon	**Received**	1/4/2013 18:00
EMail	scott@peak-environmental.com ☑ EMail EDDs	**Verbal Due**	1/21/2013
Phone	(732) 326-1010 **Fax**	**Report Due**	1/28/2013

Report To
74 Main Street
2nd Floor
Woodbridge, NJ 07095
Attn: Scott Salmon

Bill To
74 Main Street
2nd Floor
Woodbridge, NJ 07095
Attn: Mary Ellen Timmes

Report Format **Reduced**

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
00144-001	SB-2	9 / 9.5	1/4/2013@08:20	Soil	mg/Kg	5
00144-002	SB-3	5 / 5.5	1/4/2013@09:20	Soil	mg/Kg	4
00144-003	SB-4	12.5 / 13	1/4/2013@09:55	Soil	mg/Kg	4
00144-004	SB-5	11 / 11.5	1/4/2013@10:20	Soil	mg/Kg	4
00144-005	SB-6	12 / 12.5	1/4/2013@10:45	Soil	mg/Kg	3

Sample #	Tests	Status	QA Method
001	NYCP51T2	Run	8260B
002	NYCP51T2	Run	8260B
003	NYCP51T2	Run	8260B
004	NYCP51T2	Run	8260B
005	NYCP51T2	Run	8260B

01/07/2013 09:56 by Ellen - NOTE 1

3 ENCORS RECEIVED - 1 INTO MEOH/2 INTO H2O

01/07/2013 10:01 by Ellen - NOTE 2

SAMPLES RECEIVED FOR EPH W/ CONDITIONAL ANALYSES REQUESTING NJ IGW MDLs & VO FOR NY CP-51 MDLs ON SAME COC. AS PER MARK'S CONVERSATION W/ JOE R., PLEASE SPLIT INTO TWO SEPARATE JOBS SO RCS CAN BE CREATED FOR EACH SET OF SAMPLES. EPH W/ CONDITIONAL ANALYSES LOGGED IN UNDER JOB #E13-00167.

01/07/2013 13:31 by Ellen - NOTE 3

AS PER MARK'S CONVERSATION W/ JOE R., REDUCED DELIVERABLES WANTED.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **00144** CLIENT: Peak

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

* Only received 2 encores for #65

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check (exclude VOs)[1]
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 1/4/13

CORRECTIVE ACTION REQUIRED: **YES** (SEE BELOW) **NO**

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES Date/ Time: NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 1/7/13

E13-00144 0066

REV 03/2009

Laboratory Custody Chronicle

IAL Case No.

E13-00144

Client Peak Environmental Inc.

Project 4202 18TH AVE.

Received On 1/ 4/2013@18:00

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NYCP51T2	00144-001	Soil	n/a	n/a	1/ 8/13	Xing
"	-002	"	n/a	n/a	1/ 9/13	Xing
"	-003	"	n/a	n/a	1/ 8/13	Xing
"	-004	"	n/a	n/a	1/ 8/13	Xing
"	-005	"	n/a	n/a	1/ 8/13	Xing

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
One Hunters Point Plaza
47-40 21st Street, Long Island City, 11101
Phone: (718) 482-6364 • **Fax:** (718) 482-4098 • **Website:** www.dec.ny.gov

Joe Martens
Commissioner

August 22, 2014

Shapiro Living Trust
c/o Steve Talmud
5 Patriots Court
East Brunswick, NJ 08816

Re.: Spill at 4202 18th Avenue, Brooklyn, NY
Spill Case #: 1215784

Dear Mr. Talmud,

Based on the documentation provided to date, the New York State Department of Environmental Conservation (the Department) has closed the spill case referenced above.

The Department hereby reserves all of its rights concerning, and such forbearance shall not extend to, any further investigation or remedial action the Department deems necessary due to:

I. The off-site migration of petroleum contaminants that was unknown at the time of this closure.

II. Environmental conditions related to this spill case which were unknown to the Department at the time of this closure.

III. Information received, in whole or part, after the Department's spill case closure, which indicates the corrective action was not sufficiently protective of human health and/or the environment.

IV. Fraud in obtaining this spill case closure determination.

Please be advised that you should maintain a permanent file of all documentation and correspondence regarding this case for future use as the Department's files may not be maintained indefinitely.

Sincerely,

Hiralkumar Patel
Environmental Engineer 1
Spill Prevention & Response Programs

cc: Joseph Rizzo, Peak Environmental, Inc.

ATTACHMENT B

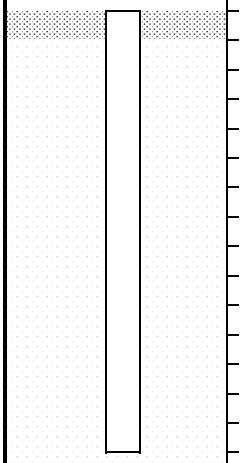
Soil Boring Logs

Geologic Boring Log Details

ENVIRONMENTAL BUSINESS CONSULTANTS

B1 Boring Log

Location: Performed in the northwest area of the building located in the northeast corner of the Site.		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name: AIG1401	Address: 4202 18th Avenue, Brooklyn, NY	Date	DTW	Ground Elevation
		Groundwater depth		
Drilling Company: C^2 Environmental	Method: Geoprobe	Not Detected		Well Specifications
Date Started: 1/22/2015	Date Completed: 1/22/2015			None
Completion Depth: 12 Feet	Geologist Reuben Levinton			

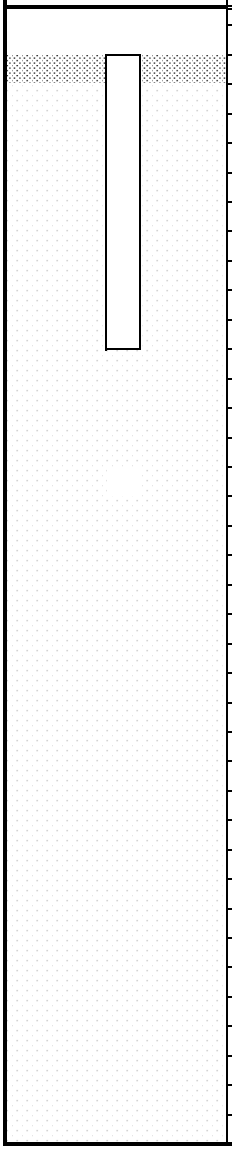
B1 (NTS)	DEPTH (ft below grade)	SAMPLES Reco-very (in.)	Blow per 6 in.	PID (ppm)	SOIL DESCRIPTION
	0 to 4	29		0.0	7" - Concrete 22" - Brown sand with rock **Retained soil sample B1(0-2)*
	4 to 8	26		0.0	26" - Brown sand with rock
	8 to 12	20		0.0	20" - Brown sand **Retained soil sample B1(8-10)*

Geologic Boring Log Details

ENVIRONMENTAL BUSINESS CONSULTANTS

B2 Boring Log

Location: Performed inside the building on Site, south of SB1.		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name: AIG1401	Address: 4202 18th Avenue, Brooklyn, NY	Date	DTW	Ground Elevation
		Groundwater depth		
Drilling Company: C^2 Environmental	Method: Geoprobe	Not Detected		Well Specifications
Date Started: 1/22/2015	Date Completed: 1/22/2015			None
Completion Depth: 10 Feet	Geologist Reuben Levinton			

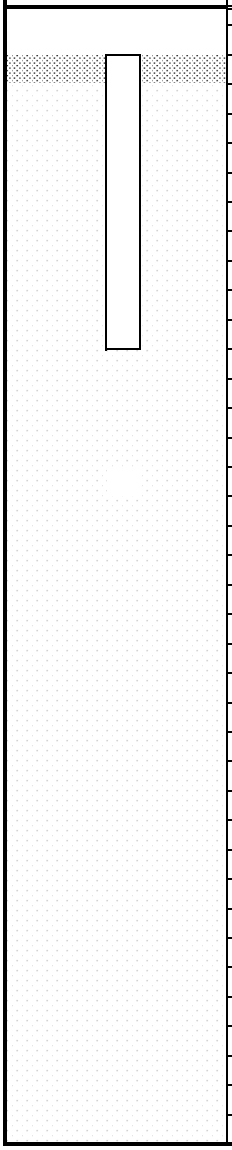
B1 (NTS)	DEPTH (ft below grade)	SAMPLES Reco-very (in.)	Blow per 6 in.	PID (ppm)	SOIL DESCRIPTION
	0				
	to 5	38		0.0	6" - Concrete 32" - Brown sand **Retained soil sample B2(0-2)*
	to 10	36		0.0	36" - Brown sand with rock **Retained soil sample B2(4-6)*

Geologic Boring Log Details

ENVIRONMENTAL BUSINESS CONSULTANTS

B3 Boring Log

Location: Located towards the Southwest corner of the site.		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name: AIG1401	Address: 4202 18th Avenue, Brooklyn, NY	Date	DTW	Ground Elevation
		Groundwater depth		
Drilling Company: C^2 Environmental	Method: Geoprobe	Not Detected		Well Specifications
Date Started: 1/22/2015	Date Completed: 1/22/2015			None
Completion Depth: 10 Feet	Geologist Reuben Levinton			

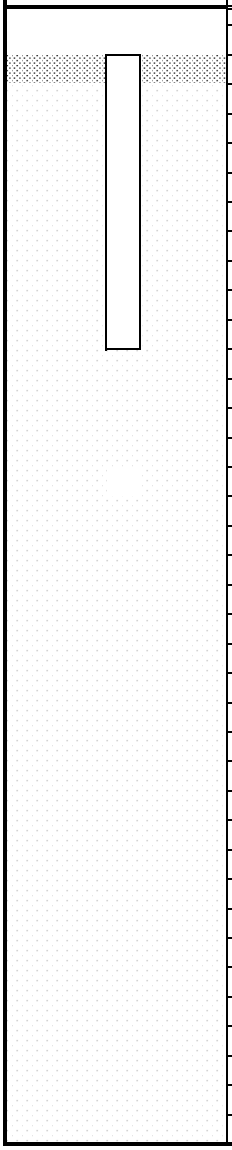
B1 (NTS)	DEPTH (ft below grade)	SAMPLES Reco-very (in.)	Blow per 6 in.	PID (ppm)	SOIL DESCRIPTION
	0				
	to 5	15		0.0	15" - Brown sand with rock **Retained soil sample B3(0-2)*
	to 10	16		0.0	16" - Brown sand with rock **Retained soil sample B3(4-6)*

Geologic Boring Log Details

ENVIRONMENTAL BUSINESS CONSULTANTS

B4 Boring Log

Location: Performed in the southeast corner of the site, near the corner of 18th Ave and E 3rd St.		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name: AIG1401	Address: 4202 18th Avenue, Brooklyn, NY	Date	DTW	Ground Elevation
		Groundwater depth		
Drilling Company: C^2 Environmental	Method: Geoprobe	Not Detected		Well Specifications
Date Started: 1/22/2015	Date Completed: 1/22/2015			None
Completion Depth: 10 Feet	Geologist Reuben Levinton			

B1 (NTS)	DEPTH (ft below grade)	SAMPLES Reco-very (in.)	Blow per 6 in.	PID (ppm)	SOIL DESCRIPTION
	0				
	to 5	30		0.0	30" - Brown sand with rock **Retained soil sample B4(0-2)*
	to 10	25		0.0	25" - Brown sand with rock **Retained soil sample B4(8-10)*

ATTACHMENT C
Groundwater Sampling Logs

GROUNDWATER PURGE / SAMPLE LOGS

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Well I.D.: MW1

Date: 2/18/2015

Well Depth (from TOC): -

Equipment: Check Valve

Static Water Level (from TOC): -

Field Personnel: Greg Swirson

Height of Water in Well: -

Gallons of Water per Well Volume: -

Flow Rate: 400ml/min.

Time	Time (24Hr)	Pump Rate	Gal. Removed	pH	Cond. (µS/cm)	Temp. (ºF)	DO (mg/L)	Comments
0.00	10:48	400ml/min	0					turbid
5.00	10:53	400ml/min	0.55					turbid
5.00	10:58	400ml/min	0.55					clear

Note 400 ml = 0.11 gallons

GROUNDWATER PURGE / SAMPLE LOGS

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Well I.D.: MW2

Date: 2/18/2015

Well Depth (from TOC): 49.55

Equipment: Check Valve

Static Water Level (from TOC): 43.15

Field Personnel: Greg Swirson

Height of Water in Well: 6.4

Gallons of Water per Well Volume: 0.256

Flow Rate: 400ml/min.

Time	Time (24Hr)	Pump Rate	Gal. Removed	pH	Cond. (µS/cm)	Temp. (ºF)	DO (mg/L)	Comments
0.00	11:13	400ml/min	0					turbid
5.00	11:18	400ml/min	0.55					turbid
5.00	11:23	400ml/min	0.55					clear

Note 400 ml = 0.11 gallons

GROUNDWATER PURGE / SAMPLE LOGS

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Well I.D.: MW3

Date: 2/18/2015

Well Depth (from TOC): 49.64

Equipment: Check Valve

Static Water Level (from TOC): 42.5

Field Personnel: Greg Swirson

Height of Water in Well: 7.14

Gallons of Water per Well Volume: 0.2856

Flow Rate: 400ml/min.

Time	Time (24Hr)	Pump Rate	Gal. Removed	pH	Cond. (µS/cm)	Temp. (ºF)	DO (mg/L)	Comments
0.00	11:46	400ml/min	0					turbid
5.00	11:51	400ml/min	0.55					turbid
5.00	11:56	400ml/min	0.55					clear

Note 400 ml = 0.11 gallons

ATTACHMENT D
Soil Gas Sampling Logs

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

CHAIN OF CUSTODY RECORD
AIR ANALYSES

800-827-5426

email: greg@phoenixlabs.com

P.O. #

Data Delivery:
- ☐ Fax #:
- ☒ Email: File
- ☐ Phone #:

Report to: Kevin Waters

Customer: EBC

Address: 1408 middle country rd, Ridge NY

Invoice to: EBC

Sampled by: Greg Swirson

Project Name: 4202 18th Ave

Requested Deliverable: RCP ☐ ASP CAT B ☒ MCP ☐ NJ Deliverables ☐

State where samples collected: NY

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-14	TO-15
		THIS SECTION FOR LAB USE ONLY											MATRIX			ANALYSES	
74444	SG1	470	6.0	-30	-2	5354	41.7	909	1127	2-18-15	-29	-5		X			X
74445	SG2	458	6.0	-30	-1	4495		915	1128	2-18-15	-30	-6		X			X
74446	SS2	218	6.0	-30	-2	5039		922	1130	2-18-15	-30	-6		X			X
74447	SS1	13636	6.0	-30	-4	0331		927	1131	2-18-15	-29	-7		X			X
	Hold	~~12859~~	~~6.0~~	~~-30~~		~~5658~~		GS									
	6L 2hr																

Relinquished by: [signature]

Accepted by: [signature]

Date: 2-18-15 Time: 12:30

Date: 2-18-15 Time: 11:00

Data Format: Excel ☒ Equis ☒ GISKey ☐ PDF ☒ Other: ☐

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Requested Criteria

Quote Number:

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: Date:

ATTACHMENT E
Laboratory Reports in Digital Format

PHOENIX
Environmental Laboratories, Inc.

Friday, December 12, 2014

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 4202 18TH AVE., BROOKLYN
Sample ID#s: BH50837 - BH50840

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

December 12, 2014

SDG I.D.: GBH50837

8260 Volatile Organics:
1,2-Dibromoethane, 1,2,3 Trichloropropane, and 1,2-Dibromo-3-chloropropane do not meet NY TOGS GA criteria, these compounds are analyzed by GC/FID method 504 or 8011 to achieve this criteria.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 12, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		12/08/14	10:00
Location Code:	EBC	Received by:	LB	12/09/14	15:35
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH50837
Phoenix ID: BH50837

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 3 FILL

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Silver	< 0.38		0.38	0.38	mg/Kg	12/10/14	EK	SW6010	
Aluminum	6680		38	7.5	mg/Kg	12/10/14	EK	SW6010	
Arsenic	3.8		0.8	0.75	mg/Kg	12/10/14	EK	SW6010	
Barium	51.8		0.8	0.38	mg/Kg	12/10/14	EK	SW6010	
Beryllium	0.40		0.30	0.15	mg/Kg	12/10/14	EK	SW6010	
Calcium	11300		38	35	mg/Kg	12/10/14	EK	SW6010	
Cadmium	0.19	B*	0.38	0.15	mg/Kg	12/10/14	EK	SW6010	
Cobalt	6.85		0.38	0.38	mg/Kg	12/10/14	EK	SW6010	
Chromium	18.4		0.38	0.38	mg/Kg	12/10/14	EK	SW6010	
Copper	25.3		0.38	0.38	mg/kg	12/10/14	EK	SW6010	
Iron	12800		38	38	mg/Kg	12/10/14	EK	SW6010	
Mercury	< 0.08		0.08	0.05	mg/Kg	12/10/14	RS	SW-7471	
Potassium	1010	N*	75	29	mg/Kg	12/10/14	EK	SW6010	
Magnesium	3970		3.8	3.8	mg/Kg	12/10/14	EK	SW6010	
Manganese	233		3.8	3.8	mg/Kg	12/10/14	EK	SW6010	
Sodium	536	N	8	3.2	mg/Kg	12/10/14	EK	SW6010	
Nickel	22.2		0.38	0.38	mg/Kg	12/10/14	EK	SW6010	
Lead	114		0.8	0.38	mg/Kg	12/10/14	EK	SW6010	
Antimony	< 1.9		1.9	1.9	mg/Kg	12/10/14	EK	SW6010	
Selenium	< 1.5		1.5	1.3	mg/Kg	12/10/14	EK	SW6010	
Thallium	< 1.5		1.5	1.5	mg/Kg	12/10/14	EK	SW6010	
Vanadium	26.5		0.4	0.38	mg/Kg	12/10/14	EK	SW6010	
Zinc	63.4	N*	0.8	0.38	mg/Kg	12/10/14	EK	SW6010	B
Percent Solid	90				%	12/09/14	I	SW846	
Soil Extraction for PCB	Completed					12/09/14	JC/H	SW3545	
Mercury Digestion	Completed					12/10/14	I/I	SW7471	
Total Metals Digest	Completed					12/09/14	CB/AG	SW846 - 3050	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 3 FILL

Phoenix I.D.: BH50837

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Polychlorinated Biphenyls							
PCB-1016	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1221	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1232	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1242	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1248	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1254	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1260	41	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1262	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
PCB-1268	ND	36	36	ug/Kg	12/10/14	AW	SW 8082
QA/QC Surrogates							
% DCBP	83			%	12/10/14	AW	30 - 150 %
% TCMX	66			%	12/10/14	AW	30 - 150 %

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 12, 2014
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 12, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		12/08/14	10:30
Location Code:	EBC	Received by:	LB	12/09/14	15:35
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH50837
Phoenix ID: BH50838

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	0.19	ug/L	12/09/14	MH	SW8260	
1,1,1-Trichloroethane	ND	5.0	0.19	ug/L	12/09/14	MH	SW8260	
1,1,2,2-Tetrachloroethane	ND	1.0	0.15	ug/L	12/09/14	MH	SW8260	
1,1,2-Trichloroethane	ND	1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,1-Dichloroethane	ND	5.0	0.23	ug/L	12/09/14	MH	SW8260	
1,1-Dichloroethene	ND	1.0	0.24	ug/L	12/09/14	MH	SW8260	
1,1-Dichloropropene	ND	1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,2,3-Trichlorobenzene	ND	1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,2,3-Trichloropropane	ND	1.0	0.21	ug/L	12/09/14	MH	SW8260	
1,2,4-Trichlorobenzene	ND	1.0	0.18	ug/L	12/09/14	MH	SW8260	
1,2,4-Trimethylbenzene	380	20	3.6	ug/L	12/10/14	MH	SW8260	
1,2-Dibromo-3-chloropropane	ND	1.0	0.36	ug/L	12/09/14	MH	SW8260	
1,2-Dibromoethane	ND	1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,2-Dichlorobenzene	ND	1.0	0.16	ug/L	12/09/14	MH	SW8260	
1,2-Dichloroethane	ND	0.60	0.20	ug/L	12/09/14	MH	SW8260	
1,2-Dichloropropane	ND	1.0	0.18	ug/L	12/09/14	MH	SW8260	
1,3,5-Trimethylbenzene	140	5.0	1.1	ug/L	12/10/14	MH	SW8260	
1,3-Dichlorobenzene	ND	1.0	0.19	ug/L	12/09/14	MH	SW8260	
1,3-Dichloropropane	ND	1.0	0.22	ug/L	12/09/14	MH	SW8260	
1,4-Dichlorobenzene	ND	1.0	0.19	ug/L	12/09/14	MH	SW8260	
2,2-Dichloropropane	ND	1.0	0.16	ug/L	12/09/14	MH	SW8260	
2-Chlorotoluene	ND	1.0	0.23	ug/L	12/09/14	MH	SW8260	
2-Hexanone	ND	1.0	0.27	ug/L	12/09/14	MH	SW8260	
2-Isopropyltoluene	1.6	1.0	0.21	ug/L	12/09/14	MH	SW8260	1
4-Chlorotoluene	ND	1.0	0.16	ug/L	12/09/14	MH	SW8260	
4-Methyl-2-pentanone	ND	1.0	0.19	ug/L	12/09/14	MH	SW8260	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 1

Phoenix I.D.: BH50838

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Acetone	ND		5.0	0.31	ug/L	12/09/14	MH	SW8260	
Acrolein	ND		5.0	0.95	ug/L	12/09/14	MH	SW8260	
Acrylonitrile	ND		5.0	0.17	ug/L	12/09/14	MH	SW8260	
Benzene	ND		0.70	0.19	ug/L	12/09/14	MH	SW8260	
Bromobenzene	ND		1.0	0.20	ug/L	12/09/14	MH	SW8260	
Bromochloromethane	ND		1.0	0.22	ug/L	12/09/14	MH	SW8260	
Bromodichloromethane	ND		1.0	0.16	ug/L	12/09/14	MH	SW8260	
Bromoform	ND		5.0	0.10	ug/L	12/09/14	MH	SW8260	
Bromomethane	ND		5.0	0.50	ug/L	12/09/14	MH	SW8260	
Carbon Disulfide	0.27	J	1.0	0.24	ug/L	12/09/14	MH	SW8260	
Carbon tetrachloride	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Chlorobenzene	ND		5.0	0.20	ug/L	12/09/14	MH	SW8260	
Chloroethane	ND		5.0	0.24	ug/L	12/09/14	MH	SW8260	
Chloroform	1.0	J	5.0	0.22	ug/L	12/09/14	MH	SW8260	
Chloromethane	ND		5.0	0.21	ug/L	12/09/14	MH	SW8260	
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
cis-1,3-Dichloropropene	ND		0.40	0.15	ug/L	12/09/14	MH	SW8260	
Dibromochloromethane	ND		1.0	0.15	ug/L	12/09/14	MH	SW8260	
Dibromomethane	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Dichlorodifluoromethane	ND		1.0	0.26	ug/L	12/09/14	MH	SW8260	
Ethylbenzene	15		1.0	0.19	ug/L	12/09/14	MH	SW8260	
Hexachlorobutadiene	ND		1.0	0.13	ug/L	12/09/14	MH	SW8260	
Isopropylbenzene	15		1.0	0.22	ug/L	12/09/14	MH	SW8260	
m&p-Xylene	90		2.0	0.84	ug/L	12/10/14	MH	SW8260	
Methyl ethyl ketone	ND		1.0	0.50	ug/L	12/09/14	MH	SW8260	
Methyl t-butyl ether (MTBE)	ND		1.0	0.19	ug/L	12/09/14	MH	SW8260	
Methylene chloride	ND		3.0	0.16	ug/L	12/09/14	MH	SW8260	
Naphthalene	52		2.0	0.38	ug/L	12/10/14	MH	SW8260	
n-Butylbenzene	ND		1.0	0.22	ug/L	12/09/14	MH	SW8260	
n-Propylbenzene	46		2.0	0.40	ug/L	12/10/14	MH	SW8260	
o-Xylene	11		1.0	0.45	ug/L	12/09/14	MH	SW8260	
p-Isopropyltoluene	5.1		1.0	0.21	ug/L	12/09/14	MH	SW8260	
sec-Butylbenzene	5.7		1.0	0.22	ug/L	12/09/14	MH	SW8260	
Styrene	ND		1.0	0.41	ug/L	12/09/14	MH	SW8260	
tert-Butylbenzene	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Tetrachloroethene	0.26	J	1.0	0.24	ug/L	12/09/14	MH	SW8260	
Tetrahydrofuran (THF)	ND		5.0	0.51	ug/L	12/09/14	MH	SW8260	1
Toluene	2.1		1.0	0.20	ug/L	12/09/14	MH	SW8260	
trans-1,2-Dichloroethene	ND		5.0	0.20	ug/L	12/09/14	MH	SW8260	
trans-1,3-Dichloropropene	ND		0.40	0.14	ug/L	12/09/14	MH	SW8260	
trans-1,4-dichloro-2-butene	ND		1.0	0.45	ug/L	12/09/14	MH	SW8260	
Trichloroethene	ND		1.0	0.18	ug/L	12/09/14	MH	SW8260	
Trichlorofluoromethane	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Trichlorotrifluoroethane	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Vinyl chloride	ND		1.0	0.14	ug/L	12/09/14	MH	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	97				%	12/09/14	MH	70 - 121 %	
% Bromofluorobenzene	107				%	12/09/14	MH	59 - 113 %	
% Dibromofluoromethane	99				%	12/09/14	MH	70 - 130 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 1

Phoenix I.D.: BH50838

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% Toluene-d8	101			%	12/09/14	MH	84 - 138 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
December 12, 2014
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 12, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		12/08/14	11:00
Location Code:	EBC	Received by:	LB	12/09/14	15:35
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH50837
Phoenix ID: BH50839

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 2

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Volatiles									
1,1,1,2-Tetrachloroethane	ND		1.0	0.19	ug/L	12/09/14	MH	SW8260	
1,1,1-Trichloroethane	ND		5.0	0.19	ug/L	12/09/14	MH	SW8260	
1,1,2,2-Tetrachloroethane	ND		1.0	0.15	ug/L	12/09/14	MH	SW8260	
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,1-Dichloroethane	ND		5.0	0.23	ug/L	12/09/14	MH	SW8260	
1,1-Dichloroethene	ND		1.0	0.24	ug/L	12/09/14	MH	SW8260	
1,1-Dichloropropene	ND		1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,2,3-Trichlorobenzene	ND		1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,2,3-Trichloropropane	ND		1.0	0.21	ug/L	12/09/14	MH	SW8260	
1,2,4-Trichlorobenzene	ND		1.0	0.18	ug/L	12/09/14	MH	SW8260	
1,2,4-Trimethylbenzene	30		1.0	0.18	ug/L	12/09/14	MH	SW8260	
1,2-Dibromo-3-chloropropane	ND		1.0	0.36	ug/L	12/09/14	MH	SW8260	
1,2-Dibromoethane	ND		1.0	0.20	ug/L	12/09/14	MH	SW8260	
1,2-Dichlorobenzene	ND		1.0	0.16	ug/L	12/09/14	MH	SW8260	
1,2-Dichloroethane	ND		0.60	0.20	ug/L	12/09/14	MH	SW8260	
1,2-Dichloropropane	ND		1.0	0.18	ug/L	12/09/14	MH	SW8260	
1,3,5-Trimethylbenzene	8.4		1.0	0.21	ug/L	12/09/14	MH	SW8260	
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L	12/09/14	MH	SW8260	
1,3-Dichloropropane	ND		1.0	0.22	ug/L	12/09/14	MH	SW8260	
1,4-Dichlorobenzene	ND		1.0	0.19	ug/L	12/09/14	MH	SW8260	
2,2-Dichloropropane	ND		1.0	0.16	ug/L	12/09/14	MH	SW8260	
2-Chlorotoluene	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
2-Hexanone	ND		1.0	0.27	ug/L	12/09/14	MH	SW8260	
2-Isopropyltoluene	0.39	J	1.0	0.21	ug/L	12/09/14	MH	SW8260	1
4-Chlorotoluene	ND		1.0	0.16	ug/L	12/09/14	MH	SW8260	
4-Methyl-2-pentanone	ND		1.0	0.19	ug/L	12/09/14	MH	SW8260	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 2

Phoenix I.D.: BH50839

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Acetone	9.2	S	5.0	0.31	ug/L	12/09/14	MH	SW8260	
Acrolein	ND		5.0	0.95	ug/L	12/09/14	MH	SW8260	
Acrylonitrile	ND		5.0	0.17	ug/L	12/09/14	MH	SW8260	
Benzene	ND		0.70	0.19	ug/L	12/09/14	MH	SW8260	
Bromobenzene	ND		1.0	0.20	ug/L	12/09/14	MH	SW8260	
Bromochloromethane	ND		1.0	0.22	ug/L	12/09/14	MH	SW8260	
Bromodichloromethane	ND		1.0	0.16	ug/L	12/09/14	MH	SW8260	
Bromoform	ND		5.0	0.10	ug/L	12/09/14	MH	SW8260	
Bromomethane	ND		5.0	0.50	ug/L	12/09/14	MH	SW8260	
Carbon Disulfide	0.66	J	1.0	0.24	ug/L	12/09/14	MH	SW8260	
Carbon tetrachloride	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Chlorobenzene	ND		5.0	0.20	ug/L	12/09/14	MH	SW8260	
Chloroethane	ND		5.0	0.24	ug/L	12/09/14	MH	SW8260	
Chloroform	0.23	J	5.0	0.22	ug/L	12/09/14	MH	SW8260	
Chloromethane	0.36	J	5.0	0.21	ug/L	12/09/14	MH	SW8260	
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
cis-1,3-Dichloropropene	ND		0.40	0.15	ug/L	12/09/14	MH	SW8260	
Dibromochloromethane	ND		1.0	0.15	ug/L	12/09/14	MH	SW8260	
Dibromomethane	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Dichlorodifluoromethane	ND		1.0	0.26	ug/L	12/09/14	MH	SW8260	
Ethylbenzene	1.6		1.0	0.19	ug/L	12/09/14	MH	SW8260	
Hexachlorobutadiene	ND		1.0	0.13	ug/L	12/09/14	MH	SW8260	
Isopropylbenzene	1.4		1.0	0.22	ug/L	12/09/14	MH	SW8260	
m&p-Xylene	9.5		1.0	0.42	ug/L	12/09/14	MH	SW8260	
Methyl ethyl ketone	ND		1.0	0.50	ug/L	12/09/14	MH	SW8260	
Methyl t-butyl ether (MTBE)	ND		1.0	0.19	ug/L	12/09/14	MH	SW8260	
Methylene chloride	ND		3.0	0.16	ug/L	12/09/14	MH	SW8260	
Naphthalene	6.2		1.0	0.19	ug/L	12/09/14	MH	SW8260	
n-Butylbenzene	1.5		1.0	0.22	ug/L	12/09/14	MH	SW8260	
n-Propylbenzene	3.7		1.0	0.20	ug/L	12/09/14	MH	SW8260	
o-Xylene	1.2		1.0	0.45	ug/L	12/09/14	MH	SW8260	
p-Isopropyltoluene	0.87	J	1.0	0.21	ug/L	12/09/14	MH	SW8260	
sec-Butylbenzene	0.93	J	1.0	0.22	ug/L	12/09/14	MH	SW8260	
Styrene	ND		1.0	0.41	ug/L	12/09/14	MH	SW8260	
tert-Butylbenzene	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Tetrachloroethene	0.92	J	1.0	0.24	ug/L	12/09/14	MH	SW8260	
Tetrahydrofuran (THF)	ND		5.0	0.51	ug/L	12/09/14	MH	SW8260	1
Toluene	3.6		1.0	0.20	ug/L	12/09/14	MH	SW8260	
trans-1,2-Dichloroethene	ND		5.0	0.20	ug/L	12/09/14	MH	SW8260	
trans-1,3-Dichloropropene	ND		0.40	0.14	ug/L	12/09/14	MH	SW8260	
trans-1,4-dichloro-2-butene	ND		1.0	0.45	ug/L	12/09/14	MH	SW8260	
Trichloroethene	0.25	J	1.0	0.18	ug/L	12/09/14	MH	SW8260	
Trichlorofluoromethane	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Trichlorotrifluoroethane	ND		1.0	0.23	ug/L	12/09/14	MH	SW8260	
Vinyl chloride	ND		1.0	0.14	ug/L	12/09/14	MH	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	100				%	12/09/14	MH	70 - 121 %	
% Bromofluorobenzene	105				%	12/09/14	MH	59 - 113 %	
% Dibromofluoromethane	101				%	12/09/14	MH	70 - 130 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 2

Phoenix I.D.: BH50839

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% Toluene-d8	96			%	12/09/14	MH	84 - 138 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 12, 2014
Reviewed and Released by: Ethan Lee, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 12, 2014

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		12/08/14	11:30
Location Code:	EBC	Received by:	LB	12/09/14	15:35
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH50837
Phoenix ID: BH50840

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 3

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Volatiles									
1,1,1,2-Tetrachloroethane	ND		1.0	0.19	ug/L	12/10/14	MH	SW8260	
1,1,1-Trichloroethane	ND		5.0	0.19	ug/L	12/10/14	MH	SW8260	
1,1,2,2-Tetrachloroethane	ND		1.0	0.15	ug/L	12/10/14	MH	SW8260	
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L	12/10/14	MH	SW8260	
1,1-Dichloroethane	ND		5.0	0.23	ug/L	12/10/14	MH	SW8260	
1,1-Dichloroethene	ND		1.0	0.24	ug/L	12/10/14	MH	SW8260	
1,1-Dichloropropene	ND		1.0	0.20	ug/L	12/10/14	MH	SW8260	
1,2,3-Trichlorobenzene	ND		1.0	0.20	ug/L	12/10/14	MH	SW8260	
1,2,3-Trichloropropane	ND		1.0	0.21	ug/L	12/10/14	MH	SW8260	
1,2,4-Trichlorobenzene	ND		1.0	0.18	ug/L	12/10/14	MH	SW8260	
1,2,4-Trimethylbenzene	8.1		1.0	0.18	ug/L	12/10/14	MH	SW8260	
1,2-Dibromo-3-chloropropane	ND		1.0	0.36	ug/L	12/10/14	MH	SW8260	
1,2-Dibromoethane	ND		1.0	0.20	ug/L	12/10/14	MH	SW8260	
1,2-Dichlorobenzene	ND		1.0	0.16	ug/L	12/10/14	MH	SW8260	
1,2-Dichloroethane	ND		0.60	0.20	ug/L	12/10/14	MH	SW8260	
1,2-Dichloropropane	ND		1.0	0.18	ug/L	12/10/14	MH	SW8260	
1,3,5-Trimethylbenzene	2.0		1.0	0.21	ug/L	12/10/14	MH	SW8260	
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L	12/10/14	MH	SW8260	
1,3-Dichloropropane	ND		1.0	0.22	ug/L	12/10/14	MH	SW8260	
1,4-Dichlorobenzene	ND		1.0	0.19	ug/L	12/10/14	MH	SW8260	
2,2-Dichloropropane	ND		1.0	0.16	ug/L	12/10/14	MH	SW8260	
2-Chlorotoluene	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
2-Hexanone	ND		1.0	0.27	ug/L	12/10/14	MH	SW8260	
2-Isopropyltoluene	0.44	J	1.0	0.21	ug/L	12/10/14	MH	SW8260	1
4-Chlorotoluene	ND		1.0	0.16	ug/L	12/10/14	MH	SW8260	
4-Methyl-2-pentanone	ND		1.0	0.19	ug/L	12/10/14	MH	SW8260	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 3

Phoenix I.D.: BH50840

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Acetone	6.6	S	5.0	0.31	ug/L	12/10/14	MH	SW8260	
Acrolein	ND		5.0	0.95	ug/L	12/10/14	MH	SW8260	
Acrylonitrile	ND		5.0	0.17	ug/L	12/10/14	MH	SW8260	
Benzene	ND		0.70	0.19	ug/L	12/10/14	MH	SW8260	
Bromobenzene	ND		1.0	0.20	ug/L	12/10/14	MH	SW8260	
Bromochloromethane	ND		1.0	0.22	ug/L	12/10/14	MH	SW8260	
Bromodichloromethane	ND		1.0	0.16	ug/L	12/10/14	MH	SW8260	
Bromoform	ND		5.0	0.10	ug/L	12/10/14	MH	SW8260	
Bromomethane	ND		5.0	0.50	ug/L	12/10/14	MH	SW8260	
Carbon Disulfide	0.68	J	1.0	0.24	ug/L	12/10/14	MH	SW8260	
Carbon tetrachloride	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
Chlorobenzene	ND		5.0	0.20	ug/L	12/10/14	MH	SW8260	
Chloroethane	ND		5.0	0.24	ug/L	12/10/14	MH	SW8260	
Chloroform	0.71	J	5.0	0.22	ug/L	12/10/14	MH	SW8260	
Chloromethane	0.54	J	5.0	0.21	ug/L	12/10/14	MH	SW8260	
cis-1,2-Dichloroethene	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
cis-1,3-Dichloropropene	ND		0.40	0.15	ug/L	12/10/14	MH	SW8260	
Dibromochloromethane	ND		1.0	0.15	ug/L	12/10/14	MH	SW8260	
Dibromomethane	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
Dichlorodifluoromethane	ND		1.0	0.26	ug/L	12/10/14	MH	SW8260	
Ethylbenzene	0.52	J	1.0	0.19	ug/L	12/10/14	MH	SW8260	
Hexachlorobutadiene	ND		1.0	0.13	ug/L	12/10/14	MH	SW8260	
Isopropylbenzene	0.60	J	1.0	0.22	ug/L	12/10/14	MH	SW8260	
m&p-Xylene	2.8		1.0	0.42	ug/L	12/10/14	MH	SW8260	
Methyl ethyl ketone	2.6		1.0	0.50	ug/L	12/10/14	MH	SW8260	
Methyl t-butyl ether (MTBE)	ND		1.0	0.19	ug/L	12/10/14	MH	SW8260	
Methylene chloride	ND		3.0	0.16	ug/L	12/10/14	MH	SW8260	
Naphthalene	3.3		1.0	0.19	ug/L	12/10/14	MH	SW8260	
n-Butylbenzene	0.73	J	1.0	0.22	ug/L	12/10/14	MH	SW8260	
n-Propylbenzene	1.7		1.0	0.20	ug/L	12/10/14	MH	SW8260	
o-Xylene	ND		1.0	0.45	ug/L	12/10/14	MH	SW8260	
p-Isopropyltoluene	0.95	J	1.0	0.21	ug/L	12/10/14	MH	SW8260	
sec-Butylbenzene	0.48	J	1.0	0.22	ug/L	12/10/14	MH	SW8260	
Styrene	ND		1.0	0.41	ug/L	12/10/14	MH	SW8260	
tert-Butylbenzene	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
Tetrachloroethene	0.54	J	1.0	0.24	ug/L	12/10/14	MH	SW8260	
Tetrahydrofuran (THF)	ND		5.0	0.51	ug/L	12/10/14	MH	SW8260	1
Toluene	0.35	J	1.0	0.20	ug/L	12/10/14	MH	SW8260	
trans-1,2-Dichloroethene	ND		5.0	0.20	ug/L	12/10/14	MH	SW8260	
trans-1,3-Dichloropropene	ND		0.40	0.14	ug/L	12/10/14	MH	SW8260	
trans-1,4-dichloro-2-butene	ND		1.0	0.45	ug/L	12/10/14	MH	SW8260	
Trichloroethene	ND		1.0	0.18	ug/L	12/10/14	MH	SW8260	
Trichlorofluoromethane	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
Trichlorotrifluoroethane	ND		1.0	0.23	ug/L	12/10/14	MH	SW8260	
Vinyl chloride	ND		1.0	0.14	ug/L	12/10/14	MH	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	97				%	12/10/14	MH	70 - 121 %	
% Bromofluorobenzene	107				%	12/10/14	MH	59 - 113 %	
% Dibromofluoromethane	100				%	12/10/14	MH	70 - 130 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW 3

Phoenix I.D.: BH50840

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% Toluene-d8	98			%	12/10/14	MH	84 - 138 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
December 12, 2014
Reviewed and Released by: Ethan Lee, Project Manager

Sample Criteria Exceedences Report

GBH50837 - EBC

Criteria: NY: 375, 375RRS, 375RS

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BH50837	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	114	0.8	63	63	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY Temperature Narration

December 12, 2014

SDG I.D.: GBH50837

The samples in this delivery group were received at 4°C.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

PHOENIX Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 4 °C Pg of

Contact Options:
[ ] Fax:
[■] Phone: (631) 504-6000
[■] Email: Csosik@ebcincny.com

Customer: Environmental Business Consultants
Address: 1808 Middle Country Road
Ridge, New York 11961

Project: 4202 18th Ave, Brooklyn NY
Report to: Environmental Business Consultants
Invoice to: Environmental Business Consultants
Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 12/9/14

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	PCB's	TAL Metals	+	+	+	+	x	+	+			Soil VOA Vials [X] methanol [X] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vials HCl	GL Amber 1000ml [ ] As is	PL As is [ ] 250ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
50837	MW3 Fill	S	12-8-14	10:00			X	X										X									
50838	MW1	GW	↓	10:30	X															3							
50839	MW2	↓	↓	11:00	X															3							
50840	MW3	↓	↓	11:30	X															3							

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	12-9-14	1216
[signature]	[signature]	12-9-14	1535

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] 5 Days
[ ] 10 Days
[ ] Other
* SURCHARGE APPLIES

NJ
[ ] Res. Criteria
[ ] Non-Res. Criteria
[ ] Impact to GW Soil Cleanup Criteria
[ ] GW Criteria

NY
[ ] TAGM 4046 GW
[ ] TAGM 4046 SOIL
[■] NY375 Unrestricted Use Soil
[■] NY375 Residential
[■] Restricted/Residential
[ ] Commercial
[ ] Industrial

Data Format
[ ] Phoenix Std Report
[■] Excel
[■] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] NJ Hazsite EDD
[■] NY EZ EDD (ASP)
[ ] Other

Data Package
[ ] NJ Reduced Deliv. *
[■] NY Enhanced (ASP B) *
[ ] Other

State where samples were collected: NY

PHOENIX
Environmental Laboratories, Inc.

Tuesday, February 03, 2015

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 4202 18TH AVE., BROOKLYN
Sample ID#s: BH66835 - BH66844

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
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Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

February 03, 2015

SDG I.D.: GBH66835

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

PHOENIX

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	8:30
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66835

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 0-2 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.38		0.38	0.38	mg/Kg	01/26/15	LK	SW6010
Aluminum	16700		38	7.5	mg/Kg	01/26/15	LK	SW6010
Arsenic	6.0		0.8	0.75	mg/Kg	01/26/15	LK	SW6010
Barium	82.4		0.8	0.38	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.60		0.30	0.15	mg/Kg	01/26/15	LK	SW6010
Calcium	11000		3.8	3.5	mg/Kg	01/26/15	LK	SW6010
Cadmium	< 0.38		0.38	0.15	mg/Kg	01/26/15	LK	SW6010
Cobalt	7.00		0.38	0.38	mg/Kg	01/26/15	LK	SW6010
Chromium	19.5	*	0.38	0.38	mg/Kg	01/26/15	LK	SW6010
Copper	18.0		0.38	0.38	mg/kg	01/26/15	LK	SW6010
Iron	18700		38	38	mg/Kg	01/26/15	LK	SW6010
Mercury	0.14	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	1080	N	8	2.9	mg/Kg	01/26/15	LK	SW6010
Magnesium	3110		3.8	3.8	mg/Kg	01/26/15	LK	SW6010
Manganese	305	N	3.8	3.8	mg/Kg	01/26/15	LK	SW6010
Sodium	748	N	8	3.2	mg/Kg	01/26/15	LK	SW6010
Nickel	14.6		0.38	0.38	mg/Kg	01/26/15	LK	SW6010
Lead	42.2	*	0.8	0.38	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.9		1.9	1.9	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.5		1.5	1.3	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.5		1.5	1.5	mg/Kg	01/26/15	LK	SW6010
Vanadium	29.5		0.4	0.38	mg/Kg	01/26/15	LK	SW6010
Zinc	43.0	*	0.8	0.38	mg/Kg	01/26/15	LK	SW6010
Percent Solid	83				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
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Phoenix I.D.: BH66835

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	39	39	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	78			%	01/26/15	AW	30 - 150 %
% TCMX	71			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.3	2.3	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.3	2.3	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	ND	2.3	2.3	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	ND	3.9	3.9	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.9	3.9	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Chlordane	ND	39	39	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.9	3.9	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.6	1.6	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	ND	3.9	3.9	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	7.8	7.8	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	39	39	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	160	160	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	85			%	01/24/15	CE	30 - 150 %
% TCMX	76			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.2	1.0	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	6.2	1.2	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	6.2	0.88	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	6.2	0.61	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	6.2	1.2	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 0-2 FT

Phoenix I.D.: BH66835

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		6.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		6.2	0.88	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND		6.2	0.89	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		6.2	1.7	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		6.2	1.7	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		6.2	0.68	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		6.2	0.55	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		6.2	0.88	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND		6.2	0.82	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		6.2	0.92	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		6.2	0.66	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		6.2	0.98	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		6.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		6.2	0.99	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		31	2.8	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		6.2	0.86	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		6.2	0.72	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		31	1.5	ug/Kg	01/24/15	JLI	SW8260	
Acetone	10	JS	50	6.2	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		12	3.5	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		6.2	0.81	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		6.2	0.91	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		6.2	0.77	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		6.2	0.87	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		6.2	4.8	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		6.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		6.2	0.72	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		6.2	0.92	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		6.2	1.5	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		6.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		6.2	3.3	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		6.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		6.2	0.67	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		6.2	0.69	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		6.2	0.78	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		6.2	1.7	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		6.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		6.2	1.3	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		6.2	2.4	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		37	5.4	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		12	1.7	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	3.2	JS	6.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		6.2	1.7	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		6.2	1.1	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND		6.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND		6.2	2.4	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND		6.2	0.89	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND		6.2	1.8	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND		6.2	0.99	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	79	J	280	59	ug/Kg	01/25/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND		12	5.6	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND		6.2	0.98	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND		6.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND		6.2	1.3	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND		12	12	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND		6.2	1.3	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND		6.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND		6.2	0.97	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND		6.2	2.0	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	100				%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	95				%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	102				%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	96				%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND		280	140	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND		280	220	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND		280	140	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND		280	99	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND		2000	280	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND		280	160	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND		280	190	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND		2000	410	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND		280	250	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND		280	160	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND		800	190	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND		2000	870	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND		2000	430	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND		280	140	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND		800	190	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	

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Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND		2000	130	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND		2000	180	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND		2000	810	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	200	J	280	130	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND		800	240	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	190	J	280	130	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	260	J	280	140	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	170	J	280	130	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND		2000	800	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND		280	100	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	240	J	280	120	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	ND		2000	300	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	190	J	280	130	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND		280	100	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	350		280	130	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND		280	150	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	170	J	280	130	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	ND		280	120	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND		280	140	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND		280	110	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND		280	150	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND		280	150	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND		280	150	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	190	J	280	110	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND		280	130	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	310		280	140	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND		280	99	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates									
% 2,4,6-Tribromophenol	86				%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	83				%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 0-2 FT

Phoenix I.D.: BH66835

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	72			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	75			%	01/24/15	DD	23 - 120 %
% Phenol-d5	80			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	105			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	9:00
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66836

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 8-10 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.35		0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Aluminum	7130		35	7.0	mg/Kg	01/26/15	LK	SW6010
Arsenic	2.2		0.7	0.70	mg/Kg	01/26/15	LK	SW6010
Barium	60.0		0.7	0.35	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.49		0.28	0.14	mg/Kg	01/26/15	LK	SW6010
Calcium	1380		3.5	3.2	mg/Kg	01/26/15	LK	SW6010
Cadmium	< 0.35		0.35	0.14	mg/Kg	01/26/15	LK	SW6010
Cobalt	9.19		0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Chromium	26.5	*	0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Copper	23.6		0.35	0.35	mg/kg	01/26/15	LK	SW6010
Iron	16200		35	35	mg/Kg	01/26/15	LK	SW6010
Mercury	< 0.03	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	1740	N	7	2.7	mg/Kg	01/26/15	LK	SW6010
Magnesium	4020		3.5	3.5	mg/Kg	01/26/15	LK	SW6010
Manganese	396	N	3.5	3.5	mg/Kg	01/26/15	LK	SW6010
Sodium	179	N	7	3.0	mg/Kg	01/26/15	LK	SW6010
Nickel	50.8		0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Lead	8.2	*	0.7	0.35	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.8		1.8	1.8	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.4		1.4	1.2	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.4		1.4	1.4	mg/Kg	01/26/15	LK	SW6010
Vanadium	27.8		0.4	0.35	mg/Kg	01/26/15	LK	SW6010
Zinc	48.8	*	0.7	0.35	mg/Kg	01/26/15	LK	SW6010
Percent Solid	96				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 8-10 FT

Phoenix I.D.: BH66836

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	88			%	01/26/15	AW	30 - 150 %
% TCMX	84			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Chlordane	ND	34	34	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.4	1.4	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	6.8	6.8	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	34	34	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	140	140	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	97			%	01/24/15	CE	30 - 150 %
% TCMX	95			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.8	0.96	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	5.8	1.2	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	5.8	0.83	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	5.8	0.57	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	5.8	1.2	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 8-10 FT

Phoenix I.D.: BH66836

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		5.8	1.3	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		5.8	0.83	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND		5.8	0.84	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		5.8	1.6	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		5.8	1.6	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		5.8	0.64	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		5.8	0.51	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		5.8	0.83	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND		5.8	0.77	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		5.8	0.86	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		5.8	0.62	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		5.8	0.92	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		5.8	0.98	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		5.8	0.93	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		29	2.6	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		5.8	0.81	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		5.8	0.68	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		29	1.4	ug/Kg	01/24/15	JLI	SW8260	
Acetone	ND		50	5.8	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		12	3.3	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		5.8	0.76	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		5.8	0.85	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		5.8	0.72	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		5.8	0.82	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		5.8	4.5	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		5.8	0.95	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		5.8	0.68	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		5.8	0.86	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		5.8	1.4	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		5.8	3.1	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		5.8	1.3	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		5.8	0.63	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		5.8	0.65	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		5.8	0.74	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		5.8	1.6	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		5.8	2.3	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		35	5.1	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		12	1.6	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.4	JS	5.8	0.96	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		5.8	1.6	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND	5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND	5.8	2.2	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND	5.8	0.84	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND	5.8	1.1	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND	5.8	1.7	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND	5.8	0.93	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND	5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND	12	5.3	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND	5.8	0.92	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND	5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND	5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND	12	11	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND	5.8	1.2	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND	5.8	1.3	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND	5.8	0.91	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND	5.8	1.9	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	99			%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	95			%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	104			%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	95			%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND	240	98	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND	240	86	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND	1700	240	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND	240	140	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND	240	98	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND	240	98	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND	1700	350	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND	240	220	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND	690	160	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND	1700	750	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND	1700	370	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND	690	160	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 8-10 FT

Phoenix I.D.: BH66836

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND	1700	120	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND	1700	160	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND	240	97	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND	1700	700	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND	690	200	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND	1700	690	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND	240	89	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND	240	94	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND	240	96	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	ND	1700	260	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND	240	92	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND	240	89	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND	240	97	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND	240	98	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	ND	240	99	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND	240	85	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	87			%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	86			%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B1 8-10 FT

Phoenix I.D.: BH66836

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	75			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	81			%	01/24/15	DD	23 - 120 %
% Phenol-d5	79			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	86			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	9:30
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66837

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 0-2 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.35		0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Aluminum	16000		35	7.0	mg/Kg	01/26/15	LK	SW6010
Arsenic	5.8		0.7	0.70	mg/Kg	01/26/15	LK	SW6010
Barium	44.5		0.7	0.35	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.52		0.28	0.14	mg/Kg	01/26/15	LK	SW6010
Calcium	7920		3.5	3.2	mg/Kg	01/26/15	LK	SW6010
Cadmium	< 0.35		0.35	0.14	mg/Kg	01/26/15	LK	SW6010
Cobalt	7.88		0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Chromium	21.9	*	0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Copper	14.6		0.35	0.35	mg/kg	01/26/15	LK	SW6010
Iron	21400		35	35	mg/Kg	01/26/15	LK	SW6010
Mercury	0.05	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	1130	N	7	2.7	mg/Kg	01/26/15	LK	SW6010
Magnesium	3980		3.5	3.5	mg/Kg	01/26/15	LK	SW6010
Manganese	231	N	3.5	3.5	mg/Kg	01/26/15	LK	SW6010
Sodium	411	N	7	3.0	mg/Kg	01/26/15	LK	SW6010
Nickel	17.8		0.35	0.35	mg/Kg	01/26/15	LK	SW6010
Lead	18.3	*	0.7	0.35	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.8		1.8	1.8	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.4		1.4	1.2	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.4		1.4	1.4	mg/Kg	01/26/15	LK	SW6010
Vanadium	36.3		0.4	0.35	mg/Kg	01/26/15	LK	SW6010
Zinc	37.9	*	0.7	0.35	mg/Kg	01/26/15	LK	SW6010
Percent Solid	88				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 0-2 FT

Phoenix I.D.: BH66837

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	84			%	01/26/15	AW	30 - 150 %
% TCMX	79			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.2	2.2	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.2	2.2	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	ND	2.2	2.2	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	ND	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Chlordane	ND	37	37	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.5	1.5	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	ND	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	37	37	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	150	150	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	87			%	01/24/15	CE	30 - 150 %
% TCMX	83			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.2	0.86	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	5.2	1.0	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	5.2	0.74	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	5.2	0.51	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 0-2 FT

Phoenix I.D.: BH66837

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		5.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		5.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		5.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		5.2	0.74	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		5.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND		5.2	0.75	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		5.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		5.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		5.2	0.58	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		5.2	0.46	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		5.2	0.74	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND		5.2	0.69	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		5.2	0.77	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		5.2	0.55	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		5.2	0.83	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		5.2	0.88	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		5.2	0.84	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		26	2.4	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		5.2	0.72	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		5.2	0.61	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		26	1.2	ug/Kg	01/24/15	JLI	SW8260	
Acetone	41	JS	50	5.2	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		10	2.9	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		5.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		5.2	0.68	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		5.2	0.76	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		5.2	0.65	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		5.2	0.73	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		5.2	4.0	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		5.2	0.85	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		5.2	0.61	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		5.2	0.77	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		5.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		5.2	0.95	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		5.2	2.7	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		5.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		5.2	0.56	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		5.2	0.59	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		5.2	0.66	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		5.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		5.2	0.95	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		5.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		5.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		5.2	2.1	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	7.2	J	31	4.5	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		10	1.4	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.2	JS	5.2	0.86	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		5.2	1.4	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		5.2	0.95	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND	5.2	0.94	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND	5.2	2.0	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND	5.2	0.75	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND	5.2	0.98	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND	5.2	1.5	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND	5.2	0.84	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	5.3	5.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND	10	4.7	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND	5.2	0.83	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND	5.2	1.0	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND	5.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND	10	9.7	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND	5.2	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND	5.2	1.2	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND	5.2	0.82	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND	5.2	1.7	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	99			%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	93			%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	86			%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	96			%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
1,2-Dichlorobenzene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
1,3-Dichlorobenzene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
1,4-Dichlorobenzene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	01/23/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
2,4-Dichlorophenol	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
2,4-Dimethylphenol	ND	260	92	ug/Kg	01/23/15	DD	SW 8270	
2,4-Dinitrophenol	ND	1900	260	ug/Kg	01/23/15	DD	SW 8270	
2,4-Dinitrotoluene	ND	260	150	ug/Kg	01/23/15	DD	SW 8270	
2,6-Dinitrotoluene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
2-Chloronaphthalene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
2-Chlorophenol	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
2-Methylnaphthalene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND	260	180	ug/Kg	01/23/15	DD	SW 8270	
2-Nitroaniline	ND	1900	380	ug/Kg	01/23/15	DD	SW 8270	
2-Nitrophenol	ND	260	240	ug/Kg	01/23/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	01/23/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND	750	180	ug/Kg	01/23/15	DD	SW 8270	
3-Nitroaniline	ND	1900	810	ug/Kg	01/23/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND	1900	400	ug/Kg	01/23/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
4-Chloroaniline	ND	750	170	ug/Kg	01/23/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 0-2 FT

Phoenix I.D.: BH66837

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND	1900	120	ug/Kg	01/23/15	DD	SW 8270	
4-Nitrophenol	ND	1900	170	ug/Kg	01/23/15	DD	SW 8270	
Acenaphthene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Acenaphthylene	ND	260	100	ug/Kg	01/23/15	DD	SW 8270	
Acetophenone	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Aniline	ND	1900	750	ug/Kg	01/23/15	DD	SW 8270	
Anthracene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Benz(a)anthracene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
Benzidine	ND	750	220	ug/Kg	01/23/15	DD	SW 8270	
Benzo(a)pyrene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Benzo(b)fluoranthene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
Benzo(ghi)perylene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Benzo(k)fluoranthene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Benzoic acid	ND	1900	750	ug/Kg	01/23/15	DD	SW 8270	1
Benzyl butyl phthalate	ND	260	96	ug/Kg	01/23/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	01/23/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND	260	100	ug/Kg	01/23/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	01/23/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Carbazole	ND	1900	280	ug/Kg	01/23/15	DD	SW 8270	
Chrysene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Dibenzofuran	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Diethyl phthalate	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Dimethylphthalate	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Di-n-butylphthalate	ND	260	99	ug/Kg	01/23/15	DD	SW 8270	
Di-n-octylphthalate	ND	260	96	ug/Kg	01/23/15	DD	SW 8270	
Fluoranthene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Fluorene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Hexachlorobenzene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Hexachlorobutadiene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Hexachloroethane	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Isophorone	ND	260	100	ug/Kg	01/23/15	DD	SW 8270	
Naphthalene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Nitrobenzene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
N-Nitrosodimethylamine	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	01/23/15	DD	SW 8270	
Pentachloronitrobenzene	ND	260	140	ug/Kg	01/23/15	DD	SW 8270	
Pentachlorophenol	ND	260	140	ug/Kg	01/23/15	DD	SW 8270	
Phenanthrene	ND	260	110	ug/Kg	01/23/15	DD	SW 8270	
Phenol	ND	260	120	ug/Kg	01/23/15	DD	SW 8270	
Pyrene	ND	260	130	ug/Kg	01/23/15	DD	SW 8270	
Pyridine	ND	260	92	ug/Kg	01/23/15	DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	88			%	01/23/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	87			%	01/23/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 0-2 FT

Phoenix I.D.: BH66837

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	79			%	01/23/15	DD	25 - 121 %
% Nitrobenzene-d5	81			%	01/23/15	DD	23 - 120 %
% Phenol-d5	84			%	01/23/15	DD	24 - 113 %
% Terphenyl-d14	92			%	01/23/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	10:00
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66838

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 4-6 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.30		0.30	0.30	mg/Kg	01/26/15	LK	SW6010
Aluminum	8520		30	6.1	mg/Kg	01/26/15	LK	SW6010
Arsenic	3.1		0.6	0.61	mg/Kg	01/26/15	LK	SW6010
Barium	45.9		0.6	0.30	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.62		0.24	0.12	mg/Kg	01/26/15	LK	SW6010
Calcium	1110		3.0	2.8	mg/Kg	01/26/15	LK	SW6010
Cadmium	< 0.30		0.30	0.12	mg/Kg	01/26/15	LK	SW6010
Cobalt	8.75		0.30	0.30	mg/Kg	01/26/15	LK	SW6010
Chromium	22.8	*	0.30	0.30	mg/Kg	01/26/15	LK	SW6010
Copper	23.2		0.30	0.30	mg/kg	01/26/15	LK	SW6010
Iron	15700		30	30	mg/Kg	01/26/15	LK	SW6010
Mercury	< 0.03	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	2470	N	6	2.4	mg/Kg	01/26/15	LK	SW6010
Magnesium	4830		30	30	mg/Kg	01/26/15	LK	SW6010
Manganese	433	N	3.0	3.0	mg/Kg	01/26/15	LK	SW6010
Sodium	261	N	6	2.6	mg/Kg	01/26/15	LK	SW6010
Nickel	38.1		0.30	0.30	mg/Kg	01/26/15	LK	SW6010
Lead	12.8	*	0.6	0.30	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.5		1.5	1.5	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.2		1.2	1.0	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.2		1.2	1.2	mg/Kg	01/26/15	LK	SW6010
Vanadium	30.7		0.3	0.30	mg/Kg	01/26/15	LK	SW6010
Zinc	61.0	*	0.6	0.30	mg/Kg	01/26/15	LK	SW6010
Percent Solid	97				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 4-6 FT

Phoenix I.D.: BH66838

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	34	34	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	87			%	01/26/15	AW	30 - 150 %
% TCMX	83			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.0	2.0	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.0	2.0	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	ND	2.0	2.0	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Chlordane	ND	34	34	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.3	1.3	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	ND	3.4	3.4	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	6.7	6.7	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	34	34	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	130	130	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	89			%	01/24/15	CE	30 - 150 %
% TCMX	88			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.7	0.78	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	4.7	0.95	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	4.7	0.67	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	4.7	0.46	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	4.7	0.94	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 4-6 FT

Phoenix I.D.: BH66838

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		4.7	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		4.7	0.92	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		4.7	0.95	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		4.7	0.67	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		4.7	0.95	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND		4.7	0.68	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		4.7	1.3	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		4.7	1.3	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		4.7	0.52	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		4.7	0.42	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		4.7	0.67	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND		4.7	0.63	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		4.7	0.70	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		4.7	0.50	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		4.7	0.75	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		4.7	0.80	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		4.7	0.76	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		24	2.1	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		4.7	0.65	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		4.7	0.55	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		24	1.1	ug/Kg	01/24/15	JLI	SW8260	
Acetone	5.2	JS	47	4.7	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		9.5	2.7	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		4.7	0.94	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		4.7	0.62	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		4.7	0.69	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		4.7	0.59	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		4.7	0.66	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		4.7	3.7	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		4.7	0.77	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		4.7	0.55	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		4.7	0.70	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		4.7	1.1	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		4.7	0.86	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		4.7	2.5	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		4.7	1.0	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		4.7	0.51	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		4.7	0.53	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		4.7	0.60	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		4.7	1.3	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		4.7	0.86	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		4.7	1.0	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		4.7	0.91	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		4.7	1.9	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		28	4.1	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		9.5	1.3	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	1.9	JS	4.7	0.78	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		4.7	1.3	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		4.7	0.86	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND		4.7	0.85	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND		4.7	1.8	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND		4.7	0.68	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND		4.7	0.89	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND		4.7	1.4	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND		4.7	0.76	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	1.4	J	4.7	1.0	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND		9.5	4.3	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND		4.7	0.75	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND		4.7	0.95	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND		4.7	0.97	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND		9.5	8.8	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND		4.7	1.0	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND		4.7	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND		4.7	0.74	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND		4.7	1.5	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	99				%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	95				%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	104				%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	96				%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND		240	120	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND		240	100	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND		240	96	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND		240	110	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND		240	100	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND		240	100	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND		240	190	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND		240	110	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND		240	120	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND		240	84	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND		1700	240	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND		240	130	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND		240	110	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND		240	96	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND		240	96	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND		240	100	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND		240	160	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND		1700	340	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND		240	210	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND		240	130	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND		680	160	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND		1700	740	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND		1700	360	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND		240	100	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND		240	120	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND		680	160	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND		240	110	ug/Kg	01/24/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 4-6 FT

Phoenix I.D.: BH66838

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND	1700	110	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND	1700	150	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND	240	95	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND	1700	680	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND	680	200	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND	1700	680	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND	240	87	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND	240	93	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND	240	91	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND	240	94	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND	240	98	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	ND	1700	260	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	ND	240	99	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND	240	90	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND	240	87	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND	240	99	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND	240	100	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND	240	95	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	ND	240	98	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND	240	96	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND	240	130	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	ND	240	97	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND	240	110	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	ND	240	120	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND	240	83	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	89			%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	86			%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B2 4-6 FT

Phoenix I.D.: BH66838

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	71			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	75			%	01/24/15	DD	23 - 120 %
% Phenol-d5	75			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	91			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	10:30
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66839

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 0-2 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.33		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Aluminum	11700		33	6.7	mg/Kg	01/26/15	LK	SW6010
Arsenic	4.7		0.7	0.67	mg/Kg	01/26/15	LK	SW6010
Barium	57.9		0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.50		0.27	0.13	mg/Kg	01/26/15	LK	SW6010
Calcium	8490		3.3	3.1	mg/Kg	01/26/15	LK	SW6010
Cadmium	< 0.33		0.33	0.13	mg/Kg	01/26/15	LK	SW6010
Cobalt	8.04		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Chromium	21.2	*	0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Copper	22.9		0.33	0.33	mg/kg	01/26/15	LK	SW6010
Iron	18300		33	33	mg/Kg	01/26/15	LK	SW6010
Mercury	0.06	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	1220	N	7	2.6	mg/Kg	01/26/15	LK	SW6010
Magnesium	3720		3.3	3.3	mg/Kg	01/26/15	LK	SW6010
Manganese	318	N	3.3	3.3	mg/Kg	01/26/15	LK	SW6010
Sodium	191	N	7	2.9	mg/Kg	01/26/15	LK	SW6010
Nickel	24.0		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Lead	62.7	*	0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.7		1.7	1.7	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.3		1.3	1.1	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.3		1.3	1.3	mg/Kg	01/26/15	LK	SW6010
Vanadium	28.8		0.3	0.33	mg/Kg	01/26/15	LK	SW6010
Zinc	67.6	*	0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Percent Solid	89				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 0-2 FT

Phoenix I.D.: BH66839

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	77			%	01/26/15	AW	30 - 150 %
% TCMX	76			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.2	2.2	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.2	2.2	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	3.0	2.2	2.2	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	8.8	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Chlordane	65	37	37	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.5	1.5	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	7.9	3.7	3.7	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	37	37	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	150	150	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	86			%	01/24/15	CE	30 - 150 %
% TCMX	85			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	6.1	1.0	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	6.1	1.2	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	6.1	0.86	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	6.1	0.59	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	6.1	1.2	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 0-2 FT

Phoenix I.D.: BH66839

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		6.1	1.3	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		6.1	0.86	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND		6.1	0.87	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		6.1	1.6	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		6.1	1.6	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		6.1	0.67	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		6.1	0.53	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		6.1	0.86	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND		6.1	0.80	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		6.1	0.90	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		6.1	0.64	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		6.1	0.96	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		6.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		6.1	0.97	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		30	2.7	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		6.1	0.84	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		6.1	0.70	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		30	1.4	ug/Kg	01/24/15	JLI	SW8260	
Acetone	6.6	JS	50	6.0	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		12	3.4	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		6.1	0.79	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		6.1	0.89	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		6.1	0.75	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		6.1	0.85	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		6.1	4.7	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		6.1	0.98	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		6.1	0.70	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		6.1	0.90	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		6.1	1.4	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		6.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		6.1	3.2	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		6.1	1.3	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		6.1	0.66	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		6.1	0.68	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		6.1	0.76	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		6.1	1.6	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		6.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		6.1	1.3	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		6.1	2.4	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		36	5.3	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		12	1.7	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.8	JS	6.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		6.1	1.6	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		6.1	1.1	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND	6.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND	6.1	2.3	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND	6.1	0.87	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND	6.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND	6.1	1.7	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND	6.1	0.97	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND	6.1	1.3	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND	12	5.5	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND	6.1	0.96	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND	6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND	6.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND	12	11	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND	6.1	1.3	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND	6.1	1.3	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND	6.1	0.95	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND	6.1	2.0	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101			%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	92			%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	101			%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	95			%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND	260	100	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND	260	130	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND	260	91	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND	1800	260	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND	260	140	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND	260	100	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND	260	100	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND	1800	370	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND	260	230	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND	730	170	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND	1800	800	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND	1800	400	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND	730	170	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 0-2 FT

Phoenix I.D.: BH66839

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND		1800	120	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND		1800	170	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND		1800	740	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	140	J	260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND		730	220	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	130	J	260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	160	J	260	130	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND		1800	730	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND		260	95	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND		260	99	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	ND		1800	280	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	160	J	260	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND		260	98	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND		260	95	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	170	J	260	120	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND		260	130	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND		260	130	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND		260	140	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND		260	140	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND		260	140	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	120	J	260	110	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	170	J	260	130	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND		260	90	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates									
% 2,4,6-Tribromophenol	74				%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	74				%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 0-2 FT

Phoenix I.D.: BH66839

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	79			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	81			%	01/24/15	DD	23 - 120 %
% Phenol-d5	79			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	53			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	11:00
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66840

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 4-6 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.33		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Aluminum	7750		33	6.6	mg/Kg	01/26/15	LK	SW6010
Arsenic	2.8		0.7	0.66	mg/Kg	01/26/15	LK	SW6010
Barium	58.1		0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.42		0.26	0.13	mg/Kg	01/26/15	LK	SW6010
Calcium	1960		3.3	3.0	mg/Kg	01/26/15	LK	SW6010
Cadmium	< 0.33		0.33	0.13	mg/Kg	01/26/15	LK	SW6010
Cobalt	11.1		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Chromium	27.3	*	0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Copper	38.3		0.33	0.33	mg/kg	01/26/15	LK	SW6010
Iron	14600		33	33	mg/Kg	01/26/15	LK	SW6010
Mercury	< 0.03	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	2470	N	7	2.6	mg/Kg	01/26/15	LK	SW6010
Magnesium	4570		3.3	3.3	mg/Kg	01/26/15	LK	SW6010
Manganese	309	N	3.3	3.3	mg/Kg	01/26/15	LK	SW6010
Sodium	415	N	7	2.8	mg/Kg	01/26/15	LK	SW6010
Nickel	51.0		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Lead	9.0	*	0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.6		1.6	1.6	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.3		1.3	1.1	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.3		1.3	1.3	mg/Kg	01/26/15	LK	SW6010
Vanadium	26.9		0.3	0.33	mg/Kg	01/26/15	LK	SW6010
Zinc	40.6	*	0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Percent Solid	94				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 4-6 FT

Phoenix I.D.: BH66840

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	85			%	01/26/15	AW	30 - 150 %
% TCMX	84			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Chlordane	ND	35	35	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.4	1.4	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	35	35	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	140	140	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	96			%	01/24/15	CE	30 - 150 %
% TCMX	93			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	0.87	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	5.3	1.1	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	5.3	0.76	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	5.3	0.52	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 4-6 FT

Phoenix I.D.: BH66840

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		5.3	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		5.3	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		5.3	0.76	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND		5.3	0.77	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		5.3	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		5.3	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		5.3	0.59	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		5.3	0.47	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		5.3	0.76	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND		5.3	0.70	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		5.3	0.79	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		5.3	0.56	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		5.3	0.84	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		5.3	0.89	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		5.3	0.85	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		27	2.4	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		5.3	0.73	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		5.3	0.62	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		27	1.3	ug/Kg	01/24/15	JLI	SW8260	
Acetone	ND		50	5.3	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		11	3.0	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		5.3	0.69	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		5.3	0.78	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		5.3	0.66	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		5.3	0.74	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		5.3	4.1	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		5.3	0.86	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		5.3	0.62	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		5.3	0.79	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		5.3	1.2	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		5.3	0.97	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		5.3	2.8	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		5.3	1.2	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		5.3	0.57	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		5.3	0.60	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		5.3	0.67	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		5.3	1.4	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		5.3	0.97	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		5.3	1.0	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		5.3	2.1	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		32	4.6	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		11	1.5	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.7	JS	5.3	0.87	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		5.3	1.4	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		5.3	0.97	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND	5.3	0.96	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND	5.3	2.0	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND	5.3	0.77	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND	5.3	1.0	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND	5.3	1.5	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND	5.3	0.85	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND	5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND	11	4.8	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND	5.3	0.84	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND	5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND	5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND	11	9.9	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND	5.3	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND	5.3	1.2	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND	5.3	0.83	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND	5.3	1.7	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101			%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	93			%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	99			%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	95			%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND	250	99	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND	250	87	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND	1800	250	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND	250	140	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND	1800	360	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND	250	220	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND	700	170	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND	1800	770	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND	1800	380	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND	700	160	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 4-6 FT

Phoenix I.D.: BH66840

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND	1800	120	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND	1800	160	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND	250	98	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND	1800	710	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND	700	210	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND	1800	700	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND	250	91	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND	250	97	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND	250	95	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	ND	1800	270	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND	250	94	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND	250	91	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND	250	98	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND	250	99	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND	250	86	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	89			%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	80			%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B3 4-6 FT

Phoenix I.D.: BH66840

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	77			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	78			%	01/24/15	DD	23 - 120 %
% Phenol-d5	78			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	65			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	11:30
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66841

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B-4 0-2 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.33		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Aluminum	7410		33	6.7	mg/Kg	01/26/15	LK	SW6010
Arsenic	3.2		0.7	0.67	mg/Kg	01/26/15	LK	SW6010
Barium	68.6		0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.35		0.27	0.13	mg/Kg	01/26/15	LK	SW6010
Calcium	26500		33	31	mg/Kg	01/26/15	LK	SW6010
Cadmium	0.18	B	0.33	0.13	mg/Kg	01/26/15	LK	SW6010
Cobalt	6.79		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Chromium	17.5	*	0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Copper	26.6		0.33	0.33	mg/kg	01/26/15	LK	SW6010
Iron	14400		33	33	mg/Kg	01/26/15	LK	SW6010
Mercury	0.18	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	1900	N	7	2.6	mg/Kg	01/26/15	LK	SW6010
Magnesium	4360		3.3	3.3	mg/Kg	01/26/15	LK	SW6010
Manganese	307	N	3.3	3.3	mg/Kg	01/26/15	LK	SW6010
Sodium	273	N	7	2.9	mg/Kg	01/26/15	LK	SW6010
Nickel	24.7		0.33	0.33	mg/Kg	01/26/15	LK	SW6010
Lead	57.3	*	0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.7		1.7	1.7	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.3		1.3	1.1	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.3		1.3	1.3	mg/Kg	01/26/15	LK	SW6010
Vanadium	24.3		0.3	0.33	mg/Kg	01/26/15	LK	SW6010
Zinc	66.6	*	0.7	0.33	mg/Kg	01/26/15	LK	SW6010
Percent Solid	89				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B-4 0-2 FT

Phoenix I.D.: BH66841

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	37	37	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	76			%	01/26/15	AW	30 - 150 %
% TCMX	81			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.2	2.2	ug/Kg	01/24/15	C/P	SW8081
4,4' -DDE	7.7	2.2	2.2	ug/Kg	01/24/15	C/P	SW8081
4,4' -DDT	5.1	3.3	3.3	ug/Kg	01/24/15	C/P	SW8081
a-BHC	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
a-Chlordane	19	3.7	3.7	ug/Kg	01/24/15	C/P	SW8081
Aldrin	ND	3.7	3.7	ug/Kg	01/24/15	C/P	SW8081
b-BHC	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Chlordane	130	37	37	ug/Kg	01/24/15	C/P	SW8081
d-BHC	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Dieldrin	ND	3.7	3.7	ug/Kg	01/24/15	C/P	SW8081
Endosulfan I	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Endosulfan II	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Endrin	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Endrin aldehyde	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Endrin ketone	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
g-BHC	ND	1.5	1.5	ug/Kg	01/24/15	C/P	SW8081
g-Chlordane	19	3.7	3.7	ug/Kg	01/24/15	C/P	SW8081
Heptachlor	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	01/24/15	C/P	SW8081
Methoxychlor	ND	37	37	ug/Kg	01/24/15	C/P	SW8081
Toxaphene	ND	150	150	ug/Kg	01/24/15	C/P	SW8081
QA/QC Surrogates							
% DCBP	135			%	01/24/15	C/P	30 - 150 %
% TCMX	90			%	01/24/15	C/P	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.1	0.84	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	5.1	1.0	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	5.1	0.73	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	5.1	0.50	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	5.1	1.0	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B-4 0-2 FT

Phoenix I.D.: BH66841

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		5.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		5.1	0.99	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		5.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		5.1	0.73	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		5.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	1.8	J	5.1	0.74	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		5.1	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		5.1	1.4	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		5.1	0.56	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		5.1	0.45	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		5.1	0.73	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	5.2		5.1	0.67	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		5.1	0.76	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		5.1	0.54	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		5.1	0.81	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		5.1	0.86	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		5.1	0.82	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		26	2.3	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		5.1	0.71	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		5.1	0.59	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		26	1.2	ug/Kg	01/24/15	JLI	SW8260	
Acetone	6.3	JS	50	5.1	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		10	2.9	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		5.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		5.1	0.66	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		5.1	0.75	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		5.1	0.63	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		5.1	0.72	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		5.1	3.9	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		5.1	0.83	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		5.1	0.59	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		5.1	0.76	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		5.1	1.2	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		5.1	0.93	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		5.1	2.7	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		5.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		5.1	0.55	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		5.1	0.57	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		5.1	0.64	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		5.1	1.4	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	4.3	J	5.1	0.93	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		5.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		5.1	0.98	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	20		5.1	2.0	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		31	4.4	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		10	1.4	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.2	JS	5.1	0.84	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	4.4	J	5.1	1.4	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		5.1	0.93	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND	5.1	0.92	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	7.7	5.1	2.0	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND	5.1	0.74	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND	5.1	0.96	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND	5.1	1.5	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND	5.1	0.82	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND	5.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND	10	4.6	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	7.0	5.1	0.81	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND	5.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND	5.1	1.0	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND	10	9.5	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND	5.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND	5.1	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND	5.1	0.80	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND	5.1	1.7	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	98			%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	90			%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	74			%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	95			%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND	260	100	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND	260	130	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND	260	92	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND	1900	260	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND	260	150	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND	1900	380	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND	260	240	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND	740	180	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND	1900	810	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND	1900	400	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND	740	170	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	01/24/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B-4 0-2 FT

Phoenix I.D.: BH66841

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND		1900	120	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND		1900	170	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	170	J	260	110	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND		1900	750	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	720		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	3200		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND		740	220	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	2700		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	3300		260	130	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	1500		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	1100		260	120	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND		1900	740	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND		260	96	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	640	J	1900	280	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	3200		260	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	360		260	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	130	J	260	110	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND		260	99	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND		260	96	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	4400		260	120	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	170	J	260	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND		260	130	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND		260	110	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	1700		260	120	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	120	J	260	110	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND		260	130	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND		260	100	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND		260	140	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND		260	140	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND		260	140	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	2800		260	110	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND		260	120	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	4200		260	130	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND		260	91	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates									
% 2,4,6-Tribromophenol	51				%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	85				%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B-4 0-2 FT

Phoenix I.D.: BH66841

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	67			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	91			%	01/24/15	DD	23 - 120 %
% Phenol-d5	87			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	60			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	12:00
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66842

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B4 8-10 FT

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver	< 0.34		0.34	0.34	mg/Kg	01/26/15	LK	SW6010
Aluminum	6960		34	6.8	mg/Kg	01/26/15	LK	SW6010
Arsenic	3.0		0.7	0.68	mg/Kg	01/26/15	LK	SW6010
Barium	60.0		0.7	0.34	mg/Kg	01/26/15	LK	SW6010
Beryllium	0.59		0.27	0.14	mg/Kg	01/26/15	LK	SW6010
Calcium	1920		3.4	3.1	mg/Kg	01/26/15	LK	SW6010
Cadmium	0.20	B	0.34	0.14	mg/Kg	01/26/15	LK	SW6010
Cobalt	14.9		0.34	0.34	mg/Kg	01/26/15	LK	SW6010
Chromium	41.4	*	0.34	0.34	mg/Kg	01/26/15	LK	SW6010
Copper	23.5		0.34	0.34	mg/kg	01/26/15	LK	SW6010
Iron	17800		34	34	mg/Kg	01/26/15	LK	SW6010
Mercury	< 0.03	N	0.03	0.02	mg/Kg	01/26/15	RS	SW-7471
Potassium	1510	N	7	2.7	mg/Kg	01/26/15	LK	SW6010
Magnesium	4080		3.4	3.4	mg/Kg	01/26/15	LK	SW6010
Manganese	516	N	3.4	3.4	mg/Kg	01/26/15	LK	SW6010
Sodium	211	N	7	2.9	mg/Kg	01/26/15	LK	SW6010
Nickel	75.2		0.34	0.34	mg/Kg	01/26/15	LK	SW6010
Lead	47.5	*	0.7	0.34	mg/Kg	01/26/15	LK	SW6010
Antimony	< 1.7		1.7	1.7	mg/Kg	01/26/15	LK	SW6010
Selenium	< 1.4		1.4	1.2	mg/Kg	01/26/15	LK	SW6010
Thallium	< 1.4		1.4	1.4	mg/Kg	01/26/15	LK	SW6010
Vanadium	29.9		0.3	0.34	mg/Kg	01/26/15	LK	SW6010
Zinc	45.2	*	0.7	0.34	mg/Kg	01/26/15	LK	SW6010
Percent Solid	93				%	01/23/15	I	SW846
Soil Extraction for PCB	Completed					01/23/15	BJ/H	SW3545
Soil Extraction for Pesticide	Completed					01/23/15	BJ	SW3545
Soil Extraction for SVOA	Completed					01/23/15	BJ/VH	SW3545
Mercury Digestion	Completed					01/26/15	I/I	SW7471

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B4 8-10 FT

Phoenix I.D.: BH66842

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Total Metals Digest	Completed				01/23/15	CB/AG	SW846 - 3050
Field Extraction	Completed				01/22/15		SW5035
Polychlorinated Biphenyls							
PCB-1016	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1221	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1232	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1242	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1248	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1254	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1260	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1262	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
PCB-1268	ND	35	35	ug/Kg	01/26/15	AW	SW 8082
QA/QC Surrogates							
% DCBP	76			%	01/26/15	AW	30 - 150 %
% TCMX	84			%	01/26/15	AW	30 - 150 %
Pesticides - Soil							
4,4' -DDD	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
4,4' -DDE	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
4,4' -DDT	ND	2.1	2.1	ug/Kg	01/24/15	CE	SW8081
a-BHC	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
a-Chlordane	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
Aldrin	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
b-BHC	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Chlordane	ND	35	35	ug/Kg	01/24/15	CE	SW8081
d-BHC	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Dieldrin	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
Endosulfan I	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endosulfan II	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endrin	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endrin aldehyde	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Endrin ketone	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
g-BHC	ND	1.4	1.4	ug/Kg	01/24/15	CE	SW8081
g-Chlordane	ND	3.5	3.5	ug/Kg	01/24/15	CE	SW8081
Heptachlor	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	01/24/15	CE	SW8081
Methoxychlor	ND	35	35	ug/Kg	01/24/15	CE	SW8081
Toxaphene	ND	140	140	ug/Kg	01/24/15	CE	SW8081
QA/QC Surrogates							
% DCBP	87			%	01/24/15	CE	30 - 150 %
% TCMX	88			%	01/24/15	CE	30 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.5	0.74	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	4.5	0.90	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	4.5	0.64	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	4.5	0.44	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	4.5	0.89	ug/Kg	01/24/15	JLI	SW8260

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B4 8-10 FT

Phoenix I.D.: BH66842

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		4.5	0.98	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND		4.5	0.88	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND		4.5	0.90	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND		4.5	0.64	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND		4.5	0.90	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	2.3	J	4.5	0.65	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND		4.5	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND		4.5	1.2	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND		4.5	0.50	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND		4.5	0.40	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND		4.5	0.64	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	1.1	J	4.5	0.60	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND		4.5	0.67	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND		4.5	0.48	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND		4.5	0.71	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND		4.5	0.76	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND		4.5	0.72	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND		23	2.0	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND		4.5	0.62	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND		4.5	0.52	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		23	1.1	ug/Kg	01/24/15	JLI	SW8260	
Acetone	ND		45	4.5	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		9.0	2.5	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		4.5	0.89	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		4.5	0.59	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		4.5	0.66	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		4.5	0.56	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		4.5	0.63	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		4.5	3.5	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		4.5	0.73	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		4.5	0.52	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		4.5	0.67	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		4.5	1.1	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		4.5	0.82	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		4.5	2.4	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		4.5	0.98	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		4.5	0.49	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		4.5	0.51	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		4.5	0.57	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		4.5	1.2	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		4.5	0.82	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		4.5	0.95	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		4.5	0.87	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	1.8	J	4.5	1.8	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		27	3.9	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		9.0	1.2	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.0	JS	4.5	0.74	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		4.5	1.2	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		4.5	0.82	ug/Kg	01/24/15	JLI	SW8260	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Propylbenzene	ND	4.5	0.81	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND	4.5	1.7	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND	4.5	0.65	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND	4.5	0.85	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND	4.5	1.3	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND	4.5	0.72	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND	4.5	0.95	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND	9.0	4.1	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND	4.5	0.71	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND	4.5	0.90	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND	4.5	0.92	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND	9.0	8.4	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND	4.5	0.96	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND	4.5	1.0	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND	4.5	0.70	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND	4.5	1.5	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	99			%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	97			%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	99			%	01/24/15	JLI	70 - 130 %	
% Toluene-d8	96			%	01/24/15	JLI	84 - 138 %	

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
1,2-Dichlorobenzene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
1,3-Dichlorobenzene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
1,4-Dichlorobenzene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	01/24/15	DD	SW 8270	
2,4,6-Trichlorophenol	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dichlorophenol	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dimethylphenol	ND	250	89	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrophenol	ND	1800	250	ug/Kg	01/24/15	DD	SW 8270	
2,4-Dinitrotoluene	ND	250	140	ug/Kg	01/24/15	DD	SW 8270	
2,6-Dinitrotoluene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
2-Chloronaphthalene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
2-Chlorophenol	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
2-Methylnaphthalene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	01/24/15	DD	SW 8270	
2-Nitroaniline	ND	1800	360	ug/Kg	01/24/15	DD	SW 8270	
2-Nitrophenol	ND	250	230	ug/Kg	01/24/15	DD	SW 8270	
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	01/24/15	DD	SW 8270	1
3,3'-Dichlorobenzidine	ND	710	170	ug/Kg	01/24/15	DD	SW 8270	
3-Nitroaniline	ND	1800	780	ug/Kg	01/24/15	DD	SW 8270	
4,6-Dinitro-2-methylphenol	ND	1800	380	ug/Kg	01/24/15	DD	SW 8270	
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
4-Chloroaniline	ND	710	170	ug/Kg	01/24/15	DD	SW 8270	
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B4 8-10 FT

Phoenix I.D.: BH66842

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Nitroaniline	ND	1800	120	ug/Kg	01/24/15	DD	SW 8270	
4-Nitrophenol	ND	1800	160	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Acenaphthylene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Acetophenone	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Aniline	ND	1800	720	ug/Kg	01/24/15	DD	SW 8270	
Anthracene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benz(a)anthracene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzidine	ND	710	210	ug/Kg	01/24/15	DD	SW 8270	
Benzo(a)pyrene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(b)fluoranthene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(ghi)perylene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzo(k)fluoranthene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Benzoic acid	ND	1800	710	ug/Kg	01/24/15	DD	SW 8270	1
Benzyl butyl phthalate	ND	250	92	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethoxy)methane	ND	250	99	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroethyl)ether	ND	250	96	ug/Kg	01/24/15	DD	SW 8270	
Bis(2-chloroisopropyl)ether	ND	250	99	ug/Kg	01/24/15	DD	SW 8270	1
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Carbazole	ND	1800	270	ug/Kg	01/24/15	DD	SW 8270	
Chrysene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenz(a,h)anthracene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Dibenzofuran	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Diethyl phthalate	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Dimethylphthalate	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Di-n-butylphthalate	ND	250	95	ug/Kg	01/24/15	DD	SW 8270	
Di-n-octylphthalate	ND	250	92	ug/Kg	01/24/15	DD	SW 8270	
Fluoranthene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Fluorene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobenzene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorobutadiene	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Hexachloroethane	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Isophorone	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Naphthalene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Nitrobenzene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodimethylamine	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodi-n-propylamine	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	01/24/15	DD	SW 8270	
Pentachloronitrobenzene	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
Pentachlorophenol	ND	250	130	ug/Kg	01/24/15	DD	SW 8270	
Phenanthrene	ND	250	100	ug/Kg	01/24/15	DD	SW 8270	
Phenol	ND	250	110	ug/Kg	01/24/15	DD	SW 8270	
Pyrene	ND	250	120	ug/Kg	01/24/15	DD	SW 8270	
Pyridine	ND	250	88	ug/Kg	01/24/15	DD	SW 8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	88			%	01/24/15	DD	19 - 122 %	
% 2-Fluorobiphenyl	81			%	01/24/15	DD	30 - 115 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: B4 8-10 FT

Phoenix I.D.: BH66842

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% 2-Fluorophenol	77			%	01/24/15	DD	25 - 121 %
% Nitrobenzene-d5	80			%	01/24/15	DD	23 - 120 %
% Phenol-d5	79			%	01/24/15	DD	24 - 113 %
% Terphenyl-d14	62			%	01/24/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	0:00
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66843

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK LOW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Percent Solid	100	1		%	01/22/15		SW846
Field Extraction	Completed				01/22/15		SW5035
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	0.82	ug/Kg	01/24/15	JLI	SW8260
1,1,1-Trichloroethane	ND	5.0	1.0	ug/Kg	01/24/15	JLI	SW8260
1,1,2,2-Tetrachloroethane	ND	5.0	0.71	ug/Kg	01/24/15	JLI	SW8260
1,1,2-Trichloroethane	ND	5.0	0.49	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethane	ND	5.0	0.99	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloroethene	ND	5.0	1.1	ug/Kg	01/24/15	JLI	SW8260
1,1-Dichloropropene	ND	5.0	0.97	ug/Kg	01/24/15	JLI	SW8260
1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/Kg	01/24/15	JLI	SW8260
1,2,3-Trichloropropane	ND	5.0	0.71	ug/Kg	01/24/15	JLI	SW8260
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/Kg	01/24/15	JLI	SW8260
1,2,4-Trimethylbenzene	ND	5.0	0.72	ug/Kg	01/24/15	JLI	SW8260
1,2-Dibromo-3-chloropropane	ND	5.0	1.3	ug/Kg	01/24/15	JLI	SW8260
1,2-Dibromoethane	ND	5.0	1.3	ug/Kg	01/24/15	JLI	SW8260
1,2-Dichlorobenzene	ND	5.0	0.55	ug/Kg	01/24/15	JLI	SW8260
1,2-Dichloroethane	ND	5.0	0.44	ug/Kg	01/24/15	JLI	SW8260
1,2-Dichloropropane	ND	5.0	0.71	ug/Kg	01/24/15	JLI	SW8260
1,3,5-Trimethylbenzene	ND	5.0	0.66	ug/Kg	01/24/15	JLI	SW8260
1,3-Dichlorobenzene	ND	5.0	0.74	ug/Kg	01/24/15	JLI	SW8260
1,3-Dichloropropane	ND	5.0	0.53	ug/Kg	01/24/15	JLI	SW8260
1,4-Dichlorobenzene	ND	5.0	0.79	ug/Kg	01/24/15	JLI	SW8260
2,2-Dichloropropane	ND	5.0	0.84	ug/Kg	01/24/15	JLI	SW8260
2-Chlorotoluene	ND	5.0	0.80	ug/Kg	01/24/15	JLI	SW8260
2-Hexanone	ND	25	2.3	ug/Kg	01/24/15	JLI	SW8260
2-Isopropyltoluene	ND	5.0	0.69	ug/Kg	01/24/15	JLI	SW8260 1

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK LOW

Phoenix I.D.: BH66843

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Chlorotoluene	ND		5.0	0.58	ug/Kg	01/24/15	JLI	SW8260	
4-Methyl-2-pentanone	ND		25	1.2	ug/Kg	01/24/15	JLI	SW8260	
Acetone	ND		50	5.0	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		10	2.8	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		5.0	0.99	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		5.0	0.65	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		5.0	0.73	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		5.0	0.62	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		5.0	0.70	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		5.0	3.9	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		5.0	0.81	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		5.0	0.58	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		5.0	0.74	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		5.0	1.2	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		5.0	0.91	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		5.0	2.6	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		5.0	1.1	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		5.0	0.54	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		5.0	0.56	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		5.0	0.63	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		5.0	1.3	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		5.0	0.91	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		5.0	1.1	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		5.0	0.96	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		5.0	2.0	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		30	4.3	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		10	1.4	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	2.0	JS	5.0	0.82	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		5.0	1.3	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		5.0	0.91	ug/Kg	01/24/15	JLI	SW8260	
n-Propylbenzene	ND		5.0	0.90	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND		5.0	1.9	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND		5.0	0.72	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND		5.0	0.94	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND		5.0	1.4	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND		5.0	0.80	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND		5.0	1.1	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND		10	4.5	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND		5.0	0.79	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND		5.0	1.0	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND		5.0	1.0	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND		10	9.3	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND		5.0	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND		5.0	1.1	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND		5.0	0.78	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND		5.0	1.6	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	100				%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	97				%	01/24/15	JLI	59 - 113 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK LOW

Phoenix I.D.: BH66843

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% Dibromofluoromethane	101			%	01/24/15	JLI	70 - 130 %
% Toluene-d8	96			%	01/24/15	JLI	84 - 138 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.
Trip blank included

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:	RL	01/22/15	0:00
Location Code:	EBC	Received by:	LB	01/23/15	15:54
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH66835
Phoenix ID: BH66844

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK HIGH

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Percent Solid	100	1		%	01/22/15		SW846	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	250	41	ug/Kg	01/24/15	JLI	SW8260	
1,1,1-Trichloroethane	ND	250	50	ug/Kg	01/24/15	JLI	SW8260	
1,1,2,2-Tetrachloroethane	ND	250	36	ug/Kg	01/24/15	JLI	SW8260	
1,1,2-Trichloroethane	ND	250	25	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloroethane	ND	250	50	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloroethene	ND	250	55	ug/Kg	01/24/15	JLI	SW8260	
1,1-Dichloropropene	ND	250	49	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichlorobenzene	ND	250	50	ug/Kg	01/24/15	JLI	SW8260	
1,2,3-Trichloropropane	ND	250	36	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trichlorobenzene	ND	250	50	ug/Kg	01/24/15	JLI	SW8260	
1,2,4-Trimethylbenzene	ND	250	36	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromo-3-chloropropane	ND	250	67	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dibromoethane	ND	250	67	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichlorobenzene	ND	250	28	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloroethane	ND	250	22	ug/Kg	01/24/15	JLI	SW8260	
1,2-Dichloropropane	ND	250	36	ug/Kg	01/24/15	JLI	SW8260	
1,3,5-Trimethylbenzene	ND	250	33	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichlorobenzene	ND	250	37	ug/Kg	01/24/15	JLI	SW8260	
1,3-Dichloropropane	ND	250	27	ug/Kg	01/24/15	JLI	SW8260	
1,4-Dichlorobenzene	ND	250	40	ug/Kg	01/24/15	JLI	SW8260	
2,2-Dichloropropane	ND	250	42	ug/Kg	01/24/15	JLI	SW8260	
2-Chlorotoluene	ND	250	40	ug/Kg	01/24/15	JLI	SW8260	
2-Hexanone	ND	1300	110	ug/Kg	01/24/15	JLI	SW8260	
2-Isopropyltoluene	ND	250	35	ug/Kg	01/24/15	JLI	SW8260	1
4-Chlorotoluene	ND	250	29	ug/Kg	01/24/15	JLI	SW8260	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK HIGH

Phoenix I.D.: BH66844

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
4-Methyl-2-pentanone	ND		1300	60	ug/Kg	01/24/15	JLI	SW8260	
Acetone	ND		2500	250	ug/Kg	01/24/15	JLI	SW8260	
Acrylonitrile	ND		500	140	ug/Kg	01/24/15	JLI	SW8260	
Benzene	ND		250	50	ug/Kg	01/24/15	JLI	SW8260	
Bromobenzene	ND		250	33	ug/Kg	01/24/15	JLI	SW8260	
Bromochloromethane	ND		250	37	ug/Kg	01/24/15	JLI	SW8260	
Bromodichloromethane	ND		250	31	ug/Kg	01/24/15	JLI	SW8260	
Bromoform	ND		250	35	ug/Kg	01/24/15	JLI	SW8260	
Bromomethane	ND		250	190	ug/Kg	01/24/15	JLI	SW8260	
Carbon Disulfide	ND		250	41	ug/Kg	01/24/15	JLI	SW8260	
Carbon tetrachloride	ND		250	29	ug/Kg	01/24/15	JLI	SW8260	
Chlorobenzene	ND		250	37	ug/Kg	01/24/15	JLI	SW8260	
Chloroethane	ND		250	59	ug/Kg	01/24/15	JLI	SW8260	
Chloroform	ND		250	46	ug/Kg	01/24/15	JLI	SW8260	
Chloromethane	ND		250	130	ug/Kg	01/24/15	JLI	SW8260	
cis-1,2-Dichloroethene	ND		250	55	ug/Kg	01/24/15	JLI	SW8260	
cis-1,3-Dichloropropene	ND		250	27	ug/Kg	01/24/15	JLI	SW8260	
Dibromochloromethane	ND		250	28	ug/Kg	01/24/15	JLI	SW8260	
Dibromomethane	ND		250	32	ug/Kg	01/24/15	JLI	SW8260	
Dichlorodifluoromethane	ND		250	67	ug/Kg	01/24/15	JLI	SW8260	
Ethylbenzene	ND		250	46	ug/Kg	01/24/15	JLI	SW8260	
Hexachlorobutadiene	ND		250	53	ug/Kg	01/24/15	JLI	SW8260	
Isopropylbenzene	ND		250	48	ug/Kg	01/24/15	JLI	SW8260	
m&p-Xylene	ND		250	99	ug/Kg	01/24/15	JLI	SW8260	
Methyl Ethyl Ketone	ND		1500	220	ug/Kg	01/24/15	JLI	SW8260	
Methyl t-butyl ether (MTBE)	ND		500	69	ug/Kg	01/24/15	JLI	SW8260	
Methylene chloride	180	JS	250	41	ug/Kg	01/24/15	JLI	SW8260	
Naphthalene	ND		250	67	ug/Kg	01/24/15	JLI	SW8260	
n-Butylbenzene	ND		250	46	ug/Kg	01/24/15	JLI	SW8260	
n-Propylbenzene	ND		250	45	ug/Kg	01/24/15	JLI	SW8260	
o-Xylene	ND		250	96	ug/Kg	01/24/15	JLI	SW8260	
p-Isopropyltoluene	ND		250	36	ug/Kg	01/24/15	JLI	SW8260	
sec-Butylbenzene	ND		250	47	ug/Kg	01/24/15	JLI	SW8260	
Styrene	ND		250	72	ug/Kg	01/24/15	JLI	SW8260	
tert-Butylbenzene	ND		250	40	ug/Kg	01/24/15	JLI	SW8260	
Tetrachloroethene	ND		250	53	ug/Kg	01/24/15	JLI	SW8260	
Tetrahydrofuran (THF)	ND		500	230	ug/Kg	01/24/15	JLI	SW8260	1
Toluene	ND		250	40	ug/Kg	01/24/15	JLI	SW8260	
trans-1,2-Dichloroethene	ND		250	50	ug/Kg	01/24/15	JLI	SW8260	
trans-1,3-Dichloropropene	ND		250	51	ug/Kg	01/24/15	JLI	SW8260	
trans-1,4-dichloro-2-butene	ND		500	460	ug/Kg	01/24/15	JLI	SW8260	
Trichloroethene	ND		250	53	ug/Kg	01/24/15	JLI	SW8260	
Trichlorofluoromethane	ND		250	56	ug/Kg	01/24/15	JLI	SW8260	
Trichlorotrifluoroethane	ND		250	39	ug/Kg	01/24/15	JLI	SW8260	
Vinyl chloride	ND		250	81	ug/Kg	01/24/15	JLI	SW8260	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	100				%	01/24/15	JLI	70 - 121 %	
% Bromofluorobenzene	95				%	01/24/15	JLI	59 - 113 %	
% Dibromofluoromethane	94				%	01/24/15	JLI	70 - 130 %	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK HIGH

Phoenix I.D.: BH66844

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% Toluene-d8	96			%	01/24/15	JLI	84 - 138 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Results are reported on an ``as received`` basis, and are not corrected for dry weight.
Trip blank included

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
February 03, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

Sample Criteria Exceedences Report

GBH66835 - EBC

Criteria: NY: 375, 375RRS, 375RS

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BH66836	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	50.8	0.35	30	30	mg/Kg
BH66838	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	38.1	0.30	30	30	mg/Kg
BH66840	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	51.0	0.33	30	30	mg/Kg
BH66841	$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	360	260	330	330	ug/Kg
BH66841	$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	3200	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	2700	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	3300	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1100	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential	3200	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	1700	260	500	500	ug/Kg
BH66841	$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	3200	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2700	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	3300	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	360	260	330	330	ug/Kg
BH66841	$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1700	260	500	500	ug/Kg
BH66841	$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2700	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	360	260	330	330	ug/Kg
BH66841	$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3200	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	260	500	500	ug/Kg
BH66841	$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	260	800	800	ug/Kg
BH66841	$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3300	260	1000	1000	ug/Kg
BH66841	$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3200	260	1000	1000	ug/Kg
BH66841	$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.7	2.2	3.3	3.3	ug/Kg
BH66841	$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.1	3.3	3.3	3.3	ug/Kg
BH66842	CR-SM	Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	41.4	0.34	30		mg/Kg
BH66842	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	75.2	0.34	30	30	mg/Kg
BH66844	$8260-SMDPR	Vinyl chloride	NY / 375-6.8 Volatiles / Residential	ND	250	210	210	ug/Kg
BH66844	$8260-SMDPR	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	2500	50	50	ug/Kg
BH66844	$8260-SMDPR	Benzene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	250	60	60	ug/Kg
BH66844	$8260-SMDPR	Vinyl chloride	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	250	20	20	ug/Kg
BH66844	$8260-SMDPR	Methyl Ethyl Ketone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	1500	120	120	ug/Kg
BH66844	$8260-SMDPR	Methylene chloride	NY / 375-6.8 Volatiles / Unrestricted Use Soil	180	250	50	50	ug/Kg
BH66844	$8260-SMDPR	trans-1,2-Dichloroethene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	250	190	190	ug/Kg
BH66844	$8260-SMDPR	1,2-Dichloroethane	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	250	20	20	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY Temperature Narration

February 03, 2015

SDG I.D.: GBH66835

The samples in this delivery group were received at 4°C.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

NY/NJ CHAIN OF CUSTODY RECORD

Temp 4 °C Pg 1 of 1

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Fax:
[X] Phone: (631) 504-6000
[X] Email: Csosik@ebcincny.com

Customer: Environmental Business Consultants
Address: 1808 Middle Country Road
Ridge, New York 11961

Project: 4202 18th Ave, Brooklyn NY Project P.O:
Report to: Environmental Business Consultants
Invoice to: Environmental Business Consultants

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Reuben Levinton Date: 1/23/15

Analysis Request

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260	SVOCs 8270	Pesticides/PCBs	TAL Metals								Soil VOA Vials [X] methanol [X] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] HCl	GL Amber 1000ml [ ] As is	PL As is [ ] 250ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
060835	B1 0-2'	S	1/22/15	8:30	X	X	X	X								3	1								
060836	B1 8-10'			9:00	X	X	X	X								3	1								
060837	B2 0-2'			9:30	X	X	X	X								3	1								
060838	B2 4-6'			10:00	X	X	X	X								3	1								
060839	B3 0-2'			10:30	X	X	X	X								3	1								
060840	B3 4-6'			11:00	X	X	X	X								3	1								
060841	B4 0-2'			11:30	X	X	X	X								3	1								
060842	B4 8-10'			12:00	X	X	X	X								3	1								
060843	Trip Blank Low				X											2									
060844	Trip Blank High				X											1									

Relinquished by:	Accepted by:	Date:	Time:
		1-23-15	12:30
		1-23-15	15:54

Comments, Special Requirements or Regulations:

Turnaround:
- [ ] 1 Day*
- [ ] 2 Days*
- [ ] 3 Days*
- [X] 5 Days
- [ ] 10 Days
- [ ] Other

* SURCHARGE APPLIES

NJ
- [ ] Res. Criteria
- [ ] Non-Res. Criteria
- [ ] Impact to GW Soil Cleanup Criteria
- [ ] GW Criteria

NY
- [ ] TAGM 4046 GW
- [ ] TAGM 4046 SOIL
- [X] NY375 Unrestricted Use Soil
- [X] NY375 Residential
- [X] Restricted/Residential
- [ ] Commercial
- [ ] Industrial

Data Format
- [ ] Phoenix Std Report
- [X] Excel
- [X] PDF
- [ ] GIS/Key
- [ ] EQuIS
- [ ] NJ Hazsite EDD
- [X] NY EZ EDD (ASP)
- [ ] Other

Data Package
- [ ] NJ Reduced Deliv. *
- [X] NY Enhanced (ASP B) *
- [ ] Other

State where samples were collected: NY

PHOENIX
Environmental Laboratories, Inc.

Monday, February 23, 2015

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 4202 18TH AVE.
Sample ID#s: BH74444 - BH74447

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
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Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 23, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	GS	02/18/15	11:27
Location Code:	EBC	Received by:	LB	02/18/15	16:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	470				

Laboratory Data

SDG ID: GBH74444
Phoenix ID: BH74444

Project ID: 4202 18TH AVE.
Client ID: SG1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/18/15	KCA	TO15	1
1,1,1-Trichloroethane	0.479	*0.183*	2.61	*1.00*	02/18/15	KCA	TO15	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/18/15	KCA	TO15	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	02/18/15	KCA	TO15	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	02/18/15	KCA	TO15	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	02/18/15	KCA	TO15	
1,2,4-Trimethylbenzene	1.07	*0.204*	5.26	*1.00*	02/18/15	KCA	TO15	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	02/18/15	KCA	TO15	
1,3,5-Trimethylbenzene	0.309	*0.204*	1.52	*1.00*	02/18/15	KCA	TO15	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	02/18/15	KCA	TO15	
1,3-Dichlorobenzene	0.914	*0.166*	5.49	*1.00*	02/18/15	KCA	TO15	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/18/15	KCA	TO15	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	02/18/15	KCA	TO15	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	02/18/15	KCA	TO15	
Acetone	142	*2.11*	337	*5.01*	02/19/15	KCA	TO15	
Acrylonitrile	ND	*0.461*	ND	*1.00*	02/18/15	KCA	TO15	
Benzene	0.964	*0.313*	3.08	*1.00*	02/18/15	KCA	TO15	
Benzyl chloride	ND	*0.193*	ND	*1.00*	02/18/15	KCA	TO15	

Project ID: 4202 18TH AVE.
Client ID: SG1

Phoenix I.D.: BH74444

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	02/18/15	KCA	TO15	
Bromoform	ND	*0.097*	ND	*1.00*	02/18/15	KCA	TO15	
Bromomethane	ND	*0.258*	ND	*1.00*	02/18/15	KCA	TO15	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	02/18/15	KCA	TO15	
Carbon Tetrachloride	0.087	*0.040*	0.55	*0.25*	02/18/15	KCA	TO15	
Chlorobenzene	ND	*0.217*	ND	*1.00*	02/18/15	KCA	TO15	
Chloroethane	ND	*0.379*	ND	*1.00*	02/18/15	KCA	TO15	
Chloroform	0.230	*0.205*	1.12	*1.00*	02/18/15	KCA	TO15	
Chloromethane	ND	*0.485*	ND	*1.00*	02/18/15	KCA	TO15	
Cis-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/18/15	KCA	TO15	
Cyclohexane	ND	*0.291*	ND	*1.00*	02/18/15	KCA	TO15	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	02/18/15	KCA	TO15	
Dichlorodifluoromethane	0.592	*0.202*	2.93	*1.00*	02/18/15	KCA	TO15	
Ethanol	104	*2.66*	196	*5.01*	02/19/15	KCA	TO15	1
Ethyl acetate	4.71	*0.278*	17.0	*1.00*	02/18/15	KCA	TO15	1
Ethylbenzene	2.29	*0.230*	9.9	*1.00*	02/18/15	KCA	TO15	
Heptane	0.720	*0.244*	2.95	*1.00*	02/18/15	KCA	TO15	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	02/18/15	KCA	TO15	
Hexane	1.06	*0.284*	3.73	*1.00*	02/18/15	KCA	TO15	
Isopropylalcohol	60.9	*2.04*	150	*5.01*	02/19/15	KCA	TO15	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	
m,p-Xylene	10.1	*0.230*	43.8	*1.00*	02/18/15	KCA	TO15	
Methyl Ethyl Ketone	1.44	*0.339*	4.24	*1.00*	02/18/15	KCA	TO15	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	02/18/15	KCA	TO15	
Methylene Chloride	ND	*0.288*	ND	*1.00*	02/18/15	KCA	TO15	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
o-Xylene	2.67	*0.230*	11.6	*1.00*	02/18/15	KCA	TO15	
Propylene	2.33	*0.581*	4.01	*1.00*	02/18/15	KCA	TO15	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
Styrene	ND	*0.235*	ND	*1.00*	02/18/15	KCA	TO15	
Tetrachloroethene	0.937	*0.037*	6.35	*0.25*	02/18/15	KCA	TO15	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	02/18/15	KCA	TO15	1
Toluene	5.40	*0.266*	20.3	*1.00*	02/18/15	KCA	TO15	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/18/15	KCA	TO15	
Trichloroethene	0.049	*0.047*	0.26	*0.25*	02/18/15	KCA	TO15	
Trichlorofluoromethane	5.94	*0.178*	33.4	*1.00*	02/18/15	KCA	TO15	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	02/18/15	KCA	TO15	
Vinyl Chloride	ND	*0.098*	ND	*0.25*	02/18/15	KCA	TO15	
QA/QC Surrogates								
% Bromofluorobenzene	92	*%*	92	*%*	02/18/15	KCA	70 - 130 %	

Project ID: 4202 18TH AVE.
Client ID: SG1

Phoenix I.D.: BH74444

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 23, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 23, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	GS	02/18/15	11:28
Location Code:	EBC	Received by:	LB	02/18/15	16:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	458				

Laboratory Data

SDG ID: GBH74444
Phoenix ID: BH74445

Project ID: 4202 18TH AVE.
Client ID: SG2

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/18/15	KCA	TO15	1
1,1,1-Trichloroethane	1.81	*0.183*	9.9	*1.00*	02/18/15	KCA	TO15	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/18/15	KCA	TO15	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	02/18/15	KCA	TO15	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	02/18/15	KCA	TO15	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	02/18/15	KCA	TO15	
1,2,4-Trimethylbenzene	0.646	*0.204*	3.17	*1.00*	02/18/15	KCA	TO15	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	02/18/15	KCA	TO15	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	02/18/15	KCA	TO15	
1,3-Dichlorobenzene	1.51	*0.166*	9.07	*1.00*	02/18/15	KCA	TO15	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/18/15	KCA	TO15	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	02/18/15	KCA	TO15	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	02/18/15	KCA	TO15	
Acetone	72.3	*2.11*	172	*5.01*	02/19/15	KCA	TO15	
Acrylonitrile	ND	*0.461*	ND	*1.00*	02/18/15	KCA	TO15	
Benzene	0.773	*0.313*	2.47	*1.00*	02/18/15	KCA	TO15	
Benzyl chloride	ND	*0.193*	ND	*1.00*	02/18/15	KCA	TO15	

Project ID: 4202 18TH AVE.
Client ID: SG2

Phoenix I.D.: BH74445

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	02/18/15	KCA	TO15	
Bromoform	ND	*0.097*	ND	*1.00*	02/18/15	KCA	TO15	
Bromomethane	ND	*0.258*	ND	*1.00*	02/18/15	KCA	TO15	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	02/18/15	KCA	TO15	
Carbon Tetrachloride	0.110	*0.040*	0.69	*0.25*	02/18/15	KCA	TO15	
Chlorobenzene	ND	*0.217*	ND	*1.00*	02/18/15	KCA	TO15	
Chloroethane	ND	*0.379*	ND	*1.00*	02/18/15	KCA	TO15	
Chloroform	ND	*0.205*	ND	*1.00*	02/18/15	KCA	TO15	
Chloromethane	ND	*0.485*	ND	*1.00*	02/18/15	KCA	TO15	
Cis-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/18/15	KCA	TO15	
Cyclohexane	0.879	*0.291*	3.02	*1.00*	02/18/15	KCA	TO15	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	02/18/15	KCA	TO15	
Dichlorodifluoromethane	1.70	*0.202*	8.40	*1.00*	02/18/15	KCA	TO15	
Ethanol	84.3	*2.66*	159	*5.01*	02/19/15	KCA	TO15	1
Ethyl acetate	12.3	*0.278*	44.3	*1.00*	02/18/15	KCA	TO15	1
Ethylbenzene	1.07	*0.230*	4.64	*1.00*	02/18/15	KCA	TO15	
Heptane	0.736	*0.244*	3.01	*1.00*	02/18/15	KCA	TO15	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	02/18/15	KCA	TO15	
Hexane	2.59	*0.284*	9.12	*1.00*	02/18/15	KCA	TO15	
Isopropylalcohol	118	*2.04*	290	*5.01*	02/19/15	KCA	TO15	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	
m,p-Xylene	4.07	*0.230*	17.7	*1.00*	02/18/15	KCA	TO15	
Methyl Ethyl Ketone	1.20	*0.339*	3.54	*1.00*	02/18/15	KCA	TO15	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	02/18/15	KCA	TO15	
Methylene Chloride	0.373	*0.288*	1.29	*1.00*	02/18/15	KCA	TO15	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
o-Xylene	1.15	*0.230*	4.99	*1.00*	02/18/15	KCA	TO15	
Propylene	10.2	*0.581*	17.5	*1.00*	02/18/15	KCA	TO15	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
Styrene	ND	*0.235*	ND	*1.00*	02/18/15	KCA	TO15	
Tetrachloroethene	0.421	*0.037*	2.85	*0.25*	02/18/15	KCA	TO15	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	02/18/15	KCA	TO15	1
Toluene	5.23	*0.266*	19.7	*1.00*	02/18/15	KCA	TO15	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/18/15	KCA	TO15	
Trichloroethene	0.233	*0.047*	1.25	*0.25*	02/18/15	KCA	TO15	
Trichlorofluoromethane	26.7	*0.178*	150	*1.00*	02/18/15	KCA	TO15	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	02/18/15	KCA	TO15	
Vinyl Chloride	ND	*0.098*	ND	*0.25*	02/18/15	KCA	TO15	
QA/QC Surrogates								
% Bromofluorobenzene	92	*%*	92	*%*	02/18/15	KCA	70 - 130 %	

Project ID: 4202 18TH AVE.
Client ID: SG2

Phoenix I.D.: BH74445

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director
February 23, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 23, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	GS	02/18/15	11:30
Location Code:	EBC	Received by:	LB	02/18/15	16:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	218				

Laboratory Data

SDG ID: GBH74444
Phoenix ID: BH74446

Project ID: 4202 18TH AVE.
Client ID: SS2

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/18/15	KCA	TO15	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	02/18/15	KCA	TO15	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/18/15	KCA	TO15	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	02/18/15	KCA	TO15	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	02/18/15	KCA	TO15	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	02/18/15	KCA	TO15	
1,2,4-Trimethylbenzene	0.526	*0.204*	2.58	*1.00*	02/18/15	KCA	TO15	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	02/18/15	KCA	TO15	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	02/18/15	KCA	TO15	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	02/18/15	KCA	TO15	
1,3-Dichlorobenzene	1.02	*0.166*	6.13	*1.00*	02/18/15	KCA	TO15	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/18/15	KCA	TO15	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	02/18/15	KCA	TO15	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	02/18/15	KCA	TO15	
Acetone	21.3	*0.421*	50.6	*1.00*	02/18/15	KCA	TO15	
Acrylonitrile	ND	*0.461*	ND	*1.00*	02/18/15	KCA	TO15	
Benzene	0.489	*0.313*	1.56	*1.00*	02/18/15	KCA	TO15	
Benzyl chloride	ND	*0.193*	ND	*1.00*	02/18/15	KCA	TO15	

Project ID: 4202 18TH AVE.
Client ID: SS2

Phoenix I.D.: BH74446

Parameter	ppbv Result		ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Bromodichloromethane	ND		*0.149*	ND	*1.00*	02/18/15	KCA	TO15	
Bromoform	ND		*0.097*	ND	*1.00*	02/18/15	KCA	TO15	
Bromomethane	ND		*0.258*	ND	*1.00*	02/18/15	KCA	TO15	
Carbon Disulfide	ND		*0.321*	ND	*1.00*	02/18/15	KCA	TO15	
Carbon Tetrachloride	0.082		*0.040*	0.52	*0.25*	02/18/15	KCA	TO15	
Chlorobenzene	ND		*0.217*	ND	*1.00*	02/18/15	KCA	TO15	
Chloroethane	ND		*0.379*	ND	*1.00*	02/18/15	KCA	TO15	
Chloroform	ND		*0.205*	ND	*1.00*	02/18/15	KCA	TO15	
Chloromethane	ND		*0.485*	ND	*1.00*	02/18/15	KCA	TO15	
Cis-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
cis-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	02/18/15	KCA	TO15	
Cyclohexane	ND		*0.291*	ND	*1.00*	02/18/15	KCA	TO15	
Dibromochloromethane	ND		*0.118*	ND	*1.00*	02/18/15	KCA	TO15	
Dichlorodifluoromethane	0.412		*0.202*	2.04	*1.00*	02/18/15	KCA	TO15	
Ethanol	91.2	E	*0.531*	172	*1.00*	02/18/15	KCA	TO15	1
Ethyl acetate	6.35		*0.278*	22.9	*1.00*	02/18/15	KCA	TO15	1
Ethylbenzene	1.30		*0.230*	5.64	*1.00*	02/18/15	KCA	TO15	
Heptane	0.501		*0.244*	2.05	*1.00*	02/18/15	KCA	TO15	
Hexachlorobutadiene	ND		*0.094*	ND	*1.00*	02/18/15	KCA	TO15	
Hexane	0.295		*0.284*	1.04	*1.00*	02/18/15	KCA	TO15	
Isopropylalcohol	67.5	E	*0.407*	166	*1.00*	02/18/15	KCA	TO15	
Isopropylbenzene	ND		*0.204*	ND	*1.00*	02/18/15	KCA	TO15	
m,p-Xylene	5.91		*0.230*	25.6	*1.00*	02/18/15	KCA	TO15	
Methyl Ethyl Ketone	0.671		*0.339*	1.98	*1.00*	02/18/15	KCA	TO15	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	ND	*1.00*	02/18/15	KCA	TO15	
Methylene Chloride	ND		*0.288*	ND	*1.00*	02/18/15	KCA	TO15	
n-Butylbenzene	ND		*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
o-Xylene	1.52		*0.230*	6.60	*1.00*	02/18/15	KCA	TO15	
Propylene	0.790		*0.581*	1.36	*1.00*	02/18/15	KCA	TO15	1
sec-Butylbenzene	ND		*0.182*	ND	*1.00*	02/18/15	KCA	TO15	1
Styrene	ND		*0.235*	ND	*1.00*	02/18/15	KCA	TO15	
Tetrachloroethene	0.424		*0.037*	2.87	*0.25*	02/18/15	KCA	TO15	
Tetrahydrofuran	ND		*0.339*	ND	*1.00*	02/18/15	KCA	TO15	1
Toluene	3.86		*0.266*	14.5	*1.00*	02/18/15	KCA	TO15	
Trans-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	02/18/15	KCA	TO15	
trans-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	02/18/15	KCA	TO15	
Trichloroethene	ND		*0.047*	ND	*0.25*	02/18/15	KCA	TO15	
Trichlorofluoromethane	0.223		*0.178*	1.25	*1.00*	02/18/15	KCA	TO15	
Trichlorotrifluoroethane	ND		*0.131*	ND	*1.00*	02/18/15	KCA	TO15	
Vinyl Chloride	ND		*0.098*	ND	*0.25*	02/18/15	KCA	TO15	
QA/QC Surrogates									
% Bromofluorobenzene	95		*%*	95	*%*	02/18/15	KCA	70 - 130 %	

Project ID: 4202 18TH AVE.
Client ID: SS2

Phoenix I.D.: BH74446

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 23, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 23, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	GS	02/18/15	11:31
Location Code:	EBC	Received by:	LB	02/18/15	16:00
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	13636				

Laboratory Data

SDG ID: GBH74444
Phoenix ID: BH74447

Project ID: 4202 18TH AVE.
Client ID: SS1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/19/15	KCA	TO15	1
1,1,1-Trichloroethane	ND	*0.183*	ND	*1.00*	02/19/15	KCA	TO15	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/19/15	KCA	TO15	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	02/19/15	KCA	TO15	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	02/19/15	KCA	TO15	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	02/19/15	KCA	TO15	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	02/19/15	KCA	TO15	
1,2,4-Trimethylbenzene	0.475	*0.204*	2.33	*1.00*	02/19/15	KCA	TO15	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	02/19/15	KCA	TO15	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/19/15	KCA	TO15	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	02/19/15	KCA	TO15	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	02/19/15	KCA	TO15	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	02/19/15	KCA	TO15	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	02/19/15	KCA	TO15	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	02/19/15	KCA	TO15	
1,3-Dichlorobenzene	1.04	*0.166*	6.25	*1.00*	02/19/15	KCA	TO15	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/19/15	KCA	TO15	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	02/19/15	KCA	TO15	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	02/19/15	KCA	TO15	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	02/19/15	KCA	TO15	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	02/19/15	KCA	TO15	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	02/19/15	KCA	TO15	
Acetone	62.0	*2.11*	147	*5.01*	02/19/15	KCA	TO15	
Acrylonitrile	ND	*0.461*	ND	*1.00*	02/19/15	KCA	TO15	
Benzene	0.575	*0.313*	1.84	*1.00*	02/19/15	KCA	TO15	
Benzyl chloride	ND	*0.193*	ND	*1.00*	02/19/15	KCA	TO15	

Project ID: 4202 18TH AVE.
Client ID: SS1

Phoenix I.D.: BH74447

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	02/19/15	KCA	TO15	
Bromoform	ND	*0.097*	ND	*1.00*	02/19/15	KCA	TO15	
Bromomethane	ND	*0.258*	ND	*1.00*	02/19/15	KCA	TO15	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	02/19/15	KCA	TO15	
Carbon Tetrachloride	0.102	*0.040*	0.64	*0.25*	02/19/15	KCA	TO15	
Chlorobenzene	ND	*0.217*	ND	*1.00*	02/19/15	KCA	TO15	
Chloroethane	ND	*0.379*	ND	*1.00*	02/19/15	KCA	TO15	
Chloroform	ND	*0.205*	ND	*1.00*	02/19/15	KCA	TO15	
Chloromethane	ND	*0.485*	ND	*1.00*	02/19/15	KCA	TO15	
Cis-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/19/15	KCA	TO15	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/19/15	KCA	TO15	
Cyclohexane	ND	*0.291*	ND	*1.00*	02/19/15	KCA	TO15	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	02/19/15	KCA	TO15	
Dichlorodifluoromethane	0.470	*0.202*	2.32	*1.00*	02/19/15	KCA	TO15	
Ethanol	81.2	*2.66*	153	*5.01*	02/19/15	KCA	TO15	1
Ethyl acetate	7.67	*0.278*	27.6	*1.00*	02/19/15	KCA	TO15	1
Ethylbenzene	0.956	*0.230*	4.15	*1.00*	02/19/15	KCA	TO15	
Heptane	0.465	*0.244*	1.90	*1.00*	02/19/15	KCA	TO15	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	02/19/15	KCA	TO15	
Hexane	0.500	*0.284*	1.76	*1.00*	02/19/15	KCA	TO15	
Isopropylalcohol	112	*2.04*	275	*5.01*	02/19/15	KCA	TO15	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	02/19/15	KCA	TO15	
m,p-Xylene	3.64	*0.230*	15.8	*1.00*	02/19/15	KCA	TO15	
Methyl Ethyl Ketone	0.717	*0.339*	2.11	*1.00*	02/19/15	KCA	TO15	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	02/19/15	KCA	TO15	
Methylene Chloride	ND	*0.288*	ND	*1.00*	02/19/15	KCA	TO15	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	02/19/15	KCA	TO15	1
o-Xylene	1.00	*0.230*	4.34	*1.00*	02/19/15	KCA	TO15	
Propylene	2.72	*0.581*	4.68	*1.00*	02/19/15	KCA	TO15	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	02/19/15	KCA	TO15	1
Styrene	ND	*0.235*	ND	*1.00*	02/19/15	KCA	TO15	
Tetrachloroethene	0.272	*0.037*	1.84	*0.25*	02/19/15	KCA	TO15	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	02/19/15	KCA	TO15	1
Toluene	6.62	*0.266*	24.9	*1.00*	02/19/15	KCA	TO15	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/19/15	KCA	TO15	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/19/15	KCA	TO15	
Trichloroethene	ND	*0.047*	ND	*0.25*	02/19/15	KCA	TO15	
Trichlorofluoromethane	0.212	*0.178*	1.19	*1.00*	02/19/15	KCA	TO15	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	02/19/15	KCA	TO15	
Vinyl Chloride	ND	*0.098*	ND	*0.25*	02/19/15	KCA	TO15	
QA/QC Surrogates								
% Bromofluorobenzene	93	*%*	93	*%*	02/19/15	KCA	70 - 130 %	

Project ID: 4202 18TH AVE.
Client ID: SS1

Phoenix I.D.: BH74447

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Reference

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
February 23, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

February 23, 2015

QA/QC Data

SDG I.D.: GBH74444

QA/QC Batch 300060, QC Sample No: BH73709 (BH74444, BH74445, BH74446, BH74447)

Volatiles

Parameter	Blank ppbv	Blank ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
1,1,1,2-Tetrachloroethane	ND	ND	155	ND	ND	ND	ND	NC	70 - 130	20	I
1,1,1-Trichloroethane	ND	ND	117	ND	ND	ND	ND	NC	70 - 130	20	
1,1,2,2-Tetrachloroethane	ND	ND	99	ND	ND	ND	ND	NC	70 - 130	20	
1,1,2-Trichloroethane	ND	ND	109	ND	ND	ND	ND	NC	70 - 130	20	
1,1-Dichloroethane	ND	ND	98	ND	ND	ND	ND	NC	70 - 130	20	
1,1-Dichloroethene	ND	ND	93	ND	ND	ND	ND	NC	70 - 130	20	
1,2,4-Trichlorobenzene	ND	ND	52	ND	ND	ND	ND	NC	70 - 130	20	I
1,2,4-Trimethylbenzene	ND	ND	88	ND	ND	ND	ND	NC	70 - 130	20	
1,2-Dibromoethane(EDB)	ND	ND	107	ND	ND	ND	ND	NC	70 - 130	20	
1,2-Dichlorobenzene	ND	ND	76	ND	ND	ND	ND	NC	70 - 130	20	
1,2-Dichloroethane	ND	ND	105	ND	ND	ND	ND	NC	70 - 130	20	
1,2-dichloropropane	ND	ND	107	ND	ND	ND	ND	NC	70 - 130	20	
1,2-Dichlorotetrafluoroethane	ND	ND	101	ND	ND	ND	ND	NC	70 - 130	20	
1,3,5-Trimethylbenzene	ND	ND	92	ND	ND	ND	ND	NC	70 - 130	20	
1,3-Butadiene	ND	ND	93	ND	ND	ND	ND	NC	70 - 130	20	
1,3-Dichlorobenzene	ND	ND	81	ND	ND	ND	ND	NC	70 - 130	20	
1,4-Dichlorobenzene	ND	ND	79	ND	ND	ND	ND	NC	70 - 130	20	
1,4-Dioxane	ND	ND	105	ND	ND	ND	ND	NC	70 - 130	20	
2-Hexanone(MBK)	ND	ND	122	ND	ND	ND	ND	NC	70 - 130	20	
4-Ethyltoluene	ND	ND	90	ND	ND	ND	ND	NC	70 - 130	20	
4-Isopropyltoluene	ND	ND	111	ND	ND	ND	ND	NC	70 - 130	20	
4-Methyl-2-pentanone(MIBK)	ND	ND	110	ND	ND	ND	ND	NC	70 - 130	20	
Acetone	ND	ND	95	44.9	43.4	18.9	18.3	3.2	70 - 130	20	
Acrylonitrile	ND	ND	101	ND	ND	ND	ND	NC	70 - 130	20	
Benzene	ND	ND	98	1.63	1.77	0.512	0.554	7.9	70 - 130	20	
Benzyl chloride	ND	ND	102	ND	ND	ND	ND	NC	70 - 130	20	
Bromodichloromethane	ND	ND	122	ND	ND	ND	ND	NC	70 - 130	20	
Bromoform	ND	ND	134	ND	ND	ND	ND	NC	70 - 130	20	I
Bromomethane	ND	ND	99	ND	ND	ND	ND	NC	70 - 130	20	
Carbon Disulfide	ND	ND	96	ND	ND	ND	ND	NC	70 - 130	20	
Carbon Tetrachloride	ND	ND	127	ND	ND	ND	ND	NC	70 - 130	20	
Chlorobenzene	ND	ND	105	ND	ND	ND	ND	NC	70 - 130	20	
Chloroethane	ND	ND	97	ND	ND	ND	ND	NC	70 - 130	20	
Chloroform	ND	ND	102	ND	ND	ND	ND	NC	70 - 130	20	
Chloromethane	ND	ND	97	1.25	1.20	0.604	0.581	3.9	70 - 130	20	
Cis-1,2-Dichloroethene	ND	ND	100	ND	ND	ND	ND	NC	70 - 130	20	
cis-1,3-Dichloropropene	ND	ND	113	ND	ND	ND	ND	NC	70 - 130	20	
Cyclohexane	ND	ND	94	183	202	53.1	58.8	10.2	70 - 130	20	
Dibromochloromethane	ND	ND	126	ND	ND	ND	ND	NC	70 - 130	20	
Dichlorodifluoromethane	ND	ND	103	ND	ND	ND	ND	NC	70 - 130	20	
Ethanol	ND	ND	103	26.2	25.2	13.9	13.4	3.7	70 - 130	20	

QA/QC Data

SDG I.D.: GBH74444

Parameter	Blank ppbv	Blank ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Ethyl acetate	ND	ND	92	ND	ND	ND	ND	NC	70 - 130	20	
Ethylbenzene	ND	ND	106	ND	ND	ND	ND	NC	70 - 130	20	
Heptane	ND	ND	98	ND	ND	ND	ND	NC	70 - 130	20	
Hexachlorobutadiene	ND	ND	80	ND	ND	ND	ND	NC	70 - 130	20	
Hexane	ND	ND	96	5.46	5.39	1.55	1.53	1.3	70 - 130	20	
Isopropylalcohol	ND	ND	105	400	398	163	162	0.6	70 - 130	20	
Isopropylbenzene	ND	ND	114	1.42	ND	0.290	ND	NC	70 - 130	20	
m,p-Xylene	ND	ND	105	5.25	5.25	1.21	1.21	0.0	70 - 130	20	
Methyl Ethyl Ketone	ND	ND	97	205	206	69.4	70.0	0.9	70 - 130	20	
Methyl tert-butyl ether(MTBE)	ND	ND	98	ND	ND	ND	ND	NC	70 - 130	20	
Methylene Chloride	ND	ND	91	ND	ND	ND	ND	NC	70 - 130	20	
n-Butylbenzene	ND	ND	116	ND	ND	ND	ND	NC	70 - 130	20	
o-Xylene	ND	ND	101	ND	ND	ND	ND	NC	70 - 130	20	
Propylene	ND	ND	105	2.89	2.65	1.68	1.54	8.7	70 - 130	20	
sec-Butylbenzene	ND	ND	106	ND	ND	ND	ND	NC	70 - 130	20	
Styrene	ND	ND	103	69.4	67.3	16.3	15.8	3.1	70 - 130	20	
Tetrachloroethene	ND	ND	106	140	143	20.7	21.1	1.9	70 - 130	20	
Tetrahydrofuran	ND	ND	93	22.8	23.0	7.74	7.82	1.0	70 - 130	20	
Toluene	ND	ND	105	2.08	2.11	0.553	0.561	1.4	70 - 130	20	
Trans-1,2-Dichloroethene	ND	ND	99	ND	ND	ND	ND	NC	70 - 130	20	
trans-1,3-Dichloropropene	ND	ND	129	ND	ND	ND	ND	NC	70 - 130	20	
Trichloroethene	ND	ND	103	15.0	15.1	2.79	2.82	1.1	70 - 130	20	
Trichlorofluoromethane	ND	ND	103	ND	ND	ND	ND	NC	70 - 130	20	
Trichlorotrifluoroethane	ND	ND	95	ND	ND	ND	ND	NC	70 - 130	20	
Vinyl Chloride	ND	ND	96	ND	ND	ND	ND	NC	70 - 130	20	
% Bromofluorobenzene	92	92	92	94.6	89	94.6	89	6.1	70 - 130	20	
QA/QC Batch 299679, QC Sample No: BH74947 (BH74444 (5X) , BH74445 (5X) , BH74447 (5X))											
Volatiles											
Acetone	ND	ND	92	109	109	46.0	46.0	0.0	70 - 130	20	
Ethanol	ND	ND	>200	1130	1140	598	605	1.2	70 - 130	20	I
Isopropylalcohol	ND	ND	104	310	312	126	127	0.8	70 - 130	20	

I = This parameter is outside laboratory lcs/lcsd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
February 23, 2015

Sample Criteria Exceedences Report

GBH74444 - EBC

Criteria: None

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

CHAIN OF CUSTODY RECORD
AIR ANALYSES

800-827-5426
email: greg@phoenixlabs.com

P.O. #

Data Delivery:
- ☐ Fax #:
- ☑ Email: File
- ☐ Phone #:

Report to: Kevin Waters
Customer: EBC
Address: 1808 middle country rd, Ridge NY

Invoice to: EBC

Sampled by: Greg Swirson

Project Name: 4202 18th Ave

Requested Deliverable:
RCP ☐ ASP CAT B ☒
MCP ☐ NJ Deliverables ☐

State where samples collected: NY

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-14	TO-15
		THIS SECTION FOR LAB USE ONLY											MATRIX			ANALYSES	
74444	SG1	470	6.0	-30	-2	5354	41.7	909	1127	2-18-15	-29	-5		X			X
74445	SG2	458	6.0	-30	-1	4495		915	1128	2-18-15	-30	-6		X			X
74446	SS2	218	6.0	-30	-2	5039		922	1130	2-18-15	-30	-6		X			X
74447	SS1	13636	6.0	-30	-4	0331		927	1131	2-18-15	-29	-7		X			X
	Hold	~~12859~~	~~6.0~~	~~-30~~		~~5658~~		GS									
	6L 2hr																

Relinquished by: [signature]

Accepted By: [signature]

Date: 2-18-15 Time: 12:30
2-18-15 1600

Data Format:
Excel ☒ Equis ☒ GISKey ☐
PDF ☒ Other: ☐

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

Requested Criteria

Quote Number:

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: Date:

PHOENIX
Environmental Laboratories, Inc.

Thursday, February 26, 2015

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 4202 18TH AVE., BROOKLYN
Sample ID#s: BH75404 - BH75408

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

February 26, 2015

SDG I.D.: GBH75404

8260 Volatile Organics:
1,2-Dibromoethane, 1,2,3 Trichloropropane, and 1,2-Dibromo-3-chloropropane do not meet NY TOGS GA criteria, these compounds are analyzed by GC/FID method 504 or 8011 to achieve this criteria.

SIM Analysis:
The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

Toxaphene is reported to the lowest possible reporting level. The NY TOGS criteria for this compound can not be achieved.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 26, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		02/18/15	10:00
Location Code:	EBC	Received by:	LB	02/19/15	16:24
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH75404
Phoenix ID: BH75404

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW1

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver (Dissolved)	< 0.005	N	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Aluminum (Dissolved)	0.102		0.011	0.005	mg/L	02/25/15	LK	SW6010C
Arsenic, (Dissolved)	< 0.003		0.003	0.004	mg/L	02/25/15	LK	SW6010C
Barium (Dissolved)	0.058		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Beryllium (Dissolved)	< 0.001		0.001	0.001	mg/L	02/25/15	LK	SW6010C
Calcium (Dissolved)	29.2		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Cadmium (Dissolved)	< 0.004		0.004	0.0005	mg/L	02/25/15	LK	SW6010C
Cobalt, (Dissolved)	< 0.005		0.005	0.001	mg/L	02/25/15	LK	SW6010C
Chromium (Dissolved)	0.002		0.001	0.001	mg/L	02/25/15	LK	SW6010C
Copper, (Dissolved)	0.002	B*	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Iron, (Dissolved)	0.16		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Mercury (Dissolved)	< 0.0002		0.0002	0.00015	mg/L	02/23/15	RS	SW7470A
Potassium (Dissolved)	3.9		0.1	0.01	mg/L	02/25/15	LK	SW6010C
Magnesium (Dissolved)	32.7		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Manganese, (Dissolved)	0.150		0.005	0.001	mg/L	02/25/15	LK	SW6010C
Sodium (Dissolved)	68.9		1.1	0.11	mg/L	02/25/15	LK	SW6010C
Nickel, (Dissolved)	0.004		0.004	0.001	mg/L	02/25/15	LK	SW6010C
Lead (Dissolved)	< 0.002		0.002	0.001	mg/L	02/25/15	LK	SW6010C
Antimony, (Dissolved)	< 0.003		0.003	0.003	mg/L	02/23/15	RS	SW7010
Selenium, (Dissolved)	< 0.004		0.004	0.002	mg/L	02/24/15	RS	SW7010
Thallium , (Dissolved)	< 0.0005		0.0005	0.0005	mg/L	02/23/15	RS	SW7010
Vanadium, (Dissolved)	< 0.011		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Zinc, (Dissolved)	0.008	B	0.011	0.0012	mg/L	02/25/15	LK	SW6010C
Filtration	Completed					02/20/15	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					02/23/15	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					02/19/15	L	SW3510C
Extraction for Pest (2 Liter)	Completed					02/19/15	L	SW3510C
Semi-Volatile Extraction	Completed					02/19/15	E/D/K	SW3520C

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW1

Phoenix I.D.: BH75404

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Dissolved Metals Preparation	Completed				02/20/15	AG		
Pesticides								
4,4' -DDD	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
4,4' -DDE	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
4,4' -DDT	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
a-BHC	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
a-chlordane	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
Alachlor	ND	0.080	0.080	ug/L	02/20/15	CE	SW8081B	1
Aldrin	ND	0.002	0.002	ug/L	02/20/15	CE	SW8081B	
b-BHC	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
Chlordane	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
d-BHC	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
Dieldrin	ND	0.004	0.004	ug/L	02/20/15	CE	SW8081B	
Endosulfan I	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
Endosulfan II	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
Endosulfan Sulfate	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
Endrin	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
Endrin Aldehyde	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
Endrin ketone	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
g-BHC (Lindane)	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
g-chlordane	ND	0.011	0.011	ug/L	02/20/15	CE	SW8081B	
Heptachlor	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
Heptachlor epoxide	ND	0.005	0.005	ug/L	02/20/15	CE	SW8081B	
Methoxychlor	ND	0.11	0.11	ug/L	02/20/15	CE	SW8081B	
Toxaphene	ND	0.27	0.27	ug/L	02/20/15	CE	SW8081B	
QA/QC Surrogates								
%DCBP (Surrogate Rec)	37			%	02/20/15	CE	SW8081B	
%TCMX (Surrogate Rec)	59			%	02/20/15	CE	SW8081B	
Polychlorinated Biphenyls								
PCB-1016	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1221	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1232	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1242	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1248	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1254	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1260	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1262	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1268	ND	0.053	0.053	ug/L	02/20/15	AW	E608/SW8082A	
QA/QC Surrogates								
% DCBP	50			%	02/20/15	AW	30 - 150 %	
% TCMX	65			%	02/20/15	AW	30 - 150 %	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,1-Dichloroethane	ND	5.0	0.25	ug/L	02/24/15	MH	SW8260C	

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Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,1-Dichloropropene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2,3-Trichlorobenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2,3-Trichloropropane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2,4-Trimethylbenzene	8.8		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND		1.0	0.50	ug/L	02/24/15	MH	SW8260C	
1,2-Dibromoethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,2-Dichloroethane	ND		0.60	0.25	ug/L	02/24/15	MH	SW8260C	
1,2-Dichloropropane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,3,5-Trimethylbenzene	1.3		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,3-Dichloropropane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
2,2-Dichloropropane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
2-Chlorotoluene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
2-Hexanone	ND		2.5	2.5	ug/L	02/24/15	MH	SW8260C	
2-Isopropyltoluene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	1
4-Chlorotoluene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
4-Methyl-2-pentanone	ND		2.5	2.5	ug/L	02/24/15	MH	SW8260C	
Acetone	4.3	JS	5.0	2.5	ug/L	02/24/15	MH	SW8260C	
Acrolein	ND		5.0	2.5	ug/L	02/24/15	MH	SW8260C	
Acrylonitrile	ND		5.0	2.5	ug/L	02/24/15	MH	SW8260C	
Benzene	ND		0.70	0.25	ug/L	02/24/15	MH	SW8260C	
Bromobenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Bromochloromethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Bromodichloromethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Bromoform	ND		5.0	0.25	ug/L	02/24/15	MH	SW8260C	
Bromomethane	ND		5.0	0.25	ug/L	02/24/15	MH	SW8260C	
Carbon Disulfide	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Carbon tetrachloride	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Chlorobenzene	ND		5.0	0.25	ug/L	02/24/15	MH	SW8260C	
Chloroethane	ND		5.0	0.25	ug/L	02/24/15	MH	SW8260C	
Chloroform	1.9	J	5.0	0.25	ug/L	02/24/15	MH	SW8260C	
Chloromethane	ND		5.0	0.25	ug/L	02/24/15	MH	SW8260C	
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
cis-1,3-Dichloropropene	ND		0.40	0.25	ug/L	02/24/15	MH	SW8260C	
Dibromochloromethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Dibromomethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Dichlorodifluoromethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Ethylbenzene	0.44	J	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Hexachlorobutadiene	ND		0.5	0.20	ug/L	02/24/15	MH	SW8260C	
Isopropylbenzene	0.30	J	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
m&p-Xylene	2.7		1.0	0.50	ug/L	02/24/15	MH	SW8260C	
Methyl ethyl ketone	ND		2.5	2.5	ug/L	02/24/15	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Methylene chloride	ND		3.0	0.25	ug/L	02/24/15	MH	SW8260C	
Naphthalene	1.2		1.0	1.0	ug/L	02/24/15	MH	SW8260C	

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Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Butylbenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
n-Propylbenzene	0.66	J	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
o-Xylene	0.52	J	1.0	0.25	ug/L	02/24/15	MH	SW8260C	
p-Isopropyltoluene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
sec-Butylbenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Styrene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
tert-Butylbenzene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Tetrachloroethene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Tetrahydrofuran (THF)	ND		5.0	2.5	ug/L	02/24/15	MH	SW8260C	1
Toluene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
trans-1,2-Dichloroethene	ND		5.0	0.25	ug/L	02/24/15	MH	SW8260C	
trans-1,3-Dichloropropene	ND		0.40	0.25	ug/L	02/24/15	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND		2.5	2.5	ug/L	02/24/15	MH	SW8260C	
Trichloroethene	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Trichlorofluoromethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Trichlorotrifluoroethane	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
Vinyl chloride	ND		1.0	0.25	ug/L	02/24/15	MH	SW8260C	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	99				%	02/24/15	MH	70 - 121 %	
% Bromofluorobenzene	100				%	02/24/15	MH	59 - 113 %	
% Dibromofluoromethane	98				%	02/24/15	MH	70 - 130 %	
% Toluene-d8	99				%	02/24/15	MH	84 - 138 %	

Semivolatiles

1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/L	02/23/15	DD	SW8270D	
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
1,2-Diphenylhydrazine	ND		5.0	1.6	ug/L	02/23/15	DD	SW8270D	
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4,5-Trichlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4,6-Trichlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dichlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dimethylphenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dinitrophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dinitrotoluene	ND		5.0	2.0	ug/L	02/23/15	DD	SW8270D	
2,6-Dinitrotoluene	ND		5.0	1.6	ug/L	02/23/15	DD	SW8270D	
2-Chloronaphthalene	ND		5.0	1.4	ug/L	02/23/15	DD	SW8270D	
2-Chlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2-Methylnaphthalene	ND		5.0	1.5	ug/L	02/23/15	DD	SW8270D	
2-Methylphenol (o-cresol)	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2-Nitroaniline	ND		5.0	5.0	ug/L	02/23/15	DD	SW8270D	
2-Nitrophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
3,3'-Dichlorobenzidine	ND		5.0	2.4	ug/L	02/23/15	DD	SW8270D	
3-Nitroaniline	ND		5.0	5.0	ug/L	02/23/15	DD	SW8270D	
4,6-Dinitro-2-methylphenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
4-Bromophenyl phenyl ether	ND		5.0	1.5	ug/L	02/23/15	DD	SW8270D	
4-Chloro-3-methylphenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
4-Chloroaniline	ND		3.5	2.3	ug/L	02/23/15	DD	SW8270D	
4-Chlorophenyl phenyl ether	ND		5.0	1.7	ug/L	02/23/15	DD	SW8270D	

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
4-Nitroaniline	ND	5.0	1.7	ug/L	02/23/15	DD	SW8270D
4-Nitrophenol	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
Acenaphthene	ND	5.0	1.5	ug/L	02/23/15	DD	SW8270D
Acetophenone	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Aniline	ND	3.5	5.0	ug/L	02/23/15	DD	SW8270D
Anthracene	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Benzidine	ND	4.5	2.9	ug/L	02/23/15	DD	SW8270D
Benzoic acid	ND	25	10	ug/L	02/23/15	DD	SW8270D
Benzyl butyl phthalate	ND	5.0	1.3	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethyl)ether	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
Carbazole	ND	25	3.8	ug/L	02/23/15	DD	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	02/23/15	DD	SW8270D
Diethyl phthalate	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Dimethylphthalate	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Di-n-butylphthalate	ND	5.0	1.3	ug/L	02/23/15	DD	SW8270D
Di-n-octylphthalate	ND	5.0	1.3	ug/L	02/23/15	DD	SW8270D
Fluoranthene	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Fluorene	ND	5.0	1.7	ug/L	02/23/15	DD	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	02/23/15	DD	SW8270D
Isophorone	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
Naphthalene	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
N-Nitrosodimethylamine	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
N-Nitrosodiphenylamine	ND	5.0	1.9	ug/L	02/23/15	DD	SW8270D
Phenol	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
Pyrene	ND	5.0	1.7	ug/L	02/23/15	DD	SW8270D
Pyridine	ND	10	1.2	ug/L	02/23/15	DD	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	71			%	02/23/15	DD	19 - 122 %
% 2-Fluorobiphenyl	68			%	02/23/15	DD	30 - 115 %
% 2-Fluorophenol	42			%	02/23/15	DD	25 - 121 %
% Nitrobenzene-d5	63			%	02/23/15	DD	23 - 120 %
% Phenol-d5	45			%	02/23/15	DD	24 - 113 %
% Terphenyl-d14	77			%	02/23/15	DD	18 - 137 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	0.50	0.50	ug/L	02/22/15	DD	SW8270D (SIM)
Acenaphthylene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)
Benz(a)anthracene	0.02	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	5.2	1.0	1.0	ug/L	02/22/15	DD	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.40	0.40	ug/L	02/22/15	DD	SW8270D (SIM)

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Hexachloroethane	ND	0.50	0.50	ug/L	02/22/15	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Nitrobenzene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)
Pentachloronitrobenzene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)
Pentachlorophenol	ND	0.80	0.80	ug/L	02/22/15	DD	SW8270D (SIM)
Phenanthrene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	97			%	02/22/15	DD	15 - 110 %
% 2-Fluorobiphenyl	80			%	02/22/15	DD	30 - 115 %
% 2-Fluorophenol	65			%	02/22/15	DD	15 - 110 %
% Nitrobenzene-d5	90			%	02/22/15	DD	23 - 120 %
% Phenol-d5	79			%	02/22/15	DD	15 - 110 %
% Terphenyl-d14	116			%	02/22/15	DD	18 - 137 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 26, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 26, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		02/18/15	11:00
Location Code:	EBC	Received by:	LB	02/19/15	16:24
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH75404
Phoenix ID: BH75405

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW2

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver (Dissolved)	< 0.005	N	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Aluminum (Dissolved)	0.273		0.011	0.005	mg/L	02/25/15	LK	SW6010C
Arsenic, (Dissolved)	< 0.003		0.003	0.004	mg/L	02/25/15	LK	SW6010C
Barium (Dissolved)	0.076		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Beryllium (Dissolved)	< 0.001		0.001	0.001	mg/L	02/25/15	LK	SW6010C
Calcium (Dissolved)	27.5		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Cadmium (Dissolved)	< 0.004		0.004	0.0005	mg/L	02/25/15	LK	SW6010C
Cobalt, (Dissolved)	0.002	B	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Chromium (Dissolved)	0.002		0.001	0.001	mg/L	02/25/15	LK	SW6010C
Copper, (Dissolved)	0.004	B*	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Iron, (Dissolved)	0.53		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Mercury (Dissolved)	< 0.0002		0.0002	0.00015	mg/L	02/23/15	RS	SW7470A
Potassium (Dissolved)	3.8		0.1	0.01	mg/L	02/25/15	LK	SW6010C
Magnesium (Dissolved)	24.3		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Manganese, (Dissolved)	0.202		0.005	0.001	mg/L	02/25/15	LK	SW6010C
Sodium (Dissolved)	26.0		0.11	0.01	mg/L	02/25/15	LK	SW6010C
Nickel, (Dissolved)	0.008		0.004	0.001	mg/L	02/25/15	LK	SW6010C
Lead (Dissolved)	< 0.002		0.002	0.001	mg/L	02/25/15	LK	SW6010C
Antimony, (Dissolved)	< 0.003		0.003	0.003	mg/L	02/23/15	RS	SW7010
Selenium, (Dissolved)	< 0.004		0.004	0.002	mg/L	02/24/15	RS	SW7010
Thallium , (Dissolved)	< 0.0005		0.0005	0.0005	mg/L	02/23/15	RS	SW7010
Vanadium, (Dissolved)	0.002	B	0.011	0.001	mg/L	02/25/15	LK	SW6010C
Zinc, (Dissolved)	0.005	B	0.011	0.0012	mg/L	02/25/15	LK	SW6010C
Filtration	Completed					02/20/15	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					02/23/15	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					02/19/15	L	SW3510C
Extraction for Pest (2 Liter)	Completed					02/19/15	L	SW3510C
Semi-Volatile Extraction	Completed					02/19/15	E/D/K	SW3520C

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Dissolved Metals Preparation	Completed				02/20/15	AG		
Pesticides								
4,4' -DDD	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
4,4' -DDE	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
4,4' -DDT	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
a-BHC	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
a-chlordane	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
Alachlor	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	1
Aldrin	ND	0.015	0.015	ug/L	02/20/15	CE	SW8081B	
b-BHC	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
Chlordane	ND	0.50	0.50	ug/L	02/20/15	CE	SW8081B	
d-BHC	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
Dieldrin	ND	0.015	0.015	ug/L	02/20/15	CE	SW8081B	
Endosulfan I	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
Endosulfan II	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
Endosulfan Sulfate	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
Endrin	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
Endrin Aldehyde	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
Endrin ketone	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
g-BHC (Lindane)	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
g-chlordane	ND	0.10	0.10	ug/L	02/20/15	CE	SW8081B	
Heptachlor	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
Heptachlor epoxide	ND	0.050	0.050	ug/L	02/20/15	CE	SW8081B	
Methoxychlor	ND	1.0	1.0	ug/L	02/20/15	CE	SW8081B	
Toxaphene	ND	2.5	2.5	ug/L	02/20/15	CE	SW8081B	
QA/QC Surrogates								
%DCBP (Surrogate Rec)	Diluted Out			%	02/20/15	CE	SW8081B	
%TCMX (Surrogate Rec)	Diluted Out			%	02/20/15	CE	SW8081B	
Polychlorinated Biphenyls								
PCB-1016	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1221	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1232	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1242	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1248	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1254	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1260	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1262	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1268	ND	0.050	0.050	ug/L	02/20/15	AW	E608/SW8082A	
QA/QC Surrogates								
% DCBP	47			%	02/20/15	AW	30 - 150 %	
% TCMX	62			%	02/20/15	AW	30 - 150 %	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	

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1,1-Dichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloropropene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,3-Trichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,3-Trichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND		1.0	0.50	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromoethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloroethane	ND		0.60	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2,2-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Chlorotoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Hexanone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
2-Isopropyltoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	1
4-Chlorotoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
4-Methyl-2-pentanone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Acetone	4.4	JS	5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrolein	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrylonitrile	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Benzene	ND		0.70	0.25	ug/L	02/20/15	MH	SW8260C	
Bromobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromochloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromodichloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromoform	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromomethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon Disulfide	0.29	J	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon tetrachloride	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chlorobenzene	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroform	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloromethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,3-Dichloropropene	ND		0.40	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromochloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromomethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dichlorodifluoromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Ethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Hexachlorobutadiene	ND		0.5	0.20	ug/L	02/20/15	MH	SW8260C	B
Isopropylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
m&p-Xylene	ND		1.0	0.50	ug/L	02/20/15	MH	SW8260C	
Methyl ethyl ketone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Methylene chloride	ND		3.0	0.25	ug/L	02/20/15	MH	SW8260C	
Naphthalene	ND		1.0	1.0	ug/L	02/20/15	MH	SW8260C	

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n-Butylbenzene	0.51	J	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
n-Propylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
o-Xylene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
p-Isopropyltoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
sec-Butylbenzene	0.34	J	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Styrene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
tert-Butylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrachloroethene	0.69	J	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrahydrofuran (THF)	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	1
Toluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,2-Dichloroethene	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,3-Dichloropropene	ND		0.40	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Trichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorofluoromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorotrifluoroethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Vinyl chloride	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	101				%	02/20/15	MH	70 - 121 %	
% Bromofluorobenzene	97				%	02/20/15	MH	59 - 113 %	
% Dibromofluoromethane	94				%	02/20/15	MH	70 - 130 %	
% Toluene-d8	100				%	02/20/15	MH	84 - 138 %	

Semivolatiles

1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/L	02/23/15	DD	SW8270D	
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
1,2-Diphenylhydrazine	ND		5.0	1.6	ug/L	02/23/15	DD	SW8270D	
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4,5-Trichlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4,6-Trichlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dichlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dimethylphenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dinitrophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2,4-Dinitrotoluene	ND		5.0	2.0	ug/L	02/23/15	DD	SW8270D	
2,6-Dinitrotoluene	ND		5.0	1.6	ug/L	02/23/15	DD	SW8270D	
2-Chloronaphthalene	ND		5.0	1.4	ug/L	02/23/15	DD	SW8270D	
2-Chlorophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2-Methylnaphthalene	ND		5.0	1.5	ug/L	02/23/15	DD	SW8270D	
2-Methylphenol (o-cresol)	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
2-Nitroaniline	ND		5.0	5.0	ug/L	02/23/15	DD	SW8270D	
2-Nitrophenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
3,3'-Dichlorobenzidine	ND		5.0	2.4	ug/L	02/23/15	DD	SW8270D	
3-Nitroaniline	ND		5.0	5.0	ug/L	02/23/15	DD	SW8270D	
4,6-Dinitro-2-methylphenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
4-Bromophenyl phenyl ether	ND		5.0	1.5	ug/L	02/23/15	DD	SW8270D	
4-Chloro-3-methylphenol	ND		1.0	1.0	ug/L	02/23/15	DD	SW8270D	
4-Chloroaniline	ND		3.5	2.3	ug/L	02/23/15	DD	SW8270D	
4-Chlorophenyl phenyl ether	ND		5.0	1.7	ug/L	02/23/15	DD	SW8270D	

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4-Nitroaniline	ND	5.0	1.7	ug/L	02/23/15	DD	SW8270D
4-Nitrophenol	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
Acenaphthene	ND	5.0	1.5	ug/L	02/23/15	DD	SW8270D
Acetophenone	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Aniline	ND	3.5	5.0	ug/L	02/23/15	DD	SW8270D
Anthracene	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Benzidine	ND	4.5	2.9	ug/L	02/23/15	DD	SW8270D
Benzoic acid	ND	25	10	ug/L	02/23/15	DD	SW8270D
Benzyl butyl phthalate	ND	5.0	1.3	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethyl)ether	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
Carbazole	ND	25	3.8	ug/L	02/23/15	DD	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	02/23/15	DD	SW8270D
Diethyl phthalate	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Dimethylphthalate	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Di-n-butylphthalate	ND	5.0	1.3	ug/L	02/23/15	DD	SW8270D
Di-n-octylphthalate	ND	5.0	1.3	ug/L	02/23/15	DD	SW8270D
Fluoranthene	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
Fluorene	ND	5.0	1.7	ug/L	02/23/15	DD	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	02/23/15	DD	SW8270D
Isophorone	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
Naphthalene	ND	5.0	1.4	ug/L	02/23/15	DD	SW8270D
N-Nitrosodimethylamine	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	5.0	1.6	ug/L	02/23/15	DD	SW8270D
N-Nitrosodiphenylamine	ND	5.0	1.9	ug/L	02/23/15	DD	SW8270D
Phenol	ND	1.0	1.0	ug/L	02/23/15	DD	SW8270D
Pyrene	ND	5.0	1.7	ug/L	02/23/15	DD	SW8270D
Pyridine	ND	10	1.2	ug/L	02/23/15	DD	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	83			%	02/23/15	DD	19 - 122 %
% 2-Fluorobiphenyl	70			%	02/23/15	DD	30 - 115 %
% 2-Fluorophenol	46			%	02/23/15	DD	25 - 121 %
% Nitrobenzene-d5	65			%	02/23/15	DD	23 - 120 %
% Phenol-d5	49			%	02/23/15	DD	24 - 113 %
% Terphenyl-d14	83			%	02/23/15	DD	18 - 137 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	0.50	0.50	ug/L	02/22/15	DD	SW8270D (SIM)
Acenaphthylene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)
Benz(a)anthracene	0.05	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(a)pyrene	0.03	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(b)fluoranthene	0.04	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(ghi)perylene	0.02	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	02/22/15	DD	SW8270D (SIM)
Chrysene	0.04	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.40	0.40	ug/L	02/22/15	DD	SW8270D (SIM)

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Hexachloroethane	ND	0.50	0.50	ug/L	02/22/15	DD	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)	
Nitrobenzene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)	
Pentachloronitrobenzene	ND	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)	
Pentachlorophenol	ND	0.80	0.80	ug/L	02/22/15	DD	SW8270D (SIM)	
Phenanthrene	0.32	0.10	0.10	ug/L	02/22/15	DD	SW8270D (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	122			%	02/22/15	DD	15 - 110 %	3
% 2-Fluorobiphenyl	86			%	02/22/15	DD	30 - 115 %	
% 2-Fluorophenol	69			%	02/22/15	DD	15 - 110 %	
% Nitrobenzene-d5	102			%	02/22/15	DD	23 - 120 %	
% Phenol-d5	85			%	02/22/15	DD	15 - 110 %	
% Terphenyl-d14	121			%	02/22/15	DD	18 - 137 %	

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.
3 = This parameter exceeds laboratory specified limits.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Pesticide Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 26, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 26, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		02/18/15	12:00
Location Code:	EBC	Received by:	LB	02/19/15	16:24
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH75404
Phoenix ID: BH75406

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW3

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver (Dissolved)	< 0.005	N	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Aluminum (Dissolved)	0.351		0.011	0.005	mg/L	02/25/15	LK	SW6010C
Arsenic, (Dissolved)	< 0.003		0.003	0.004	mg/L	02/25/15	LK	SW6010C
Barium (Dissolved)	0.070		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Beryllium (Dissolved)	< 0.001		0.001	0.001	mg/L	02/25/15	LK	SW6010C
Calcium (Dissolved)	21.8		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Cadmium (Dissolved)	< 0.004		0.004	0.0005	mg/L	02/25/15	LK	SW6010C
Cobalt, (Dissolved)	0.003	B	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Chromium (Dissolved)	0.003		0.001	0.001	mg/L	02/25/15	LK	SW6010C
Copper, (Dissolved)	0.005	B*	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Iron, (Dissolved)	0.88		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Mercury (Dissolved)	< 0.0002		0.0002	0.00015	mg/L	02/23/15	RS	SW7470A
Potassium (Dissolved)	4.4		0.1	0.01	mg/L	02/25/15	LK	SW6010C
Magnesium (Dissolved)	26.5		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Manganese, (Dissolved)	1.50		0.005	0.001	mg/L	02/25/15	LK	SW6010C
Sodium (Dissolved)	46.7		0.11	0.01	mg/L	02/25/15	LK	SW6010C
Nickel, (Dissolved)	0.017		0.004	0.001	mg/L	02/25/15	LK	SW6010C
Lead (Dissolved)	< 0.002		0.002	0.001	mg/L	02/25/15	LK	SW6010C
Antimony, (Dissolved)	< 0.003		0.003	0.003	mg/L	02/23/15	RS	SW7010
Selenium, (Dissolved)	< 0.004		0.004	0.002	mg/L	02/24/15	RS	SW7010
Thallium , (Dissolved)	< 0.0005		0.0005	0.0005	mg/L	02/23/15	RS	SW7010
Vanadium, (Dissolved)	< 0.011		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Zinc, (Dissolved)	0.006	B	0.011	0.0012	mg/L	02/25/15	LK	SW6010C
Filtration	Completed					02/20/15	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					02/23/15	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					02/19/15	L	SW3510C
Extraction for Pest (2 Liter)	Completed					02/19/15	L	SW3510C
Semi-Volatile Extraction	Completed					02/19/15	E/D/K	SW3520C

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW3

Phoenix I.D.: BH75406

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Dissolved Metals Preparation	Completed				02/20/15	AG		
Pesticides								
4,4' -DDD	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
4,4' -DDE	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
4,4' -DDT	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
a-BHC	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
a-chlordane	ND	0.020	0.020	ug/L	02/20/15	C/P	SW8081B	
Alachlor	ND	0.082	0.082	ug/L	02/20/15	C/P	SW8081B	1
Aldrin	ND	0.010	0.010	ug/L	02/20/15	C/P	SW8081B	
b-BHC	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
Chlordane	ND	0.050	0.050	ug/L	02/20/15	C/P	SW8081B	
d-BHC	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
Dieldrin	ND	0.004	0.004	ug/L	02/20/15	C/P	SW8081B	
Endosulfan I	ND	0.020	0.020	ug/L	02/20/15	C/P	SW8081B	
Endosulfan II	ND	0.011	0.011	ug/L	02/20/15	C/P	SW8081B	
Endosulfan Sulfate	ND	0.011	0.011	ug/L	02/20/15	C/P	SW8081B	
Endrin	ND	0.008	0.008	ug/L	02/20/15	C/P	SW8081B	
Endrin Aldehyde	ND	0.011	0.011	ug/L	02/20/15	C/P	SW8081B	
Endrin ketone	ND	0.011	0.011	ug/L	02/20/15	C/P	SW8081B	
g-BHC (Lindane)	ND	0.010	0.010	ug/L	02/20/15	C/P	SW8081B	
g-chlordane	ND	0.020	0.020	ug/L	02/20/15	C/P	SW8081B	
Heptachlor	ND	0.005	0.005	ug/L	02/20/15	C/P	SW8081B	
Heptachlor epoxide	ND	0.020	0.020	ug/L	02/20/15	C/P	SW8081B	
Methoxychlor	ND	0.11	0.11	ug/L	02/20/15	C/P	SW8081B	
Toxaphene	ND	0.27	0.27	ug/L	02/20/15	C/P	SW8081B	
QA/QC Surrogates								
%DCBP (Surrogate Rec)	42			%	02/20/15	C/P	SW8081B	
%TCMX (Surrogate Rec)	64			%	02/20/15	C/P	SW8081B	
Polychlorinated Biphenyls								
PCB-1016	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1221	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1232	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1242	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1248	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1254	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1260	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1262	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1268	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
QA/QC Surrogates								
% DCBP	52			%	02/20/15	AW	30 - 150 %	
% TCMX	65			%	02/20/15	AW	30 - 150 %	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	

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Client ID: MW3

Phoenix I.D.: BH75406

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloropropene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,3-Trichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,3-Trichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND		1.0	0.50	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromoethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloroethane	ND		0.60	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2,2-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Chlorotoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Hexanone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
2-Isopropyltoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	1
4-Chlorotoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
4-Methyl-2-pentanone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Acetone	4.5	JS	5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrolein	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrylonitrile	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Benzene	ND		0.70	0.25	ug/L	02/20/15	MH	SW8260C	
Bromobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromochloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromodichloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromoform	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromomethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon Disulfide	0.40	J	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon tetrachloride	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chlorobenzene	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroform	0.50	J	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloromethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,3-Dichloropropene	ND		0.40	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromochloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromomethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dichlorodifluoromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Ethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Hexachlorobutadiene	ND		0.5	0.20	ug/L	02/20/15	MH	SW8260C	B
Isopropylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
m&p-Xylene	ND		1.0	0.50	ug/L	02/20/15	MH	SW8260C	
Methyl ethyl ketone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Methylene chloride	ND		3.0	0.25	ug/L	02/20/15	MH	SW8260C	
Naphthalene	ND		1.0	1.0	ug/L	02/20/15	MH	SW8260C	

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
n-Propylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
o-Xylene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
p-Isopropyltoluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
sec-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Styrene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
tert-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrachloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	02/20/15	MH	SW8260C	1
Toluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Trichloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Vinyl chloride	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101			%	02/20/15	MH	70 - 121 %	
% Bromofluorobenzene	98			%	02/20/15	MH	59 - 113 %	
% Dibromofluoromethane	96			%	02/20/15	MH	70 - 130 %	
% Toluene-d8	99			%	02/20/15	MH	84 - 138 %	

Semivolatiles

1,2,4-Trichlorobenzene	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
1,2-Dichlorobenzene	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
1,2-Diphenylhydrazine	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
1,3-Dichlorobenzene	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
1,4-Dichlorobenzene	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
2,4,5-Trichlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4,6-Trichlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dichlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dimethylphenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dinitrophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dinitrotoluene	ND	5.	2.2	ug/L	02/23/15	DD	SW8270D
2,6-Dinitrotoluene	ND	5.	1.8	ug/L	02/23/15	DD	SW8270D
2-Chloronaphthalene	ND	5.6	1.6	ug/L	02/23/15	DD	SW8270D
2-Chlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2-Methylnaphthalene	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
2-Methylphenol (o-cresol)	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2-Nitroaniline	ND	5.	5.	ug/L	02/23/15	DD	SW8270D
2-Nitrophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
3,3'-Dichlorobenzidine	ND	5.	2.6	ug/L	02/23/15	DD	SW8270D
3-Nitroaniline	ND	5.	5.	ug/L	02/23/15	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
4-Bromophenyl phenyl ether	ND	5.6	1.6	ug/L	02/23/15	DD	SW8270D
4-Chloro-3-methylphenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
4-Chloroaniline	ND	3.9	2.6	ug/L	02/23/15	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	5.6	1.9	ug/L	02/23/15	DD	SW8270D

Project ID: 4202 18TH AVE., BROOKLYN
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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
4-Nitroaniline	ND	5.	1.9	ug/L	02/23/15	DD	SW8270D
4-Nitrophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
Acenaphthene	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
Acetophenone	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
Aniline	ND	3.9	5.6	ug/L	02/23/15	DD	SW8270D
Anthracene	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Benzidine	ND	5.0	3.3	ug/L	02/23/15	DD	SW8270D
Benzoic acid	ND	28	11	ug/L	02/23/15	DD	SW8270D
Benzyl butyl phthalate	ND	5.6	1.4	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	5.	1.5	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethyl)ether	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.6	1.5	ug/L	02/23/15	DD	SW8270D
Carbazole	ND	28	4.2	ug/L	02/23/15	DD	SW8270D
Dibenzofuran	ND	5.	1.6	ug/L	02/23/15	DD	SW8270D
Diethyl phthalate	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Dimethylphthalate	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
Di-n-butylphthalate	ND	5.6	1.5	ug/L	02/23/15	DD	SW8270D
Di-n-octylphthalate	ND	5.6	1.4	ug/L	02/23/15	DD	SW8270D
Fluoranthene	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Fluorene	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Hexachlorocyclopentadiene	ND	5.	1.7	ug/L	02/23/15	DD	SW8270D
Isophorone	ND	5.6	1.6	ug/L	02/23/15	DD	SW8270D
Naphthalene	ND	5.	1.6	ug/L	02/23/15	DD	SW8270D
N-Nitrosodimethylamine	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
N-Nitrosodiphenylamine	ND	5.6	2.1	ug/L	02/23/15	DD	SW8270D
Phenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
Pyrene	ND	5.6	1.9	ug/L	02/23/15	DD	SW8270D
Pyridine	ND	11	1.4	ug/L	02/23/15	DD	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	81			%	02/23/15	DD	19 - 122 %
% 2-Fluorobiphenyl	68			%	02/23/15	DD	30 - 115 %
% 2-Fluorophenol	39			%	02/23/15	DD	25 - 121 %
% Nitrobenzene-d5	59			%	02/23/15	DD	23 - 120 %
% Phenol-d5	44			%	02/23/15	DD	24 - 113 %
% Terphenyl-d14	82			%	02/23/15	DD	18 - 137 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	0.56	0.56	ug/L	02/22/15	DD	SW8270D (SIM)
Acenaphthylene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)
Benz(a)anthracene	0.02	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.1	1.1	ug/L	02/22/15	DD	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.44	0.44	ug/L	02/22/15	DD	SW8270D (SIM)

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: MW3

Phoenix I.D.: BH75406

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Hexachloroethane	ND	0.56	0.56	ug/L	02/22/15	DD	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)	
Nitrobenzene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)	
Pentachloronitrobenzene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)	
Pentachlorophenol	ND	0.89	0.89	ug/L	02/22/15	DD	SW8270D (SIM)	
Phenanthrene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	113			%	02/22/15	DD	15 - 110 %	3
% 2-Fluorobiphenyl	82			%	02/22/15	DD	30 - 115 %	
% 2-Fluorophenol	61			%	02/22/15	DD	15 - 110 %	
% Nitrobenzene-d5	87			%	02/22/15	DD	23 - 120 %	
% Phenol-d5	78			%	02/22/15	DD	15 - 110 %	
% Terphenyl-d14	122			%	02/22/15	DD	18 - 137 %	

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.
3 = This parameter exceeds laboratory specified limits.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Pesticide Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 26, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 26, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/18/15	0:00
Location Code:	EBC	Received by:	LB	02/19/15	16:24
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH75404
Phoenix ID: BH75407

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloropropene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,3-Trichloropropane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND	1.0	0.50	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromoethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloroethane	ND	0.60	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloropropane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichloropropane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2,2-Dichloropropane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Chlorotoluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Hexanone	ND	2.5	2.5	ug/L	02/20/15	MH	SW8260C	
2-Isopropyltoluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	1
4-Chlorotoluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	02/20/15	MH	SW8260C	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: TRIP BLANK

Phoenix I.D.: BH75407

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Acetone	ND	5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrolein	ND	5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrylonitrile	ND	5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Benzene	ND	0.70	0.25	ug/L	02/20/15	MH	SW8260C	
Bromobenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromochloromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromodichloromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromoform	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromomethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon Disulfide	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon tetrachloride	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chlorobenzene	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroform	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloromethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromochloromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromomethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Ethylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Hexachlorobutadiene	ND	0.5	0.20	ug/L	02/20/15	MH	SW8260C	B
Isopropylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
m&p-Xylene	ND	1.0	0.50	ug/L	02/20/15	MH	SW8260C	
Methyl ethyl ketone	ND	2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Methylene chloride	ND	3.0	0.25	ug/L	02/20/15	MH	SW8260C	
Naphthalene	ND	1.0	1.0	ug/L	02/20/15	MH	SW8260C	
n-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
n-Propylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
o-Xylene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
p-Isopropyltoluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
sec-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Styrene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
tert-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrachloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	02/20/15	MH	SW8260C	1
Toluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Trichloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Vinyl chloride	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	98			%	02/20/15	MH	70 - 121 %	
% Bromofluorobenzene	92			%	02/20/15	MH	59 - 113 %	
% Dibromofluoromethane	91			%	02/20/15	MH	70 - 130 %	

Project ID: 4202 18TH AVE., BROOKLYN

Client ID: TRIP BLANK

Phoenix I.D.: BH75407

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
% Toluene-d8	99			%	02/20/15	MH	84 - 138 %

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level LOD=Limit of Detection MDL=Method Detection Limit

Comments:

TRIP BLANK INCLUDED

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Phyllis Shiller, Laboratory Director

February 26, 2015

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 26, 2015

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		02/18/15	0:00
Location Code:	EBC	Received by:	LB	02/19/15	16:24
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBH75404
Phoenix ID: BH75408

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: DUPLIACATE

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
Silver (Dissolved)	< 0.005	N	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Aluminum (Dissolved)	0.151		0.011	0.005	mg/L	02/25/15	LK	SW6010C/E200.
Arsenic, (Dissolved)	< 0.003		0.003	0.004	mg/L	02/25/15	LK	SW6010C
Barium (Dissolved)	0.059		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Beryllium (Dissolved)	< 0.001		0.001	0.001	mg/L	02/25/15	LK	SW6010C/E200.
Calcium (Dissolved)	20.1		0.01	0.01	mg/L	02/25/15	LK	SW6010C/E200.
Cadmium (Dissolved)	< 0.004		0.004	0.0005	mg/L	02/25/15	LK	SW6010C
Cobalt, (Dissolved)	0.002	B	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Chromium (Dissolved)	0.001		0.001	0.001	mg/L	02/25/15	LK	SW6010C/E200.
Copper, (Dissolved)	0.003	B*	0.005	0.001	mg/L	02/25/15	LK	SW6010C
Iron, (Dissolved)	0.29		0.01	0.01	mg/L	02/25/15	LK	SW6010C
Mercury (Dissolved)	< 0.0002		0.0002	0.00015	mg/L	02/23/15	RS	SW7470/E245.1
Potassium (Dissolved)	4.0		0.1	0.01	mg/L	02/25/15	LK	SW6010C/E200.
Magnesium (Dissolved)	24.8		0.01	0.01	mg/L	02/25/15	LK	SW6010C/E200.
Manganese, (Dissolved)	0.961		0.005	0.001	mg/L	02/25/15	LK	SW6010C
Sodium (Dissolved)	45.5		0.11	0.01	mg/L	02/25/15	LK	SW6010C/E200.
Nickel, (Dissolved)	0.020		0.004	0.001	mg/L	02/25/15	LK	SW6010C
Lead (Dissolved)	< 0.002		0.002	0.001	mg/L	02/25/15	LK	SW6010C/E200.
Antimony, (Dissolved)	< 0.003		0.003	0.003	mg/L	02/23/15	RS	SW7010
Selenium, (Dissolved)	< 0.004		0.004	0.002	mg/L	02/24/15	RS	SW7010
Thallium , (Dissolved)	< 0.0005		0.0005	0.0005	mg/L	02/23/15	RS	SW7010
Vanadium, (Dissolved)	< 0.011		0.011	0.001	mg/L	02/25/15	LK	SW6010C
Zinc, (Dissolved)	0.006	B	0.011	0.0012	mg/L	02/25/15	LK	SW6010C
Filtration	Completed					02/20/15	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					02/23/15	I/I	SW7470/245.1
PCB Extraction (2 Liter)	Completed					02/19/15	L	SW3510C
Extraction for Pest (2 Liter)	Completed					02/19/15	L	SW3510C
Semi-Volatile Extraction	Completed					02/19/15	E/D/K	SW3520C

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: DUPLIACATE

Phoenix I.D.: BH75408

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Dissolved Metals Preparation	Completed				02/20/15	AG	SW3005A	
Pesticides								
4,4' -DDD	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
4,4' -DDE	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
4,4' -DDT	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
a-BHC	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
a-chlordane	ND	0.054	0.054	ug/L	02/20/15	CE	SW8081B	
Alachlor	ND	0.41	0.41	ug/L	02/20/15	CE	SW8081B	1
Aldrin	ND	0.008	0.008	ug/L	02/20/15	CE	SW8081B	
b-BHC	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
Chlordane	ND	0.27	0.27	ug/L	02/20/15	CE	SW8081B	
d-BHC	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
Dieldrin	ND	0.008	0.008	ug/L	02/20/15	CE	SW8081B	
Endosulfan I	ND	0.054	0.054	ug/L	02/20/15	CE	SW8081B	
Endosulfan II	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
Endosulfan Sulfate	ND	0.054	0.054	ug/L	02/20/15	CE	SW8081B	
Endrin	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
Endrin Aldehyde	ND	0.054	0.054	ug/L	02/20/15	CE	SW8081B	
Endrin ketone	ND	0.054	0.054	ug/L	02/20/15	CE	SW8081B	
g-BHC (Lindane)	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
g-chlordane	ND	0.054	0.054	ug/L	02/20/15	CE	SW8081B	
Heptachlor	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
Heptachlor epoxide	ND	0.027	0.027	ug/L	02/20/15	CE	SW8081B	
Methoxychlor	ND	0.54	0.54	ug/L	02/20/15	CE	SW8081B	
Toxaphene	ND	1.4	1.4	ug/L	02/20/15	CE	SW8081B	
QA/QC Surrogates								
%DCBP (Surrogate Rec)	Diluted Out			%	02/20/15	CE	SW8081B	
%TCMX (Surrogate Rec)	Diluted Out			%	02/20/15	CE	SW8081B	
Polychlorinated Biphenyls								
PCB-1016	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1221	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1232	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1242	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1248	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1254	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1260	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1262	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
PCB-1268	ND	0.054	0.054	ug/L	02/20/15	AW	E608/SW8082A	
QA/QC Surrogates								
% DCBP	46			%	02/20/15	AW	30 - 150 %	
% TCMX	55			%	02/20/15	AW	30 - 150 %	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloroethane	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: DUPLIACATE

Phoenix I.D.: BH75408

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
1,1-Dichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,1-Dichloropropene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,3-Trichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,3-Trichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	B
1,2,4-Trimethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND		1.0	0.50	ug/L	02/20/15	MH	SW8260C	
1,2-Dibromoethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloroethane	ND		0.60	0.25	ug/L	02/20/15	MH	SW8260C	
1,2-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3,5-Trimethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,3-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2,2-Dichloropropane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Chlorotoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
2-Hexanone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
2-Isopropyltoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	1
4-Chlorotoluene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
4-Methyl-2-pentanone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Acetone	4.4	JS	5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrolein	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Acrylonitrile	ND		5.0	2.5	ug/L	02/20/15	MH	SW8260C	
Benzene	ND		0.70	0.25	ug/L	02/20/15	MH	SW8260C	
Bromobenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromochloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromodichloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromoform	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Bromomethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon Disulfide	0.47	J	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Carbon tetrachloride	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chlorobenzene	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloroform	0.50	J	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
Chloromethane	ND		5.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
cis-1,3-Dichloropropene	ND		0.40	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromochloromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dibromomethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Dichlorodifluoromethane	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Ethylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Hexachlorobutadiene	ND		0.5	0.20	ug/L	02/20/15	MH	SW8260C	B
Isopropylbenzene	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
m&p-Xylene	ND		1.0	0.50	ug/L	02/20/15	MH	SW8260C	
Methyl ethyl ketone	ND		2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND		1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Methylene chloride	ND		3.0	0.25	ug/L	02/20/15	MH	SW8260C	
Naphthalene	ND		1.0	1.0	ug/L	02/20/15	MH	SW8260C	

Project ID: 4202 18TH AVE., BROOKLYN
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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
n-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
n-Propylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
o-Xylene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
p-Isopropyltoluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
sec-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Styrene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
tert-Butylbenzene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrachloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	02/20/15	MH	SW8260C	1
Toluene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	02/20/15	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	02/20/15	MH	SW8260C	
Trichloroethene	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
Vinyl chloride	ND	1.0	0.25	ug/L	02/20/15	MH	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	100			%	02/20/15	MH	70 - 121 %	
% Bromofluorobenzene	97			%	02/20/15	MH	59 - 113 %	
% Dibromofluoromethane	95			%	02/20/15	MH	70 - 130 %	
% Toluene-d8	99			%	02/20/15	MH	84 - 138 %	

Semivolatiles

1,2,4-Trichlorobenzene	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
1,2-Dichlorobenzene	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
1,2-Diphenylhydrazine	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
1,3-Dichlorobenzene	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
1,4-Dichlorobenzene	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
2,4,5-Trichlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4,6-Trichlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dichlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dimethylphenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dinitrophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2,4-Dinitrotoluene	ND	5.	2.2	ug/L	02/23/15	DD	SW8270D
2,6-Dinitrotoluene	ND	5.	1.8	ug/L	02/23/15	DD	SW8270D
2-Chloronaphthalene	ND	5.6	1.6	ug/L	02/23/15	DD	SW8270D
2-Chlorophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2-Methylnaphthalene	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
2-Methylphenol (o-cresol)	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
2-Nitroaniline	ND	5.	5.6	ug/L	02/23/15	DD	SW8270D
2-Nitrophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
3,3'-Dichlorobenzidine	ND	5.	2.6	ug/L	02/23/15	DD	SW8270D
3-Nitroaniline	ND	5.	5.6	ug/L	02/23/15	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
4-Bromophenyl phenyl ether	ND	5.6	1.6	ug/L	02/23/15	DD	SW8270D
4-Chloro-3-methylphenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
4-Chloroaniline	ND	3.9	2.6	ug/L	02/23/15	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	5.6	1.9	ug/L	02/23/15	DD	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference
4-Nitroaniline	ND	5.	1.9	ug/L	02/23/15	DD	SW8270D
4-Nitrophenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
Acenaphthene	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
Acetophenone	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
Aniline	ND	3.9	5.6	ug/L	02/23/15	DD	SW8270D
Anthracene	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Benzidine	ND	5.0	3.3	ug/L	02/23/15	DD	SW8270D
Benzoic acid	ND	28	11	ug/L	02/23/15	DD	SW8270D
Benzyl butyl phthalate	ND	5.6	1.4	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	5.	1.5	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroethyl)ether	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.6	1.5	ug/L	02/23/15	DD	SW8270D
Carbazole	ND	28	4.2	ug/L	02/23/15	DD	SW8270D
Dibenzofuran	ND	5.	1.6	ug/L	02/23/15	DD	SW8270D
Diethyl phthalate	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Dimethylphthalate	ND	5.6	1.7	ug/L	02/23/15	DD	SW8270D
Di-n-butylphthalate	ND	5.6	1.5	ug/L	02/23/15	DD	SW8270D
Di-n-octylphthalate	ND	5.6	1.4	ug/L	02/23/15	DD	SW8270D
Fluoranthene	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Fluorene	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
Hexachlorocyclopentadiene	ND	5.	1.7	ug/L	02/23/15	DD	SW8270D
Isophorone	ND	5.6	1.6	ug/L	02/23/15	DD	SW8270D
Naphthalene	ND	5.	1.6	ug/L	02/23/15	DD	SW8270D
N-Nitrosodimethylamine	ND	1.1	1.1	ug/L	02/23/15	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	5.6	1.8	ug/L	02/23/15	DD	SW8270D
N-Nitrosodiphenylamine	ND	5.6	2.1	ug/L	02/23/15	DD	SW8270D
Phenol	ND	1.	1.	ug/L	02/23/15	DD	SW8270D
Pyrene	ND	5.6	1.9	ug/L	02/23/15	DD	SW8270D
Pyridine	ND	11	1.4	ug/L	02/23/15	DD	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	82			%	02/23/15	DD	19 - 122 %
% 2-Fluorobiphenyl	72			%	02/23/15	DD	30 - 115 %
% 2-Fluorophenol	43			%	02/23/15	DD	25 - 121 %
% Nitrobenzene-d5	65			%	02/23/15	DD	23 - 120 %
% Phenol-d5	49			%	02/23/15	DD	24 - 113 %
% Terphenyl-d14	81			%	02/23/15	DD	18 - 137 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	0.56	0.56	ug/L	02/22/15	DD	SW8270D (SIM)
Acenaphthylene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)
Benz(a)anthracene	0.14	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(a)pyrene	0.13	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(b)fluoranthene	0.18	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(ghi)perylene	0.09	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Benzo(k)fluoranthene	0.07	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	ND	1.1	1.1	ug/L	02/22/15	DD	SW8270D (SIM)
Chrysene	0.13	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.44	0.44	ug/L	02/22/15	DD	SW8270D (SIM)

Project ID: 4202 18TH AVE., BROOKLYN
Client ID: DUPLIACATE

Phoenix I.D.: BH75408

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Date/Time	By	Reference	
Hexachloroethane	ND	0.56	0.56	ug/L	02/22/15	DD	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	0.07	0.02	0.02	ug/L	02/22/15	DD	SW8270D (SIM)	
Nitrobenzene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)	
Pentachloronitrobenzene	ND	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)	
Pentachlorophenol	ND	0.89	0.89	ug/L	02/22/15	DD	SW8270D (SIM)	
Phenanthrene	0.31	0.11	0.11	ug/L	02/22/15	DD	SW8270D (SIM)	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	111			%	02/22/15	DD	15 - 110 %	3
% 2-Fluorobiphenyl	81			%	02/22/15	DD	30 - 115 %	
% 2-Fluorophenol	68			%	02/22/15	DD	15 - 110 %	
% Nitrobenzene-d5	102			%	02/22/15	DD	23 - 120 %	
% Phenol-d5	85			%	02/22/15	DD	15 - 110 %	
% Terphenyl-d14	108			%	02/22/15	DD	18 - 137 %	

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.
3 = This parameter exceeds laboratory specified limits.
B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Pesticide Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 26, 2015
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Sample Criteria Exceedences Report

GBH75404 - EBC

Criteria: NY: GW

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BH75404	$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.0006	0.0006	ug/L
BH75404	$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75404	$8260DP25R	1,2,4-Trimethylbenzene	NY / TOGS - Water Quality / GA Criteria	8.8	1.0	5	5	ug/L
BH75404	$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75404	$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Bis(2-ethylhexyl)phthalate	NY / TOGS - Water Quality / GA Criteria	5.2	1.0	5	5	ug/L
BH75404	$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002	ug/L
BH75404	$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75404	$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.27	0.06	0.06	ug/L
BH75404	D-AL	Aluminum (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.102	0.011	0.1	0.1	mg/L
BH75404	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	68.9	1.1	20	20	mg/L
BH75405	$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.0006	0.0006	ug/L
BH75405	$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75405	$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75405	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.04	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.04	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.05	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.03	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.04	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.05	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75405	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.04	0.02	0.002	0.002	ug/L
BH75405	$DPPEST_GA	4,4' -DDE	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Heptachlor	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Dieldrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.015	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Heptachlor epoxide	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Aldrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.015	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Endrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	4,4' -DDT	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Chlordane	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.50	0.1	0.1	ug/L

Sample Criteria Exceedences Report

GBH75404 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BH75405	$DPPEST_GA	4,4' -DDD	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Heptachlor epoxide	NY / TOGS - Water Quality / GA Criteria	ND	0.050	0.03	0.03	ug/L
BH75405	$DPPEST_GA	Heptachlor	NY / TOGS - Water Quality / GA Criteria	ND	0.050	0.04	0.04	ug/L
BH75405	$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	2.5	0.06	0.06	ug/L
BH75405	$DPPEST_GA	Dieldrin	NY / TOGS - Water Quality / GA Criteria	ND	0.015	0.004	0.004	ug/L
BH75405	$DPPEST_GA	d-BHC	NY / TOGS - Water Quality / GA Criteria	ND	0.050	0.04	0.04	ug/L
BH75405	$DPPEST_GA	b-BHC	NY / TOGS - Water Quality / GA Criteria	ND	0.050	0.04	0.04	ug/L
BH75405	$DPPEST_GA	a-BHC	NY / TOGS - Water Quality / GA Criteria	ND	0.050	0.01	0.01	ug/L
BH75405	$DPPEST_GA	Chlordane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.05	0.05	ug/L
BH75405	D-AL	Aluminum (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.273	0.011	0.1	0.1	mg/L
BH75405	DFE-WMDP	Iron, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.53	0.01	0.3	0.3	mg/L
BH75405	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	26.0	0.11	20	20	mg/L
BH75406	$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.0006	0.0006	ug/L
BH75406	$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75406	$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75406	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.02	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.02	0.02	0.002	0.002	ug/L
BH75406	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
BH75406	$DPPEST_GA	Heptachlor epoxide	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.020	0.01	0.01	ug/L
BH75406	$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.27	0.06	0.06	ug/L
BH75406	D-AL	Aluminum (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.351	0.011	0.1	0.1	mg/L
BH75406	DFE-WMDP	Iron, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.88	0.01	0.3	0.3	mg/L
BH75406	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	1.50	0.005	0.3	0.3	mg/L
BH75406	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	46.7	0.11	20	20	mg/L
BH75407	$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.0006	0.0006	ug/L
BH75407	$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75407	$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75408	$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.0006	0.0006	ug/L
BH75408	$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75408	$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	1.0	0.04	0.04	ug/L
BH75408	$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.13	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.14	0.02	0.002	0.002	ug/L

Sample Criteria Exceedences Report

GBH75404 - EBC

Criteria: NY: GW
State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BH75408	$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.13	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.18	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.07	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.07	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.18	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.14	0.02	0.002	0.002	ug/L
BH75408	$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.13	0.02	0.002	0.002	ug/L
BH75408	$DPPEST_GA	Endrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	4,4' -DDD	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	Heptachlor	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	Heptachlor epoxide	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	Chlordane	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.27	0.1	0.1	ug/L
BH75408	$DPPEST_GA	4,4' -DDE	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	4,4' -DDT	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	Chlordane	NY / TOGS - Water Quality / GA Criteria	ND	0.27	0.05	0.05	ug/L
BH75408	$DPPEST_GA	Dieldrin	NY / TOGS - Water Quality / GA Criteria	ND	0.008	0.004	0.004	ug/L
BH75408	$DPPEST_GA	a-BHC	NY / TOGS - Water Quality / GA Criteria	ND	0.027	0.01	0.01	ug/L
BH75408	$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	1.4	0.06	0.06	ug/L
BH75408	D-AL	Aluminum (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.151	0.011	0.1	0.1	mg/L
BH75408	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.961	0.005	0.3	0.3	mg/L
BH75408	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	45.5	0.11	20	20	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY Temperature Narration

February 26, 2015

SDG I.D.: GBH75404

The samples in this delivery group were received at 4°C.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes [x] No [ ]
Coolant: IPK [x] ICE [ ] No [ ]
Temp 4 °C Pg 1 of 1

PHOENIX Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Fax:
[ ] Phone:
[x] Email: file

Customer: EBC
Address: 1808 Middle Country Rd
Ridge NY

Project: 4202 18th Ave Brooklyn NY
Report to:
Invoice to:

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOC 8260	SVOC 8270	Pest PCB	TAL metals	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [x] HCl	GL Amber 1000ml [x] As is [ ] H2SO4	PL As is [x] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
75404	mw1	gw	2.18	1000	x	x	x	x				3	3	1				
75405	mw2	↓	↓	1100	x	x	x	x				3	3	1				
75406	mw3	↓	↓	1200	x	x	x	x				3	3	1				
75407	gw trip blank				x							3						
75408	gw Duplicate	gw	2.18		x	x	x	x				3	3	1				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	2-19-15	13:20
	[signature]	2-19-15	16:24

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[x] 5 Days
[ ] 10 Days
[ ] Other
* SURCHARGE APPLIES

NJ
[ ] Res. Criteria
[ ] Non-Res. Criteria
[ ] Impact to GW Soil Cleanup Criteria
[ ] GW Criteria

NY
[x] TAGM 4046 GW
[ ] TAGM 4046 SOIL
[ ] NY375 Unrestricted Use Soil
[ ] NY375 Residential Soil
[ ] Restricted/Residential
[ ] Commercial
[ ] Industrial

Data Format
[ ] Phoenix Std Report
[x] Excel
[x] PDF
[ ] GIS/Key
[x] EQuIS
[ ] NJ Hazsite EDD
[x] NY EZ EDD (ASP)
[ ] Other _____

Data Package
[ ] NJ Reduced Deliv. *
[x] NY Enhanced (ASP B) *
[ ] Other

State where samples were collected: NY

GBH 75404

Shannon - Phoenixlabs

From: Kevin Waters [KWATERS@EBCINCNY.COM]
Sent: Friday, February 20, 2015 01:40 PM
To: Shannon - Phoenixlabs
Cc: Kevin Brussee
Subject: Re: 4202 18TH AVE BROOKLYN

Sorry. Yes dissolved.

Kevin Waters
Field Operations Manager
Environmental Business Consultants
Cell (516)-287-9023

On Feb 20, 2015, at 1:09 PM, Shannon - Phoenixlabs <shannon@phoenixlabs.com> wrote:

> We picked up groundwater samples yesterday and on the TAL Metals I need to know if you want total or Dissolved. It looks like you sent unpreserved bottles. Please let me know. Thank you.
>
> Shannon Wilhelm
> Phoenix Environmental Labs