



SoundEarth Strategies, Inc.  
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*DRAFT - Privileged and Confidential Attorney-Client Work Product*

February 17, 2012

Mr. Scott Koppelman  
AMLI Residential Partners  
535 Pontius Avenue North, Suite 120  
Seattle, Washington 98109

**SUBJECT: PHASE II ENVIRONMENTAL SITE ASSESSMENT**  
**Wallingford Property**  
**3400 Wallingford Avenue North**  
**Seattle, Washington**  
**Job Number: 0789-004-02**

Dear Mr. Koppelman:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this letter report to present the results of the Phase II Environmental Site Assessment (ESA) for the Wallingford property, located at 3400 Wallingford Avenue North in Seattle, Washington (the Property). The Property is a 2.04-acre property spanning portions of two city blocks on the north and south sides of 34<sup>th</sup> Avenue North. The Property location is shown on Figures 1 and 2.

The purpose of the subsurface assessment was to evaluate the potential for subsurface environmental impacts that may have resulted from recognized environmental conditions identified in SoundEarth's Phase I ESA for the Property, as discussed below.

The Phase II subsurface assessment was conducted in general accordance with the *Revised Proposal for Limited ACM Survey and Phase II ESA, Wallingford Property, 3400 Wallingford Avenue North, Seattle, Washington*, prepared by SoundEarth and dated January 4, 2011. This letter report presents a brief discussion of the Property history, the field activities and results of the Phase II ESA, and SoundEarth's conclusions regarding the nature and extent of soil and groundwater impacts beneath the Property. The results of the Limited Asbestos-Containing Material Survey will be presented in a separate report.

## **BACKGROUND**

Based on information reviewed as part of the Phase I ESA, it appears that the Property was initially developed in the early 1900s with four single-family residences. A two-story factory was constructed on the northern portion of the Property in 1912. The factory building was occupied by Grandma's Cookies in the 1930s. Two furniture workshop buildings were constructed on the southern portion of the Property in the 1930s and a single-story warehouse was constructed on the southern portion of the Property in 1965. Avtech Corporation occupied the 1912-vintage factory by 1973, and occupied all of the remaining structures by the 1980s. During the course of its operations, Avtech used numerous chlorinated solvents, non-halogenated solvents, petroleum hydrocarbons, paints, and various other

electrical engineering-related chemical compounds typically found in the avionics production process. A machine shop formerly occupied the northwest portion of Building 2, and a chromate plating room was situated in the basement boiler room of Building 2 from 1974 until it was moved to Building 4 in the 2000s. Numerous paint-spraying booths have operated in Buildings 2 and 3 from the 1950s until the present.

At least four underground storage tanks (USTs) were formerly located on the Property. These four USTs were reportedly removed from the Building 2 parking lot area between 1989 and 1995, and petroleum-contaminated soil (PCS) was reportedly encountered in the vicinity of a 500-gallon diesel UST and a 550-gallon gasoline UST (Figure 2). The PCS associated with a heating oil release was reportedly over-excavated; however, confirmation samples were apparently not collected or analyzed after overexcavation was completed. A subsurface investigation that was conducted adjacent to the former gasoline and diesel USTs located to the north of Building 2 indicated that PCS was also present in the vicinity of these tanks; however, the impacts were reportedly limited in extent.

Several single-family residences heated by oil-burning furnaces were historically located on parcels throughout the Property. With the exception of Building 1, the residences were demolished in the 1960s and 1970s. Information regarding the type (above- or belowground) and location of the tanks used to store the heating oil was not available in the public record.

A clandestine methamphetamine laboratory formerly operated in the basement of Building 1. The laboratory was raided by police in 1990 and may have been in operation for as long as 6 years before it was discovered by authorities. At the time of the raid, 10 gallons of diethyl ether was on the premises and the laboratory had an estimated production capacity of 100 pounds of methamphetamine per week. No reports documenting the extent of the cleanup efforts were available and no information regarding the environmental quality of soil and groundwater in the vicinity of the former methamphetamine lab was observed; however, the laboratory was deemed satisfactorily cleaned-up by the King County Public Health Department in 1991.

A coal gasification plant operated along the shore of Lake Union in close proximity to the Property from approximately 1907 until 1956. Air-fall from the plant was observed in photographs taken of the vicinity of the Property in the 1910s through the 1920s. The gasification process may have resulted in the deposition of carcinogenic polycyclic aromatic hydrocarbons, metals, and other chemicals associated with coal dust and partially combusted materials

Two air compressors are present at the Avtech facility. Compressor oil often contains polychlorinated biphenyls (PCBs).

## **PHASE II FIELD WORK**

SoundEarth conducted Phase II ESA field work in December 2001 and January 2012. Elements of the field work included a ground-penetrating radar (GPR) survey for abandoned USTs, a camera survey of accessible sewer lines, advancement of 13 direct-push soil borings and 10 hollow-stem auger borings, completion of five of the hollow-stem borings as monitoring wells, collection of representative soil and groundwater samples from the borings and wells, and measurements of groundwater elevations.

Prior to conducting the field activities, private and public utility locate services were used to identify the location of underground utilities. A more detailed discussion of field activities is presented below.

### **Ground Penetrating Radar Underground Storage Tank Survey**

A GPR survey for abandoned heating oil and fuel USTs was conducted for the Building 2 basement/boiler room, the eastern half of the Parcel 3 parking lot (reported former UST areas and possible residential heating oil tank) and eastern half of Parcel 2 (potential residential heating oil tank).

The survey was conducted by Underground Detection Services Inc. (UDS) on December 29, 2011. GPR uses high frequency radio waves to probe the subsurface to identify anomalies, including abandoned USTs, to a depth of approximately 10 feet. The survey was conducted using a GSSI Sir 3000 System GPR unit, as well as a Schonstedt GA-52 magnetic locator and a MetroTech 810 pipe locator. The survey was partitioned into seven survey areas (Areas 1 through 7, shown on Figure 2), with each area set on a 5-foot grid.

Two magnetic anomalies indicating potential heating oil USTs were identified in Area 6, located near the former residence on Parcel 2. The anomalies were approximately 4-feet square and identified at depths of approximately 4 feet (typical for heating oil tanks). The potential UST locations indicated by GPR anomalies are shown on Figure 2. No potential USTs were identified in the other areas surveyed. Less dense soils were identified in Area 5, indicating a potential previous excavation and backfill. The UDS GPR report is presented in Attachment A.

### **Sewer Line Survey**

On December 28, 2011, a camera survey was conducted by APS Locating Inc. for the sewer lines associated with chemical discharges at the Property. The purpose of the survey was to identify degraded sewer lines that could potentially release contaminants into the Property subsurface. Sewer lines were surveyed at the former chromate process room, the Building 2 paint spray booth, wave soldering area, Building 3 discharge, and Building 6 discharge. The following observations were noted:

- The sewer leading from the former chromate process room appeared intact; however, a potential hole was observed near the junction with the main beneath Burke Avenue.
- The Building 2 paint spray booth drain line was plugged at a depth of 12 inches. Another drain line located in a wooden-floored storage area to the east was also plugged.
- An array of sewer lines shown on City of Seattle sewer cards for the wave solder room in Building 2 do not appear to remain in place. The wave solder area was equipped with a storage tank and pump leading to a ceiling-hung line, apparently discharging to sewer lines on the west side of the building. A cleanout accessed in a west side storage room contained several successive 90-degree bends, and was therefore inaccessible to the camera line.
- The sewer discharge for Building 3 could not be traced completely to the building exterior. No line breaks were observed.
- No line breaks were observed in the Building 6 sewer cleanout.
- Sewer cleanouts or other convenient camera access points for Buildings 4 and 5 could not be located.

In summary, no sewer line breaks were observed on the Property. However, many of the lines were obstructed or contained numerous bends, restricting the reconnaissance. Several of the lines shown on City of Seattle sewer cards could not be located, including the array of lines mapped in the current wave solder area of Building 2.

### **Compressor Oil Sampling**

Two large air compressors are located at the facility. One sample of compressor oil was collected from each compressor and submitted to Friedman & Bruya, Inc. for analysis of PCBs by U.S. Environmental Protection Agency (EPA) Method 8082A. Neither sample contained detectable concentrations of PCBs.

### **Probe Drilling and Soil Sampling**

On January 4 and 5, 2012, ESN Northwest, Inc., under the direction of SoundEarth, advanced 13 direct-push probe borings (P01 through P13). To assess to potential impacts from past USTs and hazardous waste storage, borings P01 through P06 were advanced by a truck-mounted rig in the Building 2 parking lot to refusal (9 to 16 feet below ground surface [bgs]). Borings P07 and P08 were advanced in the Building 2 basement by hand probe to a depth of 2 feet below floor slab (to refusal). Borings P09 and P10 were advanced at Buildings 3 and 4 to a depth of 4 feet below grade (to refusal). Borings P11 through P13 were advanced at the former meth lab Building 1 by truck-mounted probe to a depth of 4 feet below grade (to evaluate near-surface spills and disposal).

Soil samples were collected continuously from the probe borings at 2- to 4-foot depth intervals and field-screened by a photoionization detector (PID) for the presence of volatile organic compounds indicative of petroleum or solvent releases. Soil types were logged by a SoundEarth geologist in accordance with the Unified Soil Classification System.

Based on boring locations, screening results, sampling depths, and observed soil characteristics, selected samples were submitted for chemical analysis, including the following:

- Gasoline-range petroleum hydrocarbons (GRPH) by Northwest Petroleum Hydrocarbon (NWTPH) Method NWTPH-Gx.
- Diesel- and oil-range petroleum hydrocarbons (DRPH and ORPH) by Method NWTPH-Dx.
- Volatile organic compounds (VOCs) by EPA Method 8260C or 8021B.
- Resource Conservation and Recovery Act (RCRA) 8 metals (arsenic, chromium, selenium, silver, cadmium, lead, barium, and mercury) by EPA Method 200.8 and Method 1631E.
- Cyanide by EPA Method SW846 9012m.
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D SIM.
- PCBs by EPA Method 8082A.

Samples were labeled, placed on ice in a cooler, and transported to Friedman & Bruya, Inc. under standard chain-of-custody protocols for laboratory analysis.



### **Hollow-stem Auger Drilling and Well Installation**

On January 10 through 13, 2012, Cascade Drilling, L.P., under the direction of SoundEarth, advanced nine hollow-stem auger borings (B01 through B09) for environmental and geotechnical purposes (GeoEngineers, Inc. also observed the drilling and is preparing a separate geotechnical evaluation of the Property). Borings B01 through B08 were advanced to depths of 25 to 40 feet at locations shown on Figure 2. The borings were located in areas of bulk waste storage, former USTs, and in areas generally downgradient of past manufacturing and chemical usage. Borings B09 and B10 were advanced to a depth of 15 feet for geotechnical purposes and to assess conditions at the suspected UST area identified by the GPR survey. Soil samples were collected at 2.5- to 5-foot depth intervals. Samples were labeled, placed on ice in a cooler, and transported to Friedman & Bruya, Inc. under standard chain-of-custody protocols for laboratory analysis (Tables 1 through 5).

Soil cuttings generated during the Phase II subsurface assessment were placed in a labeled 55-gallon drum.

Monitoring wells were installed in five of the hollow-stem auger borings as follows:

- MW01 was installed in Boring B01, which was completed near the hazardous waste storage area, and downgradient to the former meth lab. MW01 was screened at a depth of 25 to 35 feet.
- MW02 was installed in Boring B04, which was completed adjacent to the Building 5 and 6 sewer line. MW02 was screened at a depth of 15 to 25 feet.
- MW03 was installed in Boring B05, which was completed adjacent and downgradient to the former chromate process room. MW03 was screened at a depth of 25 to 35 feet.
- MW04 was installed in Boring B06, which was completed adjacent and downgradient to the Building 2 paint spray and wave solder area and former machine shops. MW04 was screened at a depth of 30 to 40 feet.
- MW05 was installed in Boring B07, which was completed downgradient to the Building 3 paint spray booths and assembly area. MW05 is located at the lowest elevation of the property, and presumed downgradient to the entire Avtech facility. MW05 was screened at a depth of 20 to 30 feet.

### **Groundwater Sampling**

The five wells were developed and purged using standard techniques. To evaluate purging efficiency, groundwater was monitored for pH, conductivity, turbidity, dissolved oxygen, and temperature. Following adequate well purging, the monitoring wells were sampled by bladder pump using dedicated tubing and low-flow techniques. Groundwater was not encountered in wells MW02 and MW03. Depth to groundwater ranged from 24.90 feet below the top of the well casing in MW05 to 36.70 feet in MW04.

Groundwater sampled from each wells was submitted for analysis of chlorinated solvents and other VOCs by EPA Method 8260C and for dissolved RCRA 8 metals (arsenic, chromium, selenium, silver,

cadmium, lead, mercury, and barium) by EPA Methods 200.8 and 1631E. Groundwater sampled from MW01 was also submitted for analysis of DRPH by Method NWTPH-Dx.

Samples were labeled, placed on ice in a cooler, and transported to Friedman & Bruya, Inc., under standard chain-of-custody protocols for laboratory analysis.

### **Groundwater Elevations**

Monitoring well elevations were surveyed to the top of the well casings (TOC) by laser-level to a reference datum identified as 100.00 feet on the MW01 TOC. Relative groundwater elevations ranged from 72.41 feet in MW01 to 46.25 feet in MW05, indicating a general groundwater flow direction to the southeast, following the general area topography, sloping downhill toward Lake Union. Groundwater elevations are summarized on Table 6 and Figure 3.

Due to dry conditions in MW02 and MW03, adequate triangulation was not achieved by the remaining three wells. Therefore, groundwater elevation contours are not depicted on Figure 3.

### **SUBSURFACE CONDITIONS AND ANALYTICAL RESULTS**

The Property is mapped as underlain by dense glacial till. The results of drilling confirm the presence of glacial till underlying the Property. Soil borings encountered minor amounts of fill and/or reworked native soils overlying very dense silty sand and sandy silt containing with variable gravels to the maximum depth of exploration (40.5 feet bgs). Wet soils were typically present at a depth of 30 feet. No petroleum odors or sheens were noted. PID readings from soil samples were generally less than 5 parts per million per volume (background soil levels), with most readings showing less than 1.0 parts per million by volume.

Copies of boring logs for borings B01 through B10 and P01 through P13 are presented in Attachment B. Geologic cross-sections of the Property are presented on Figures 4 and 5. Analytical results for soil and groundwater samples are presented and discussed below.

### **Soil Results**

Soil analytical results are summarized on Tables 1 through 5 and discussed below. The laboratory analytical reports are presented in Attachment C.

- **Metals and Cyanide.** A sample collected at a depth of 2 feet in boring P13 near Building 1 contained 296 milligrams per kilogram (mg/kg) lead, exceeding the Washington State Model Toxics Control Act (MTCA) Method A cleanup level of 250 mg/kg. A sample collected at 2 feet from nearby boring P12 contained 193 mg/kg lead. A sample collected at 2 feet from boring P07 in the chromate room contained 172 mg/kg lead. All other RCRA 8 metals were undetected or near natural background levels in the 14 samples submitted for analysis. Cyanide was not detected in samples collected in the former chromate process room or from the Building 4 sewer discharge area (P08 and P09).
- **VOCs.** A sample collected at a depth of 35 feet in boring B06 contained a concentration of 0.046 mg/kg trichloroethylene (TCE), exceeding the cleanup level of 0.03 mg/kg. A sample collected

from B06 at a depth of 20 feet contained no detectable TCE. VOCs were not detected in any of the other nine soil samples submitted for analysis.

- **GRPH and DRPH.** GRPH and DRPH were not detected in any of the 15 soil samples submitted for analysis.
- **PAHs.** A near-surface sample collected at a depth of 0 to 0.5 feet boring P10 in the unpaved area south of Building 4 contained 0.24 mg/kg benzo(a)pyrene, exceeding the MTCA Method A cleanup level of 0.1 mg/kg. A sample collected from P10 at 2 feet contained 0.015 mg/kg (below Method A). Benzo(a)pyrene was detected at a depth of 2 feet in P12 at a concentration of 0.13 mg/kg. Various other lower toxicity PAH compounds were detected in this sample. A sample collected near the floor drain in the former chromate contained no detectable PAHs.
- **PCBs.** No PCBs were detected in any of the three soil samples submitted for analysis.

### Groundwater Results

Groundwater analytical results are summarized on Table 6 and discussed below. The laboratory analytical reports are presented in Attachment C.

- **Dissolved Metals.** The groundwater sample collected from well MW04, located on the south side of Building 2, contained 18.60 micrograms per liter (µg/L) of dissolved chromium, which is below the MTCA Method A cleanup level of 50 µg/L. All other dissolved metals were either not detected or were detected at natural background levels.
- **VOCs.** The groundwater sample collected from well MW04 contained a concentration of 110 µg/L TCE. A field duplicate collected from MW04 contained 120 µg/L TCE. Both results exceed the Method A cleanup level of 5 µg/L. The groundwater sample collected from well MW05 located at the downgradient, southeast corner of the Property contained 3.3 µg/L TCE. No other VOCs were detected in the three groundwater samples submitted for analysis. The TCE groundwater concentrations and well locations are shown on Figure 6.
- **GRPH and DRPH.** GRPH and DRPH were not detected in any of the three groundwater samples submitted for analysis.

### CONCLUSIONS

The results of the subsurface investigation indicate that groundwater on the south side of Building 2 is impacted by TCE at a concentration approximately 20 times the MTCA Method A cleanup level. Soil collected from the same boring location contained a TCE concentration slightly exceeding MTCA. The TCE concentration in groundwater attenuates to a concentration below the MTCA Method A cleanup level at the downgradient corner of the Property. TCE was not detected in MW01, which is located upgradient of Building 2. Based on the inferred groundwater flow direction (southeast), the source area of the TCE is likely beneath the western half of Building 2. The lateral extent of TCE-impacted groundwater has not been defined.

A concentration of lead slightly exceeding the MTCA Method A cleanup level was detected in a near-surface soil sample collected near Building 1 (the former residence/meth lab). This may be the result of lead paint on the structure. Another sample collected near the Building 1 contained lead at a concentration below the cleanup level.

Concentrations of benzo(a)pyrene exceeding the MTCA Method A cleanup level were detected in a surface/near-surface soil sample collected in an unpaved area south of Building 4, and in a near-surface sample near Building 1. These detections could be the result of combustion material air-fall from the former coal gasification plant located nearby to the south.

## **LIMITATIONS**

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with AMLI Residential Partners. This report is solely for the use of AMLI Residential Partners unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Findings and conclusions contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others or the use of segregated portions of this report.

## **CLOSING**

SoundEarth appreciates this opportunity to provide AMLI Residential Partners with environmental consulting services. Please call either of the undersigned at (206) 306-1900 if you have any questions or comments regarding the content of this report

Respectfully,

**SoundEarth Strategies, Inc.**

**DRAFT**

Rob Roberts  
Associate Scientist

**DRAFT**

John R. Funderburk, MSPH  
Senior Principal

Attachments: Figure 1, Property Location Map  
Figure 2, Exploration Plan  
Figure 3, Groundwater Elevations (January 17, 2012)  
Figure 4, Geologic Cross Section A-A'  
Figure 5, Geologic Cross Section B-B'  
Figure 6, TCE Concentrations in Groundwater  
Table 1, Summary of Soil Analytical Results for Petroleum Hydrocarbons  
Table 2, Summary of Soil Analytical Results for RCRA Metals and Cyanide  
Table 3, Summary of Soil Analytical Results for VOCs  
Table 4, Summary of Soil Analytical Results for PCBs  
Table 5, Summary of Soil Analytical Results for PAHs  
Table 6, Summary of Groundwater Data  
A, GPR Report, Underground Detection Services Inc., January 10, 2011

B, Boring Logs

C, Laboratory Analytical Reports

*Friedman & Bruya, Inc. # 201018*

*Friedman & Bruya, Inc. # 201034 and additional*

*Friedman & Bruya, Inc. # 201188*

*Friedman & Bruya, Inc. # 201123*

*Friedman & Bruya, Inc. # 201167*

*Friedman & Bruya, Inc. # 201168*

*Friedman & Bruya, Inc. # 201148 and additional*

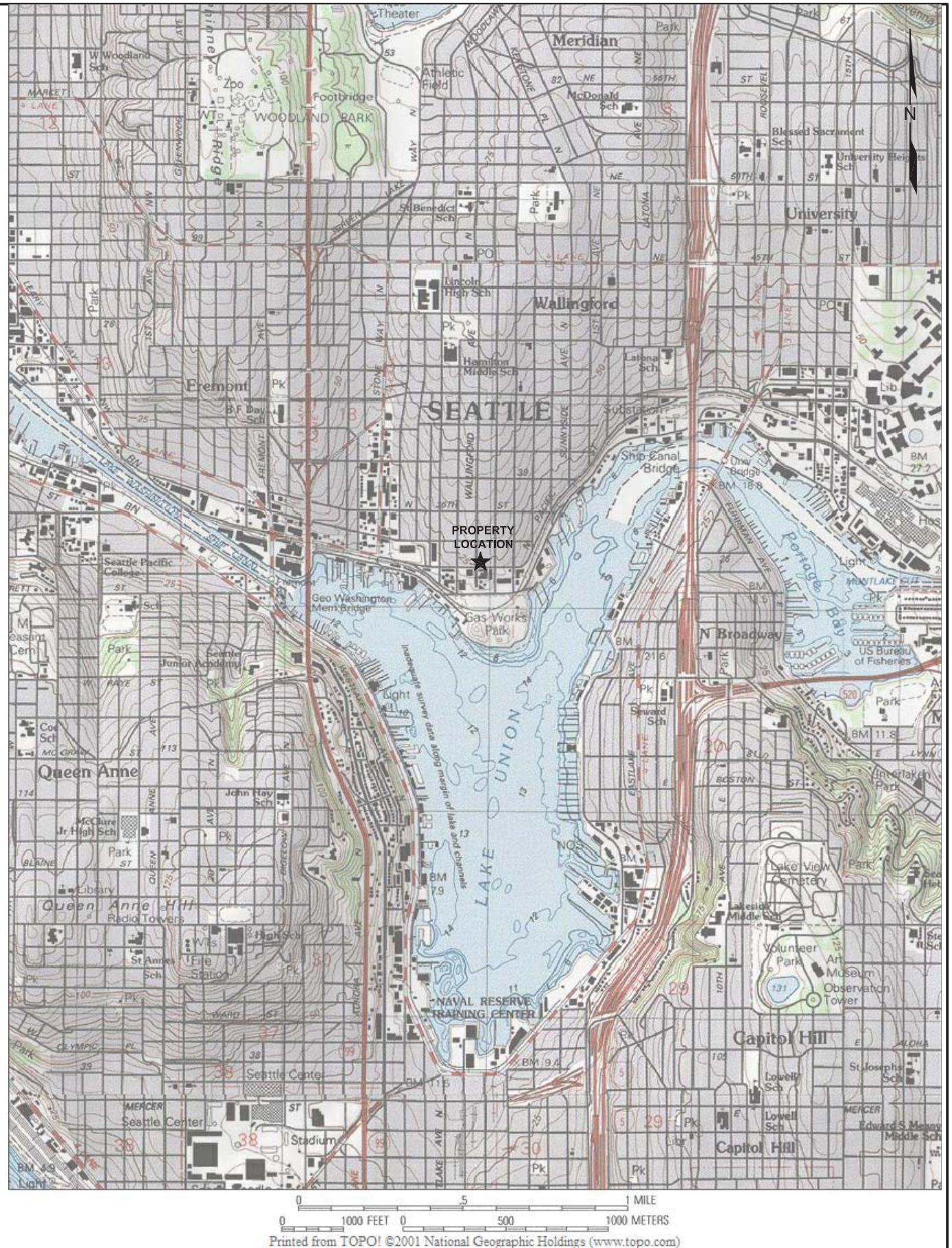
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## **FIGURES**



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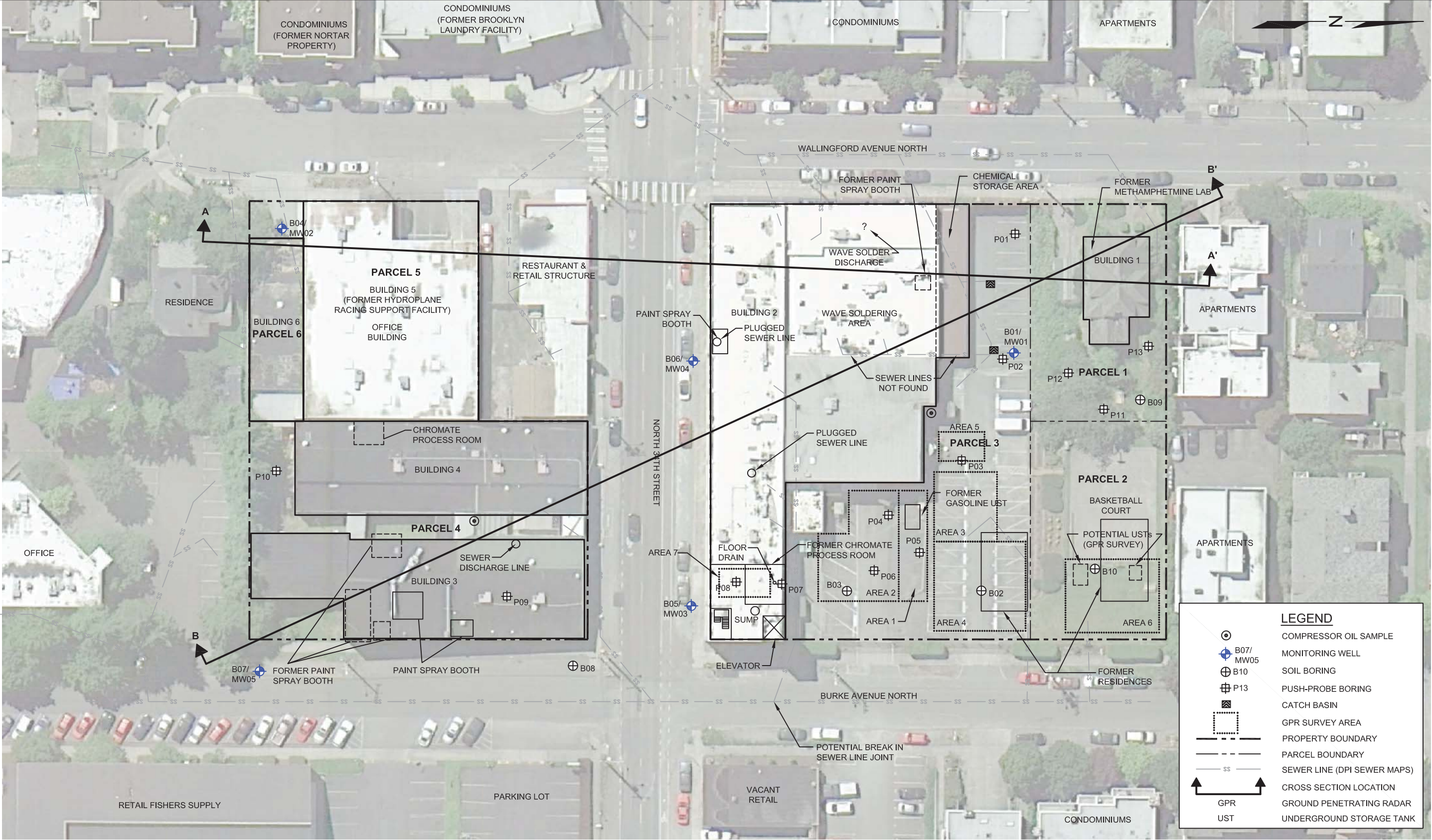
P:\0789 AMLI RESIDENTIAL\0789-004 AMLI\AVTECH\TECHNICAL\GRAPHICS\FIGURE 1\0789-004 FIG1.DWG





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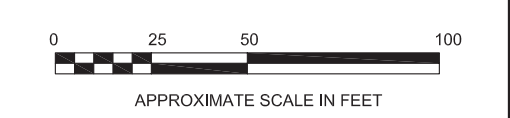
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**SoundEarth**  
Strategies  
WWW.SOUNDEARTHINC.COM

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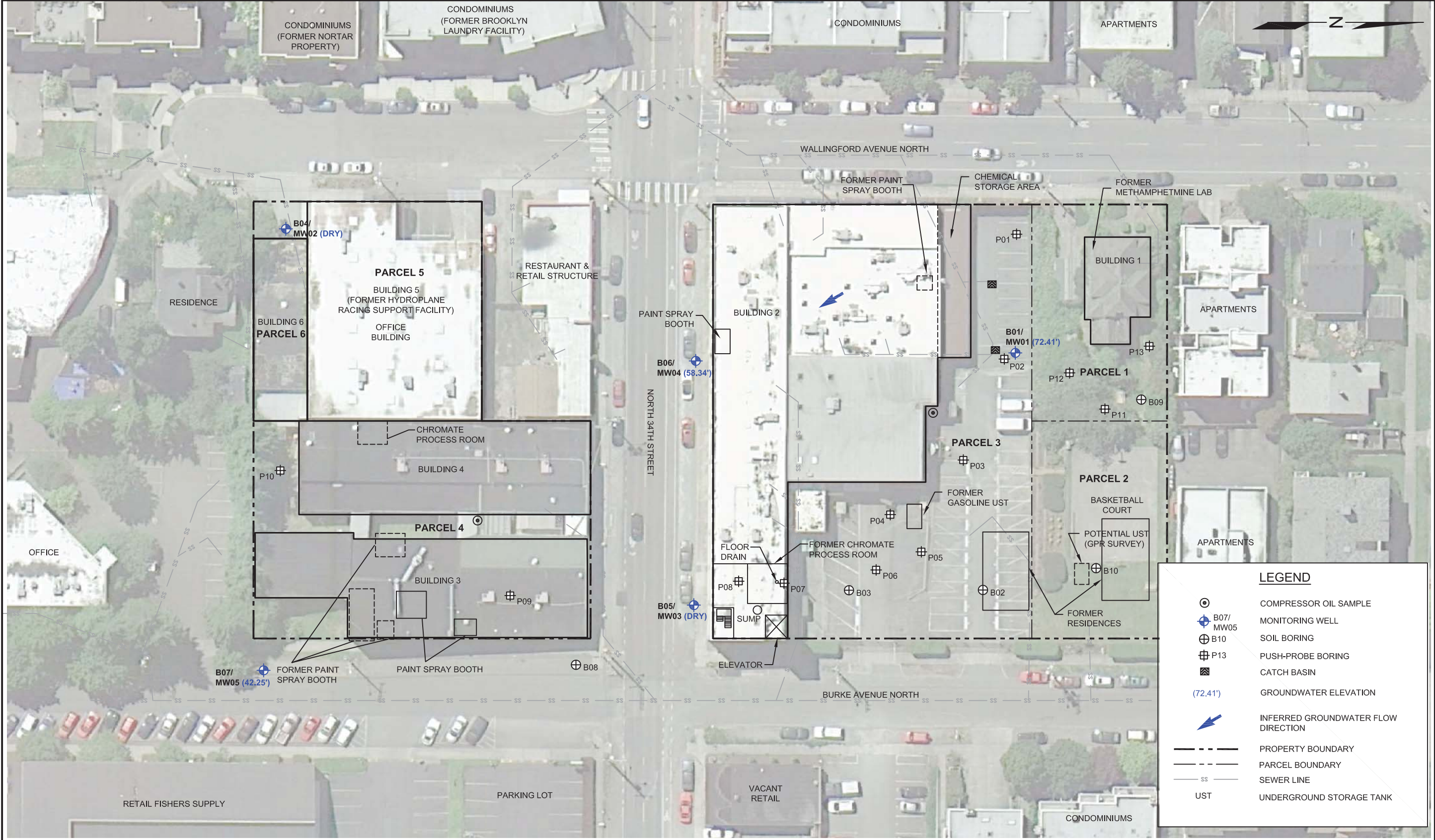
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PROJECT NUMBER: 0789-004-02  
STREET ADDRESS: 3400 WALLINGFORD AVENUE NORTH  
CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 2**  
EXPLORATION LOCATION PLAN



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CITY, STATE: SEATTLE, WASHINGTON

REGION:

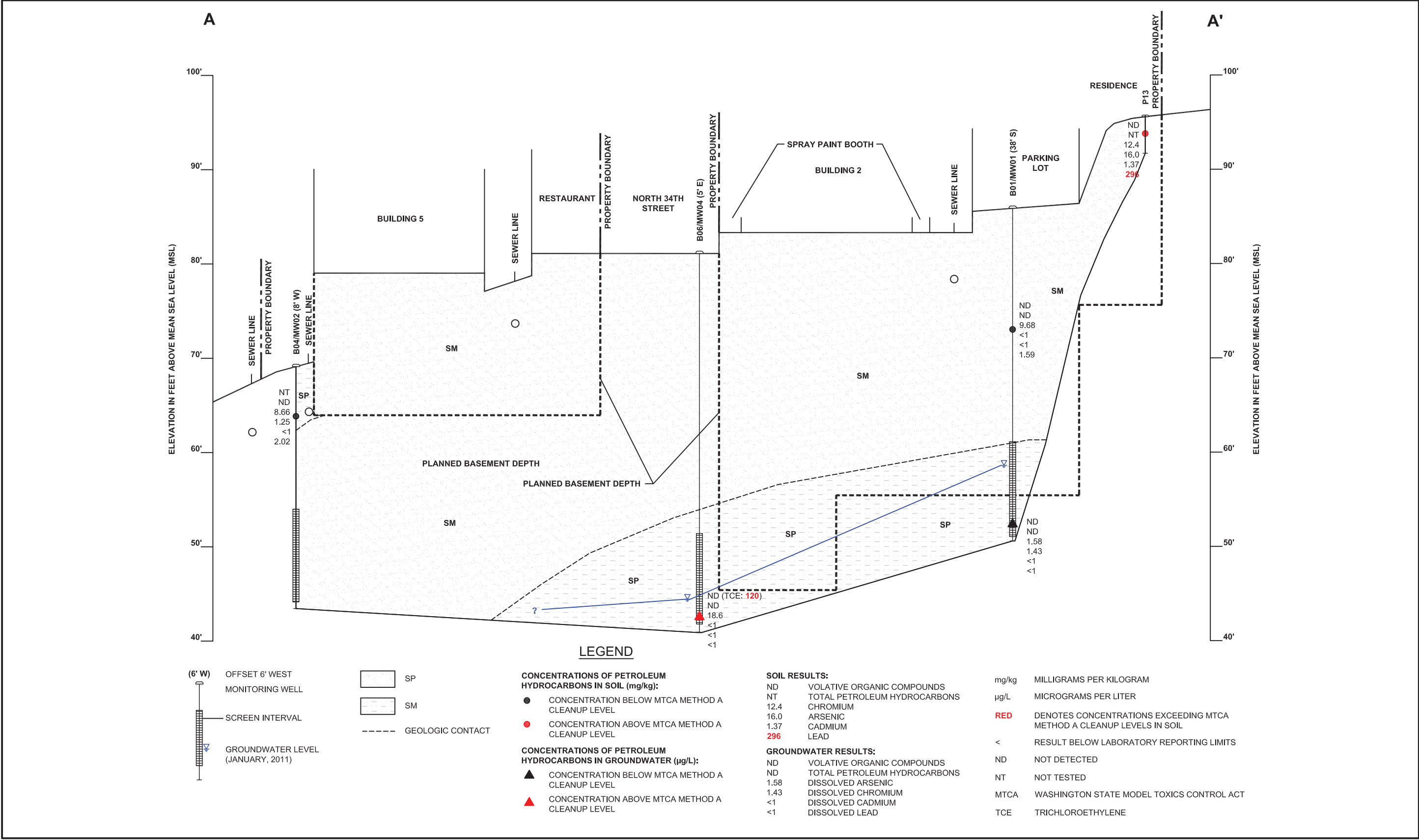


0 25 50 100  
APPROXIMATE SCALE IN FEET

**FIGURE 3**  
GROUNDWATER ELEVATIONS  
(JANUARY 17, 2012)



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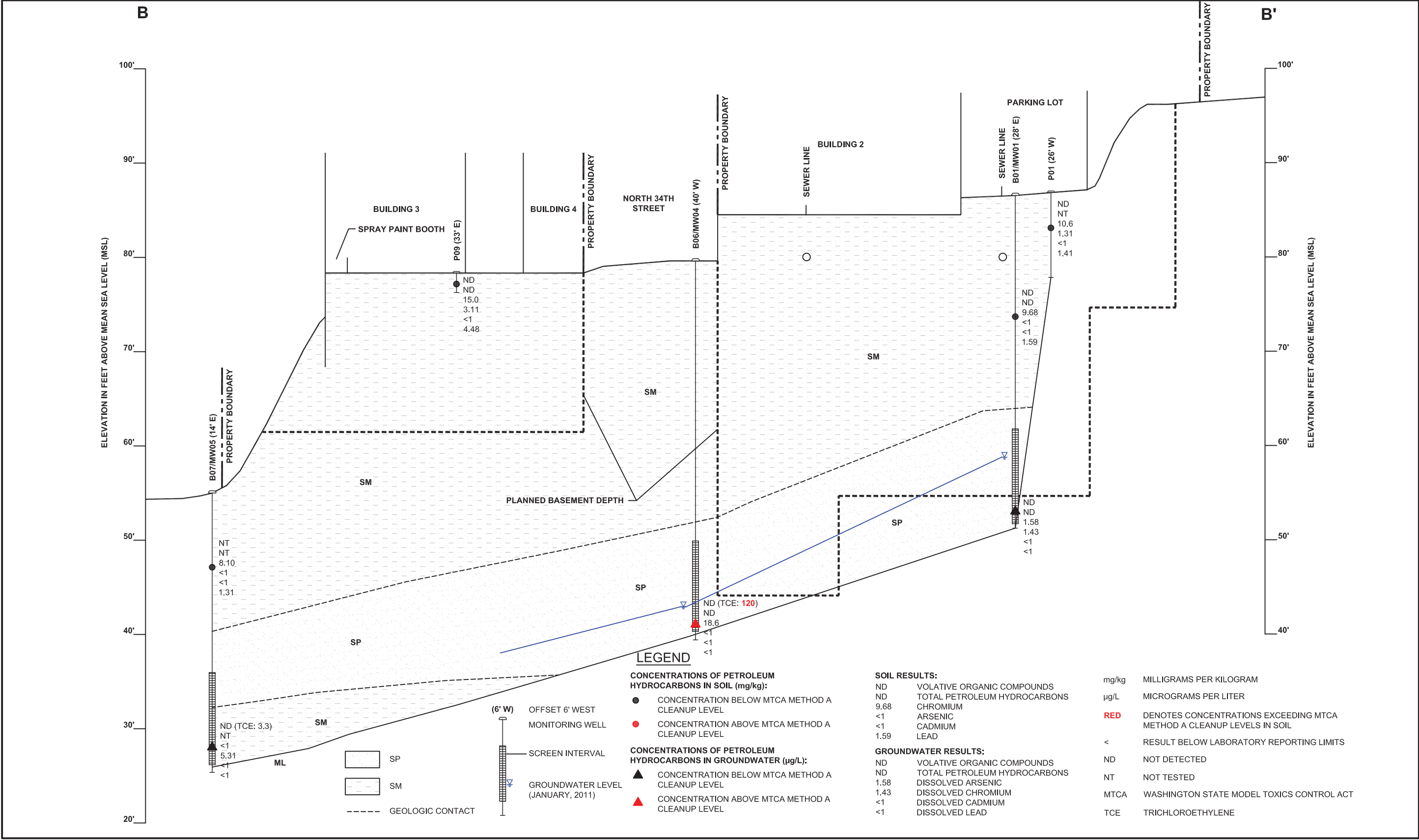
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STREET ADDRESS: 3400 WALLINGFORD AVENUE NORTH  
CITY, STATE: SEATTLE, WASHINGTON

REGION:

0 25 50 100  
APPROXIMATE HORIZONTAL SCALE IN FEET

**FIGURE 4**  
CROSS SECTION A-A'

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CITY, STATE: SEATTLE, WASHINGTON

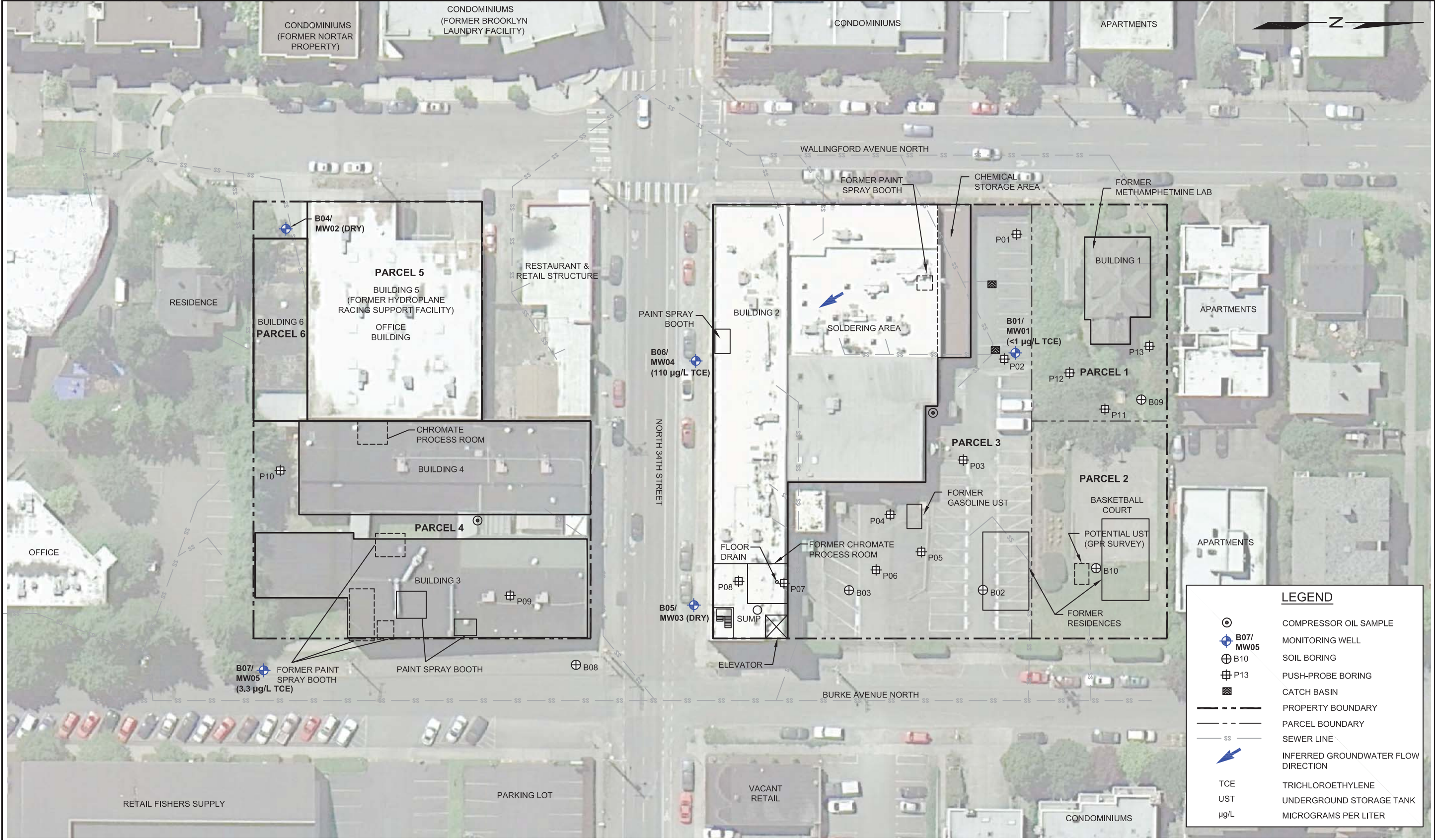
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APPROXIMATE HORIZONTAL SCALE IN FEET

**FIGURE 5**  
CROSS SECTION B-B'

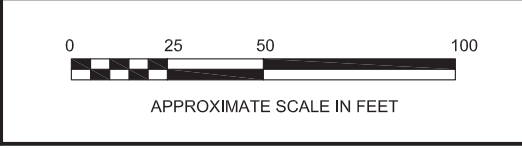
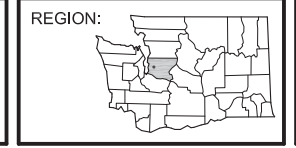


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PROJECT NAME: AVTECH PROPERTY  
PROJECT NUMBER: 0789-004-02  
STREET ADDRESS: 3400 WALLINGFORD AVENUE NORTH  
CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 6**  
TCE CONCENTRATIONS IN GROUNDWATER

## **TABLES**



**Table 1**  
**Summary of Soil Analytical Results for Petroleum Hydrocarbons**  
**Avtech Property**  
**3400 Wallingford Avenue North**  
**Seattle, Washington**

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Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)						
					GRPH <sup>1</sup>	DRPH <sup>2</sup>	ORPH <sup>2</sup>	Benzene <sup>3</sup>	Toluene <sup>3</sup>	Ethylbenzene <sup>3</sup>	Total Xylenes <sup>3</sup>
P02	P02-1.5	01/04/12	SoundEarth	1.5	--	<50	<250	--	--	--	--
P03	P03-04	01/04/12	SoundEarth	4	--	<50	<250	--	--	--	--
P04	P04-08	01/04/12	SoundEarth	8	<2	--	--	<0.02	<0.02	<0.02	<0.06
	P04-15	01/04/12	SoundEarth	15	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
P05	P05-08	01/04/12	SoundEarth	8	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
P06	P06-08	01/04/12	SoundEarth	8	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
P07	P07-02	01/05/12	SoundEarth	2	--	<50	<250	--	--	--	--
P08	P08-02	01/05/12	SoundEarth	2	--	<50	<250	--	--	--	--
B01	B01-03	01/10/12	SoundEarth	3	--	<50	<250	--	--	--	--
B02	B02-03	01/10/12	SoundEarth	3	--	<50	<250	--	--	--	--
B03	B03-03	01/10/12	SoundEarth	3	--	<50	<250	--	--	--	--
	B03-10	01/10/12	SoundEarth	10	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
B04	B04-05	01/11/12	SoundEarth	5	--	<50	<250	--	--	--	--
B08	B08-08	01/12/12	SoundEarth	8	--	<50	<250	--	--	--	--
B10	B10-0.5	01/13/12	SoundEarth	0.5	--	<50	<250	--	--	--	--
<b>MTCA Method A Cleanup Level for Soil<sup>4</sup></b>					<b>100/30<sup>a</sup></b>	<b>2,000</b>	<b>2,000</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>

**NOTES:**

**Red** denotes concentration exceeding MTCA Method A cleanup level for soil.

Chemical analyses conducted by Friedman & Bruya, Inc. of Seattle, Washington.

<sup>1</sup>Analyzed by Method NWTPH-Gx.

<sup>2</sup>Analyzed by Method NWTPH-Dx.

<sup>3</sup>Analyzed by U.S. Environmental Protection Agency Method 8020 or 8021B.

<sup>4</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

<sup>a</sup>30 mg/kg when benzene is present and 100 mg/kg when benzene is not present.

< = not detected at concentrations exceeding the laboratory reporting limit

-- = not tested

bgs = below ground surface

DRPH = diesel-range petroleum hydrocarbon

GRPH = gasoline-range hydrocarbon

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbon

SoundEarth = SoundEarth Strategies, Inc.





**Table 2**  
**Summary of Soil Analytical Results for RCRA Metals and Cyanide**  
**Avtech Property**  
**3400 Wallingford Avenue North**  
**Seattle, Washington**

*DRAFT - Privileged and Confidential Attorney-Client Work Product*

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)								
					Chromium <sup>1</sup>	Arsenic <sup>1</sup>	Selenium <sup>1</sup>	Silver <sup>1</sup>	Cadmium <sup>1</sup>	Barium <sup>1</sup>	Lead <sup>1</sup>	Cyanide <sup>2</sup>	Mercury <sup>3</sup>
P01	P01-04	01/04/12	SoundEarth	4	10.6	1.31	<1	<1	<1	29.7	1.41	--	<0.1
P02	P02-1.5	01/04/12	SoundEarth	1.5	5.08	1.52	<1	<1	<1	13.5	1.20	--	<0.1
P07	P07-02	01/05/12	SoundEarth	2	18.6	1.47	<1	<1	<1	44.3	172	--	<0.1
P08	P08-02	01/05/12	SoundEarth	2	8.75	1.36	<1	<1	<1	30.1	1.51	<0.054	<0.1
P09	P09-02	01/05/12	SoundEarth	2	15.0	3.11	<1	<1	<1	79.4	4.48	<0.053	<0.1
P10	P10-0.5	01/05/12	SoundEarth	0.5	16.7	7.90	<1	<1	<1	191	71.0	--	0.28
	P10-02	01/05/12	SoundEarth	2	--	--	--	--	--	--	--	--	<0.1
P12	P12-02	01/05/12	SoundEarth	2	12.3	12.2	<1	<1	<1	161	193	--	0.12
P13	P13-02	01/05/12	SoundEarth	2	12.4	16.0	<1	<1	1.37	163	296	--	0.18
B01	B01-03	01/10/12	SoundEarth	3	9.68	<1	<1	<1	<1	43.3	1.59	--	<0.1
B02	B02-03	01/10/12	SoundEarth	3	6.54	<1	<1	<1	<1	28.6	1.18	--	<0.1
B03	B03-10	01/10/12	SoundEarth	10	10.6	1.55	<1	<1	<1	29.2	1.61	--	<0.1
B04	B04-05	01/11/12	SoundEarth	5	8.66	1.25	<1	<1	<1	42.3	2.02	--	<0.1
B07	B07-08	01/12/12	SoundEarth	8	8.10	<1	<1	<1	<1	16.4	1.31	--	<0.1
B08	B08-08	01/12/12	SoundEarth	8	11.0	<1	<1	<1	<1	29.7	2.90	--	<0.1
<b>MTCA Method A Cleanup Level for Soil<sup>4</sup></b>					<b>2,000</b>	<b>20</b>	<b>400</b>	<b>400</b>	<b>2</b>	<b>16,000</b>	<b>250</b>	<b>NA</b>	<b>2</b>

**NOTES:**

**Red** denotes concentration exceeding MTCA cleanup level for soil for residential properties.  
 Chemical analyses conducted Friedman and Bruya, Inc. or Am Test Inc. of Seattle, Washington.

<sup>1</sup>Analyzed by EPA Method 200.8.

<sup>2</sup>Analyzed by Method SW846 9012m.

<sup>3</sup>Analyzed by EPA Method 1631E.

<sup>3</sup>Analyzed by EPA Method 1631E.

<sup>4</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

< = not detected at concentrations exceeding the laboratory reporting limit

-- = not tested

EPA = U.S. Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

NA = no Method A cleanup level

RCRA = Resource Conservation and Recovery Act

SoundEarth = SoundEarth Strategies, Inc.



Table 3  
Summary of Soil Analytical Results for VOCs  
Avtech Property  
3400 Wallingford Avenue North  
Seattle, Washington

DRAFT - Privileged and Confidential Attorney-Client Work Product

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)										
					Vinyl Chloride <sup>1</sup>	1,1-Dichloroethene <sup>1</sup>	trans-1,2-Dichloroethene <sup>1</sup>	cis-1,2-Dichloroethene <sup>1</sup>	Carbon tetrachloride <sup>1</sup>	Benzene <sup>1</sup>	Trichloroethene <sup>1</sup>	Toluene <sup>1</sup>	Tetrachloroethene <sup>1</sup>	Ethylbenzene <sup>1</sup>	Total Xylenes <sup>1</sup>
P01	P01-04	01/04/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P02	P02-1.5	01/04/12	SoundEarth	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P07	P07-02	01/05/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05 <sup>1</sup>	<0.2
P09	P09-02	01/05/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P10	P10-04	01/05/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P11	P11-04	01/05/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P13	P13-02	01/05/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B01	B01-13	01/10/12	SoundEarth	13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B03	B03-10	01/10/12	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B06	B06-20	01/11/12	SoundEarth	20	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.03	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.025	<0.05 <sup>ht</sup>	<0.2 <sup>ht</sup>
B06	B06-35	01/11/12	SoundEarth	35	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.05 <sup>ht</sup>	<0.03	0.046	<0.05	<0.025	<0.05 <sup>ht</sup>	<0.2 <sup>ht</sup>
MTCA Method A Cleanup Level for Soil <sup>2</sup>					--	--	--	--	--	0.1	0.03	7	0.05	6	9

NOTES:

Red denotes concentration exceeding MTCA cleanup level for soil.

Chemical analyses conducted by Friedman and Bruya, Inc., of Seattle, Washington.

All measurements are in mg/kg.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method 8260C.

<sup>2</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

Laboratory Note:

<sup>ht</sup>Analysis performed outside the method or client-specified holding time requirement.

-- = no MTCA Method A cleanup level

< = not detected at concentrations exceeding the laboratory reporting limit

bgs = below ground surface

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

SoundEarth = SoundEarth Strategies, Inc.

VOCs = Volatile Organic Compounds

WAC = Washington Administrative Code



**Table 4**  
**Summary of Soil Analytical Results for PCBs**  
**Avtech Property**  
**3400 Wallingford Avenue North**  
**Seattle, Washington**

*DRAFT - Privileged and Confidential Attorney-Client Work Product*

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg) <sup>1</sup>						
					Aroclor 1221	Aroclor 1232	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
P03	P03-04	01/04/12	SoundEarth	4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
P10	P10-0.5	01/05/12	SoundEarth	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B02	B02-03	01/10/12	SoundEarth	3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<b>MTCA Method A Cleanup Level for Soil</b>					<b>1</b>						

**NOTES:**

Chemical analysis conducted by Friedman & Bruya, Inc. of Seattle, Washington.

<sup>1</sup>Analyzed by U.S. Environmental Protection Agency Method 8082A.

<sup>2</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

< = less than

bgs = below ground surface

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

PCBs = polychlorinated biphenyls

SoundEarth = SoundEarth Strategies, Inc.



**Table 5**  
**Soil Sampling Analytical Results for PAHs**  
**Avtech Property**  
**3400 Wallingford Avenue North**  
**Seattle, Washington**

*DRAFT - Privileged and Confidential Attorney-Client Work Product*

Sample Location	Sample ID	Date Sampled	Sample Depth (feet bgs)	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene
P07	P07-02	01/05/12	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
P10	P10-0.5	01/05/12	0.5	0.027	0.079	<0.012	0.032	0.37	0.059	0.30	0.41	0.15	0.22	0.25	0.082	0.24	0.21	0.044	0.22
	P10-02	01/05/12	2.0	<0.01	<0.01	<0.01	<0.01	0.019	<0.01	0.023	0.028	0.013	0.015	0.016	<0.01	0.015	0.015	<0.01	0.013
P12	P12-02	01/05/12	2.0	0.012	0.016	<0.01	<0.01	0.064	0.013	0.15	0.18	0.070	0.11	0.13	0.046	0.13	0.12	0.018	0.14
<b>MTCA Method A Cleanup Levels for Unrestricted Land Uses<sup>1</sup></b>				<b>5</b>	--	--	--	--	--	--	--	<b>NC</b>	<b>NC</b>	<b>NC</b>	<b>NC</b>	<b>0.1</b>	<b>NC</b>	<b>NC</b>	--

**NOTES:**  
Sample results reported in mg/kg.  
**Red** denotes concentration exceeding MTCA Method A Cleanup Level.  
Chemical analysis conducted by Friedman & Bruya, Inc. of Seattle, Washington.  
Analyzed by U.S. Environmental Protection Agency Method 8270D SIM.  
Cleanup

< = not detected at concentration exceeding the laboratory reporting limit  
-- = no Method A Cleanup Level (non-carcinogenic PAHs)  
bgs = below ground surface  
mg/kg = micrograms per kilogram  
MTCA = Washington State Model Toxics Control Act  
NC = toxicity equivalency factor not calculated  
PAH = polycyclic aromatic hydrocarbon



Table 6  
Summary of Groundwater Data  
Avtech Property  
3400 Wallingford Avenue North  
Seattle, Washington

DRAFT - Privileged and Confidential Attorney Client Work Product

Sample ID	Sample Date	Depth to Groundwater <sup>1</sup> (feet)	Groundwater Elevation <sup>2</sup> (feet)	Analytical Results (µg/L)																			
				DRPH <sup>3</sup>	ORPH <sup>3</sup>	Benzene <sup>4</sup>	Toluene <sup>4</sup>	Ethylbenzene <sup>4</sup>	Total Xylenes <sup>4</sup>	Vinyl Chloride <sup>4</sup>	1,2-DCE <sup>4</sup>	TCE <sup>4</sup>	PCE <sup>4</sup>	MTBE <sup>4</sup>	Naphthalene <sup>4</sup>	Dissolved Chromium <sup>5</sup>	Dissolved Arsenic <sup>5</sup>	Dissolved Selenium <sup>5</sup>	Dissolved Silver <sup>5</sup>	Dissolved Cadmium <sup>5</sup>	Dissolved Barium <sup>5</sup>	Dissolved Lead <sup>5</sup>	Dissolved Mercury <sup>5</sup>
MW01 TOC: 100.00'	01/17/12	27.59	72.41	<50	<250	<0.35	<1	<1	<3	<0.2 <sup>pr</sup>	<1	<1	<1	<1	<1	1.58	1.43	<1	<1	<1	3.94	<1	<0.1
MW02 TOC: 85.28'	01/17/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW03 TOC: 91.05'	01/17/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW04 TOC: 95.04'	01/17/12	36.70	58.34	--	--	<0.35	<1	<1	<3	<0.2 <sup>pr</sup>	<1	110	<1	<1	<1	18.60	<1	<1	<1	<1	4.33	<1	<0.1
MW04 ( Field Dup) TOC: 95.04'	01/17/12	36.70	58.34	--	--	<0.35	<1	<1	<3	<0.2 <sup>pr</sup>	<1	120	<1	<1	<1	18.6	<1	<1	<1	<1	4.65	<1	<0.1
MW05 TOC: 71.15'	01/17/12	24.90	46.25	--	--	<0.35	<1	<1	<3	<0.2 <sup>pr</sup>	<1	3.3	<1	<1	<1	<1	5.31	3.55	<1	<1	22.6	<1	<0.1
MTCA Method A Cleanup Level for Groundwater <sup>7</sup>				1,000/800 <sup>3</sup>	500	5	1,000	700	1,000	0.2	NA	5	5	20	160	50	5	NA	NA	5	NA	15	2

NOTES:

Red denotes concentrations exceeding the MTCA Method A Cleanup Level.

Sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington, or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>1</sup>Measured in feet below a fixed spot on the top of the well casing rim.

<sup>2</sup>Calculated from a reference elevation of 100.00 at the MW01 top of well casing.

<sup>3</sup>Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx.

<sup>4</sup>Analyzed by EPA Method 8260C. All other 8260C analytes were undetected.

<sup>5</sup>Analyzed by EPA Method 6020 or 200.8.

<sup>6</sup>Analyzed by EPA Method 1631E.

<sup>7</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 340 of Title 173 of the Washington Administrative Code, revised November 2007.

<sup>a</sup>1,000 µg/L when benzene is not present and 800 µg/L when benzene is present.

Laboratory Notes:

<sup>pr</sup>Sample received with incorrect preservation. Results should be considered an estimate.

-- = not analyzed/not measured

< = not detected at a concentration exceeding the laboratory reporting limit

µg/L = micrograms per liter

1,2-DCE = 1,2-dichloroethene (cis and trans)

DRPH = diesel-range petroleum hydrocarbon

EDB = ethylene dibromide

EDC = ethylene dichloride

EPA = U.S. Environmental Protection Agency

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

NA = not applicable to Method A level

ORPH = oil-range petroleum hydrocarbon

PCE = tetrachlorethene

TCE = trichloroethene

TOC = top of casing elevation

**ATTACHMENT A  
GPR REPORT  
UNDERGROUND DETECTION SERVICES INC., MAY 16, 2011**





**Underground Detection  
Services, Inc.**

P.O. Box 47164  
Seattle, WA 98146

425/747-8804 tel  
206/282-1866 tel  
206/286-9889 fax

January 10, 2012

Rob Roberts  
Sound Earth Strategies  
2811 Fairview Ave E Ste. 2000  
Seattle, WA 98102

Dear Rob:

This is a report on the equipment, procedures, and results of the geophysical survey performed at 3400 Wallingford Ave N. in Seattle, Washington. The purpose of the survey was to identify if underground storage tanks (UST) exist on the site.

The equipment that was used for the survey included, but was not limited to a Schonstedt GA-52 magnetic locator, GSSI Sir 3000 System ground penetrating radar (GPR) with 270 MHz antenna, and a MetroTech 810 pipe and cable locator.

The magnetic locator measures the magnetic field simultaneously from two separate elevations within the same piece of equipment. A high pitch sound is emitted from the equipment when in the proximity of ferrous material. The equipment is carried over the survey area and swung back and forth to cover as much area as possible in a reasonable time frame.

The GPR utilizes high frequency radio waves to probe the subsurface. A radio wave is emitted from the antenna and travels through the soil, if there is an anomaly below the antenna; the radio wave is reflected back. The data that is collected is displayed in real time, through a color display. After processing on a desktop computer printouts can be available.

The data that is produced is a cross section of the geology directly below the antenna. The top of the data represents the ground surface while the bottom of the page is a reading depth of the equipment. The data is collected and displayed from left to right, with left being the beginning and right being the end of the particular survey line. Anomalies typically appear white on a color screen.

The depth of the signal penetration is dependent upon geological factors beyond the control of the surveyor. Conductive soils, clays, and saturated soils, do not allow the GPR signal to penetrate as deeply as less resistive sandy soil.

The pipe and cable locator uses a defined radio frequency induced on the line from a transmitter attached to the line at the surface. The frequency travels the length of the line and acts as an antenna below the surface. A receiver tuned to that frequency is carried above the surface and locates the line with that frequency.



A GPR survey was performed on the site for possible UST's and/or anomalies. Most areas the GPR survey was set up on a 5 foot grid. When possible the survey was performed going from north to south and east to west. In the area of the nitrogen tank on the north side of the upper parking lot the survey was performed more random than on a grid.

The first area surveyed was in the area of the loading dock on the northeast side of the building. Here the electrical service can be seen in Exhibit A provided.

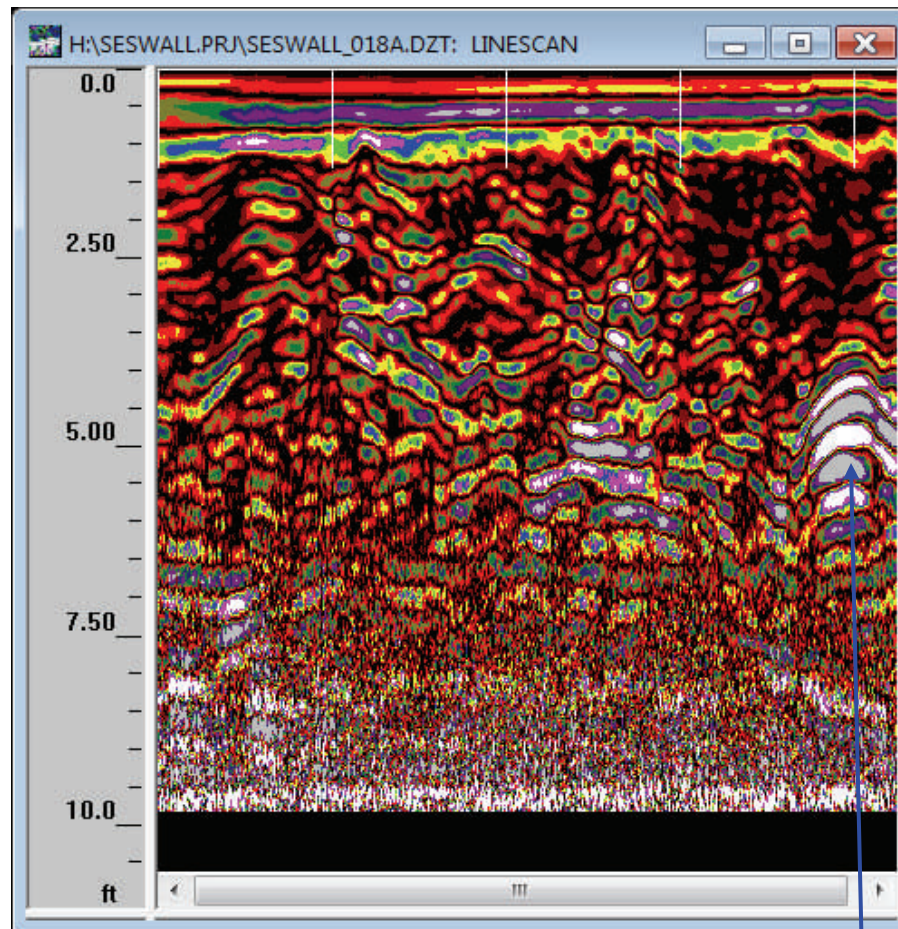
The next area surveyed was the upper parking lot to the east of the nitrogen tank. No anomalies indicated in this area. Soils appeared to be very solid. At the edge of the start of this survey a reading was further investigated. This reading led to more of a random survey on the west side of the nitrogen tank. Here anomalies were indicated and can be seen in Exhibit B. In Exhibit C there appears to have been an excavation around the doorway west of the nitrogen tank. There does not appear, from the surface, a reason for such an excavation.

Then the grass area to the north of the parking lot was surveyed. Here the soil was very dense. Anomalies were indicated when scanning this area. These anomalies can be seen in Exhibit D of the GPR survey. A picture of the area can be seen in Exhibit E. This area was measured from a pole at the sidewalk. The area of the one anomaly was west of the pole 44 feet and then 23 feet to the north.

The last area surveyed was inside the old boiler room of the building. A cap was found in the ground that was partially concreted over. Without opening cap it is unknown if it is related to a sewer or a UST. There did not appear to be any remote fill leading into the building from the street. There also was no product lines found in the boiler room. No readings of an anomaly was indicated under the slab of the boiler.

UDS did not perform a utility survey on the site at the time of the GPR survey.

Kemp Garcia

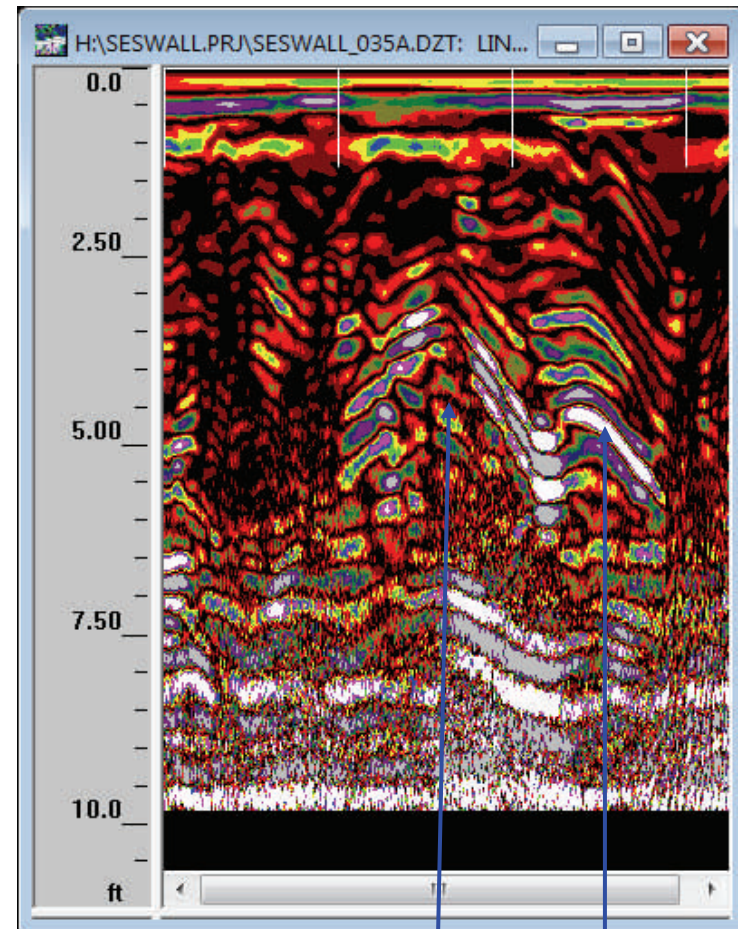
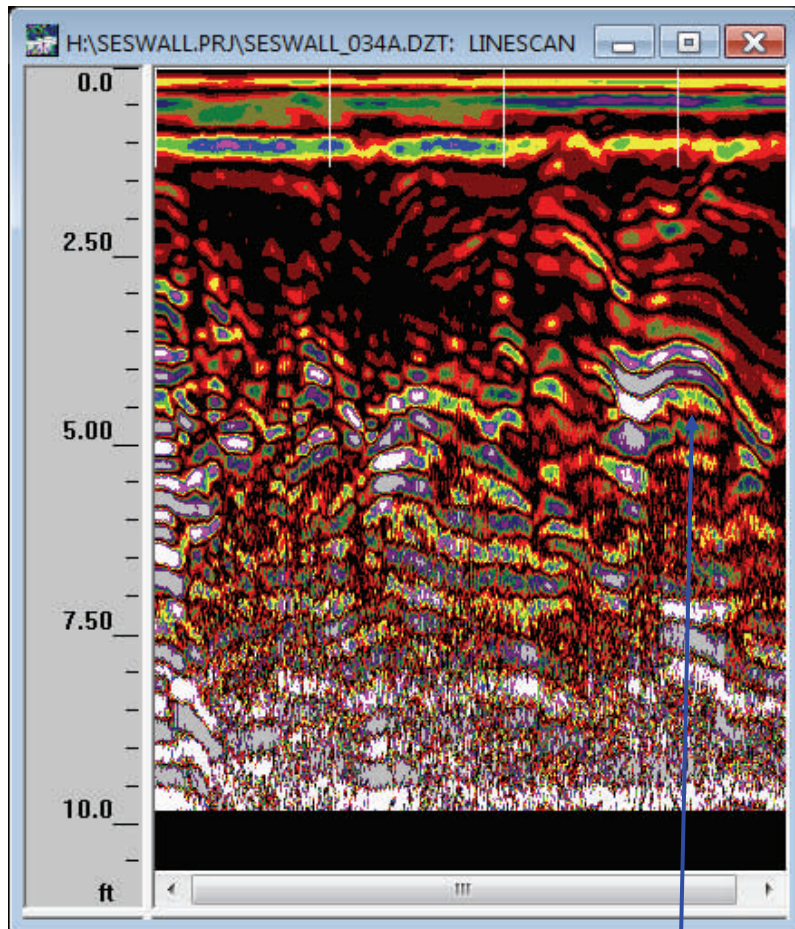


## Exhibit A

This area is in the loading dock on the north side of the building. The reading indicated is the electrical feed to the building.

Electrical leading to transformer

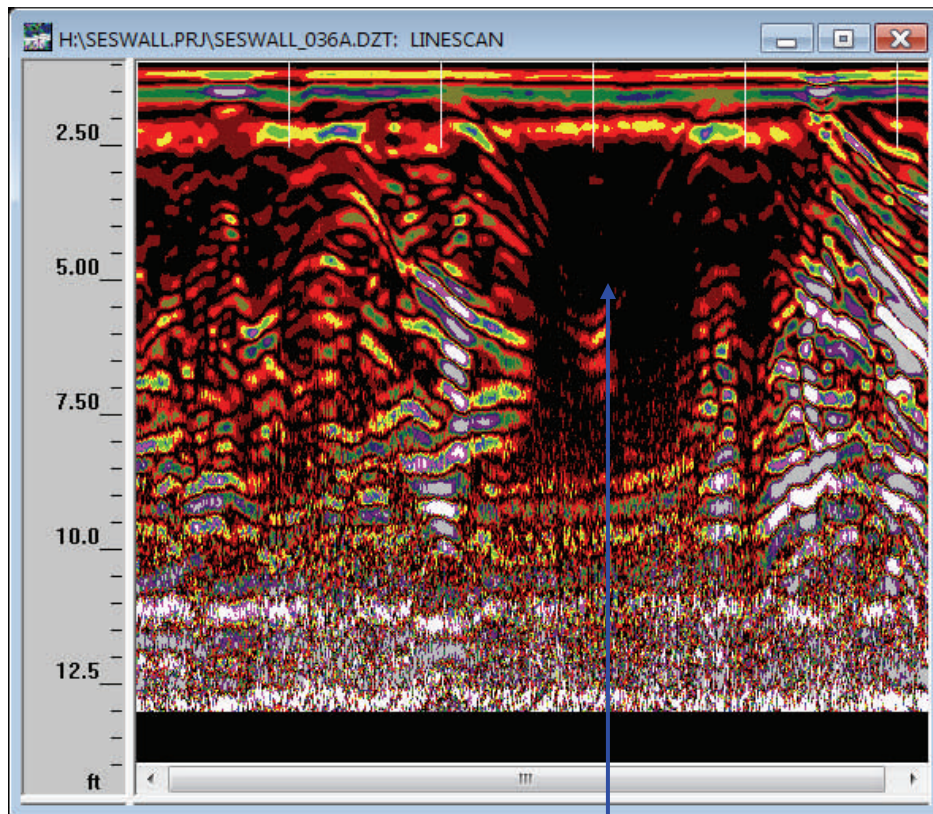




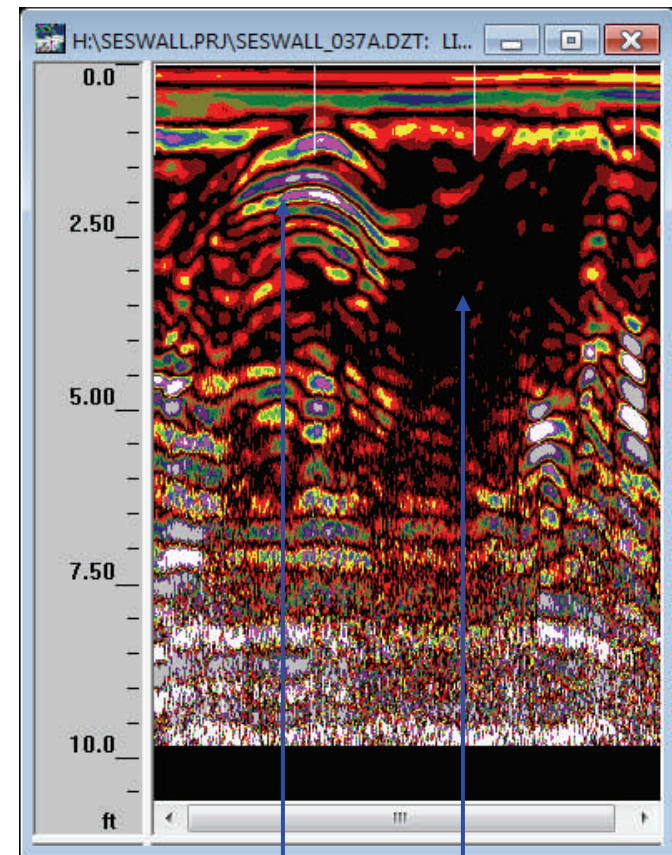
Area is around the nitrogen tank on the north side of the building in the upper parking lot.

Anomalies indicated. Unable to determine if reading are UST's.

## Exhibit B



Possible excavation



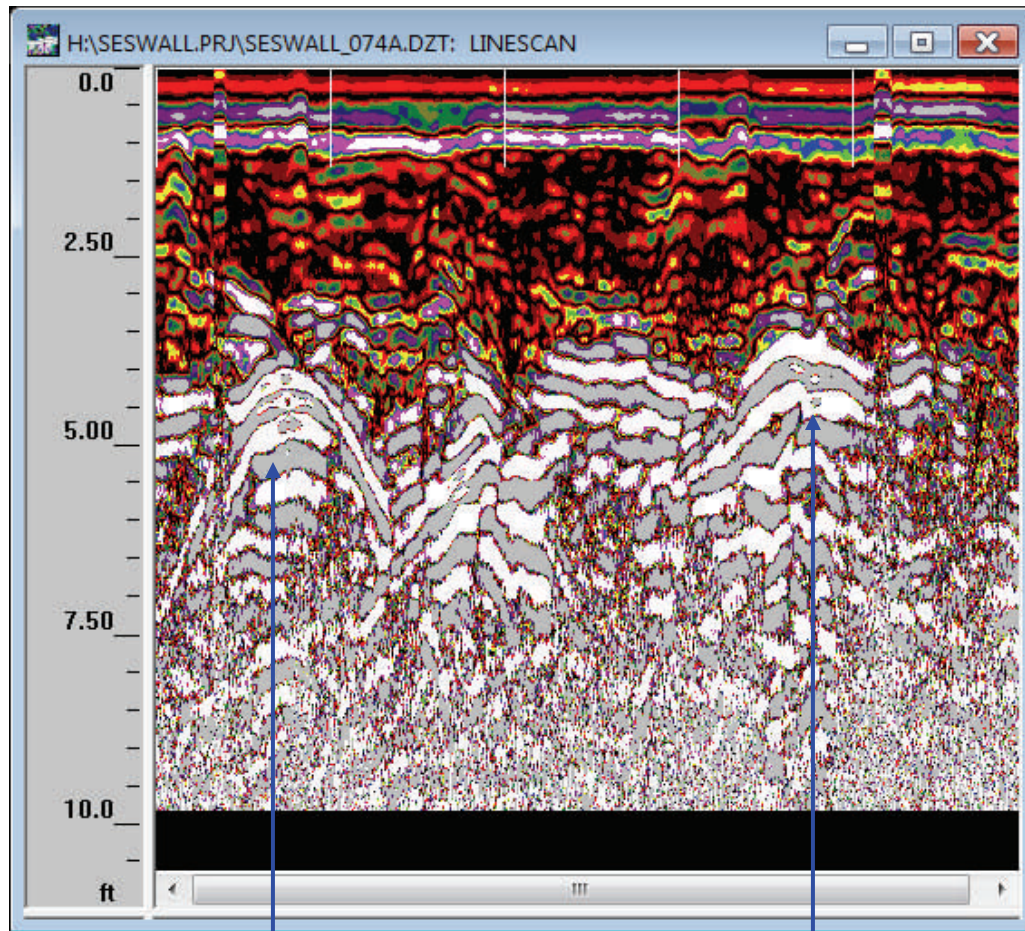
Anomaly close to the surface.

Possible excavation

## Exhibit C

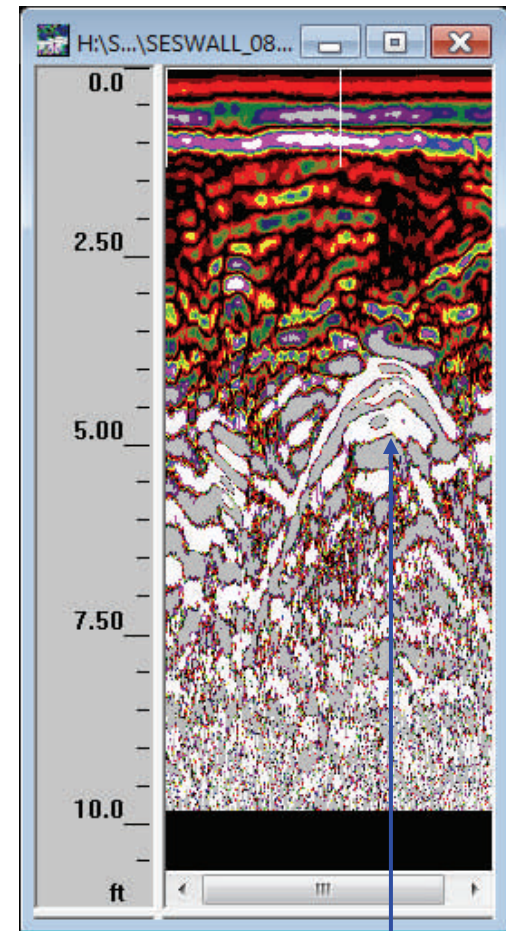
Both scans are in front of a doorway west of the Nitrogen tank. Appears area was excavated at some time.





Anomaly indicated.  
Reading is has ferrous

Possible additional anomaly further  
to the north



Same anomaly indicated  
in reading to the left.

## Exhibit D

Grassy lawn area on the north property.





## Exhibit E

Picture of area anomaly was indicated in  
Exhibit.....

Area measured from pole at sidewalk  
44 feet to the west and 23 feet to the north

**ATTACHMENT B  
BORING LOGS**





**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/10/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 23.3' N of N wall of building 2  
**Well Location E/W:** 77.7' E of W retaining wall at N property boundary  
**Reviewed by:**  
**Date Completed:** 1/10/12

**BORING LOG** | **B01**  
MW01

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

**Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Concrete	
	4 17 21		50	0.0	B01-03	SM		Damp, dense, silty SAND, with gravel, grayish brown, no odor (25-70-5).	
5	8 18 20			0.0	B01-05	SM		Damp, dense, silty SAND, with gravel, grayish brown, no odor (25-70-5).	
			80						
	12 40 50/5"		70	0.0	B01-08	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
10	28 50/6"		40	0.9	B01-10	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
	50/6"		30	NR	B01-13	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
15					B01-15				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35 feet bgs  
**Total Well Depth:** 35 feet bgs  
**State Well ID No.:** BHM097

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 25-35 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount



**Notes/Comments:**  
Notes



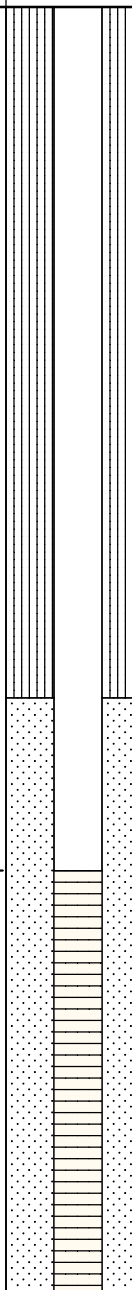







**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/10/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 23.3' N of N wall of building 2  
**Well Location E/W:** 77.7' E of W retaining wall at N property boundary  
**Reviewed by:**  
**Date Completed:** 1/10/12

**BORING LOG** | **B01**  
MW01

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		50/6"	30	0.4		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
20		50/6"	30	0.0	B01-20	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
25		21 50/6"	60	0.4	B01-25	SP		Damp, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-95-5).	
30					B01-30				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35 feet bgs  
**Total Well Depth:** 35 feet bgs  
**State Well ID No.:** BHM097

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 25-35 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount



**Notes/Comments:**  
Notes


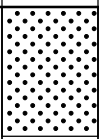
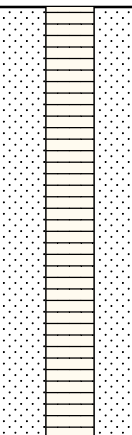




**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/10/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 23.3' N of N wall of building 2  
**Well Location E/W:** 77.7' E of W retaining wall at N property boundary  
**Reviewed by:**  
**Date Completed:** 1/10/12

**BORING LOG** | **B01**  
MW01

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA


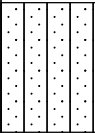

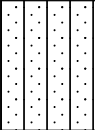






 **Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30	 18 45 50/5"	80		0.0		SP		Wet, very dense, medium to fine SAND, with silt and gravel, brown, no odor (5-95-5).	
35	 14 50/6"	70		0.0	B01-35	SP		Wet, very dense, medium to fine SAND, with silt and gravel, brown, no odor (5-85-10).	
40								Boring terminated at 35' bgs.	
45									

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35 feet bgs  
**Total Well Depth:** 35 feet bgs  
**State Well ID No.:** BHM097

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 25-35 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
Notes

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								<b>Asphalt</b>	
		14 19 28	100	0.0	B02-03	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
5		4 13 18	80	0.0	B02-05	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
		22 50/6"	60	0.0	B02-08	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (30-65-5).	
10		12 50/6"	60	0.0	B02-10	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (30-65-5).	
		50/6"	10		B02-13	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (30-65-5).	
15					B02-15				

<b>Drilling Co./Driller:</b>	Cascade/James	
<b>Drilling Equipment:</b>	HSA	
<b>Sampler Type:</b>	Split-spoon	
<b>Hammer Type/Weight:</b>	140	lbs
<b>Total Boring Depth:</b>	35.5	feet bgs
<b>Total Well Depth:</b>	--	feet bgs
<b>State Well ID No.:</b>	--	

<b>Well/Auger Diameter:</b>	--/8"	inches
<b>Well Screened Interval:</b>	--	feet bgs
<b>Screen Slot Size:</b>	--	inches
<b>Filter Pack Used:</b>	--	
<b>Surface Seal:</b>	Concrete	
<b>Annular Seal:</b>	Bentonite	
<b>Monument Type:</b>	--	



**Notes/Comments:**  
Notes










**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/10/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 30.6' N of NE corner of building 2  
**Well Location E/W:** 56.6' E of NE corner of building 2  
**Reviewed by:**  
**Date Completed:** 1/10/12

**BORING LOG** | **B02**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		31 50/2"	40	0.0		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
20		50/5"	20		B02-20	SM		Damp, very dense, silty SAND, with gravel, gray, no odor (25-70-5).	
25		16 50/4"	60	0.0	B02-25	SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
30					B02-30				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35.5 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/8" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
Notes






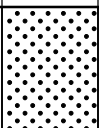

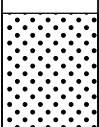


**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/10/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 30.6' N of NE corner of building 2  
**Well Location E/W:** 56.6' E of NE corner of building 2  
**Reviewed by:**  
**Date Completed:** 1/10/12

**BORING LOG** | **B02**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA


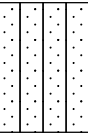






 **Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30	 17 37 50/6"	80		0.0		SP		Damp, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-90-5).	
35	 5 15 46	90		0.0	B02-35	SP		Wet, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-85-10).	
								Boring terminated at 35.5' bgs.	
40									
45									

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35.5 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/8" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
Notes

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Asphalt	
		13 25 37	100	0.0	B03-03	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
5		50/4"	0	NR	--	--		No recovery, drilling condition indicates gravel/cobbles.	
		50/0"	0	NR	--	-		No recovery, drilling condition indicates gravel/cobbles.	
10		50/5"	15	NR	B03-10	--		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
		50/4"	10	NR	B03-13	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
15					B03-15				

<b>Drilling Co./Driller:</b>	Cascade/James		
<b>Drilling Equipment:</b>	HSA		
<b>Sampler Type:</b>	Split-spoon		
<b>Hammer Type/Weight:</b>	140		lbs
<b>Total Boring Depth:</b>	35		feet bgs
<b>Total Well Depth:</b>	--		feet bgs
<b>State Well ID No.:</b>	--		

<b>Well/Auger Diameter:</b>	--/8"	inches
<b>Well Screened Interval:</b>	--	feet bgs
<b>Screen Slot Size:</b>	--	inches
<b>Filter Pack Used:</b>	--	
<b>Surface Seal:</b>	Concrete	
<b>Annular Seal:</b>	Bentonite	
<b>Monument Type:</b>	--	



**Notes/Comments:**  
Notes









**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/10/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 32' off NE corner of furthest E corner of building 2  
**Well Location E/W:** 25.3' off NE corner of furthest E corner of building 2  
**Reviewed by:**  
**Date Completed:** 1/10/12

**BORING LOG** | **B03**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** 32 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		50/5"	15	NR		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
20		36 50/6"	50	0.0	B03-20	SP		Damp, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-90-5).	
25		50/4"	15	NR	B03-25	SP		Damp, very dense, medium to fine SAND, with silt and gravel, gray, no odor (5-90-5).  Drilling conditions indicate gravel/cobbles.	
30					B03-30				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/8" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
Notes







**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/11/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 19' N of SW corner of Avtech building 6  
**Well Location E/W:** 6.5' W of SW corner of Avtech building 6  
**Reviewed by:**  
**Date Completed:** 1/11/12

**BORING LOG** | **B04**  
 MW02

**Site Address:** 3400 Wallingford Ave N  
 Seattle, WA

**Water Depth At Time of Drilling** -- feet bgs  
**Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Concrete	
	2 4 4		50	0.7	B04-03	SP		Damp, loose, medium to fine SAND, with silt, brown, no odor (5-95-0). Fill material	
5	2 3 4		50	0.0	B04-05	SP		Damp, loose, medium to fine SAND, with silt, brown, no odor (5-95-0). Fill material	
	14 25 27		1	NR		--		Insufficient recovery to sample.	
10	8 18 25		90	0.0	B04-10	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
	16 28 43		60	0.0	B04-13	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
15					B04-15				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 25 feet bgs  
**Total Well Depth:** 25. feet bgs  
**State Well ID No.:** BHM098

**Well/Auger Diameter:** 2 7/8" inches  
**Well Screened Interval:** 15-25 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 Notes



**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/11/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 19' N of SW corner of Avtech building 6  
**Well Location E/W:** 6.5' W of SW corner of Avtech building 6  
**Reviewed by:**  
**Date Completed:** 1/11/12

**BORING LOG** | **B04**  
MW02

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

**Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		14 24 22	60	0.0		SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
20		50/6"	10	NR	B04-20	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
25		50/6"	30	NR	B04-25	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
30								Boring terminated at 25' bgs.	

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 25 feet bgs  
**Total Well Depth:** 25. feet bgs  
**State Well ID No.:** BHM098

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 15-25 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
Notes

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								<b>Asphalt</b>  <b>Cleared boring with vector truck to 7' bgs.</b>	
5									
		50/6"	50	0.0	B05-08	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
10		50/6"	40	NR	B05-10	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
		40 50/6"	50	0.1	B05-13	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
15					B05-15				

<b>Drilling Co./Driller:</b>	Cascade/James	
<b>Drilling Equipment:</b>	HSA	
<b>Sampler Type:</b>	Split-spoon	
<b>Hammer Type/Weight:</b>	140	lbs
<b>Total Boring Depth:</b>	35	feet bgs
<b>Total Well Depth:</b>	35	feet bgs
<b>State Well ID No.:</b>	BHM099	

<b>Well/Auger Diameter:</b>	2"/8"	inches
<b>Well Screened Interval:</b>	25-35	feet bgs
<b>Screen Slot Size:</b>	0.010	inches
<b>Filter Pack Used:</b>	Silica sand	
<b>Surface Seal:</b>	Concrete	
<b>Annular Seal:</b>	Bentonite	
<b>Monument Type:</b>	Flush mount	

**Notes/Comments:**  
Notes





**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/11/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 10' S of SE corner of building 6  
**Well Location E/W:** 17.6' W of SE corner of building 5  
**Reviewed by:**  
**Date Completed:** 1/11/12

**BORING LOG** | **B05**  
MW03

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

**Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		50/6"	50	0.3		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
20		40 50/4"	40	0.1	B05-20	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
						SP		Damp, very dense, medium to fine SAND, with silt and gravel, brown, no odor (5-90-5).	
25		40 50/5"	40	0.1	B05-25	SP		Damp, very dense, medium to fine SAND, with silt and gravel, brown, no odor (10-85-5).	
								Drilling conditions indicate gravel.	
30					B05-30				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35 feet bgs  
**Total Well Depth:** 35 feet bgs  
**State Well ID No.:** BHM099

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 25-35 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount



**Notes/Comments:**  
Notes


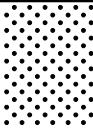
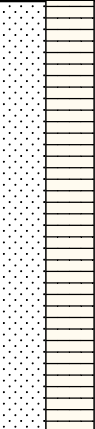


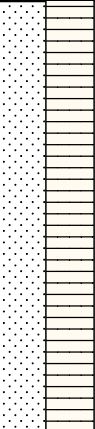


**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/11/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 10' S of SE corner of building 6  
**Well Location E/W:** 17.6' W of SE corner of building 5  
**Reviewed by:**  
**Date Completed:** 1/11/12

**BORING LOG** | **B05**  
MW03

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** 30 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30	 22 25 50/6"	90	0.3			SP		Wet, very dense, fine to medium SAND, with silt and gravel, brown, no odor (10-85-5).	
35	 43 50/5"	50	0.0		B05-35	SM-SP		Damp, very dense, silty, fine SAND, with gravel, brown, no odor (15-80-5).	
40								Boring terminated at 35' bgs.	
45									

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 35 feet bgs  
**Total Well Depth:** 35 feet bgs  
**State Well ID No.:** BHM099

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 25-35 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
Notes













**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/11/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 9' S of SW corner of building 2  
**Well Location E/W:** 82' E of SW corner of building 2  
**Reviewed by:**  
**Date Completed:** 1/11/12

**BORING LOG** | **B06**  
MW04

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** 37 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		50/6"	40	0.3		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
20		50/5"	50	NR	B06-20	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
25		50/4"	20	NR	B06-25	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
30					B06-30				

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 40 feet bgs  
**Total Well Depth:** 40 feet bgs  
**State Well ID No.:** BHM100

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 30-40 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
Notes






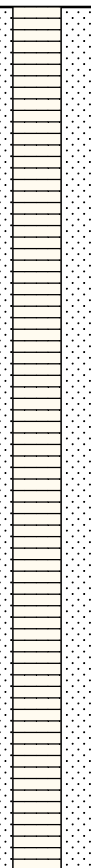






**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/11/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 9' S of SW corner of building 2  
**Well Location E/W:** 82' E of SW corner of building 2  
**Reviewed by:**  
**Date Completed:** 1/11/12

**BORING LOG** | **B06**  
MW04

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** 37 feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30		38 50/4"	60	0.5		SP		Damp, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-90-5).	
35		17 26 33	NR	0.1	B06-35	SP		Wet, very dense, medium to fine SAND, with silt and gravel, brown, no odor (5-90-5).	
40		27 50/6"	70	0.0	B06-40	SP		Wet, very dense, medium to fine SAND, with silt and gravel, brown, no odor (5-90-5).	
45								Boring terminated at 40' bgs.	

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 40 feet bgs  
**Total Well Depth:** 40 feet bgs  
**State Well ID No.:** BHM100

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 30-40 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
Notes





**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/12/12  
**Surface Conditions:** Gravel  
**Well Location N/S:** 4.5' N of SE corner of building 3  
**Well Location E/W:** 38' E of SE corner of building 3  
**Reviewed by:**  
**Date Completed:** 1/12/12

**BORING LOG** | **B07**  
 MW05

**Site Address:** 3400 Wallingford Ave N  
 Seattle, WA

**Water Depth At Time of Drilling** -- feet bgs  
**Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15	34 50/6"	50	0.4			SP		Damp, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-90-5).	
20	20 32 50/6"	90	0.2		B08-20	SP		Damp, very dense, medium to fine SAND, with silt and gravel, light brown, no odor (5-90-5).	
25	35 50/5"	70	0.2		B08-25	SM		Moist, very dense, silty SAND, gray, no odor (25-75-0).	
								Wet drill cuttings	
	NR	50	0.0			SM		Damp, very dense, silty SAND, with gravel, gray, no odor (25-65-10).	
30					B08-30	ML			

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 30 feet bgs  
**Total Well Depth:** 30 feet bgs  
**State Well ID No.:** BHM101

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 20-30 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
 Notes





**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/12/12  
**Surface Conditions:** Gravel  
**Well Location N/S:** 4.5' N of SE corner of building 3  
**Well Location E/W:** 38' E of SE corner of building 3  
**Reviewed by:**  
**Date Completed:** 1/12/12

**BORING LOG** | **B07**  
MW05

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30								<b>Damp, very dense, SILT with fine sand, gray, no odor (40-55-5).</b>  <b>Boring terminated at 30' bgs.</b>	
35									
40									
45									

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 30 feet bgs  
**Total Well Depth:** 30 feet bgs  
**State Well ID No.:** BHM101

**Well/Auger Diameter:** 2"/8" inches  
**Well Screened Interval:** 20-30 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush mount

**Notes/Comments:**  
Notes

[illegible]

<b>Drilling Co./Driller:</b>	Cascade/James	
<b>Drilling Equipment:</b>	HSA	
<b>Sampler Type:</b>	Split-spoon	
<b>Hammer Type/Weight:</b>	140	lbs
<b>Total Boring Depth:</b>	25	feet bgs
<b>Total Well Depth:</b>	--	feet bgs
<b>State Well ID No.:</b>	--	

<b>Well/Auger Diameter:</b>	--/8"	inches
<b>Well Screened Interval:</b>	--	feet bgs
<b>Screen Slot Size:</b>	--	inches
<b>Filter Pack Used:</b>	--	
<b>Surface Seal:</b>	Concrete	
<b>Annular Seal:</b>	Bentonite	
<b>Monument Type:</b>	--	

**Notes/Comments:**  
Notes



**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/12/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 6' S of NE corner of building 3  
**Well Location E/W:** 14.3" E of NW corner of building 3  
**Reviewed by:**  
**Date Completed:** 1/12/12

**BORING LOG** | **B08**  
 --

**Site Address:** 3400 Wallingford Ave N  
 Seattle, WA

**Water Depth At Time of Drilling** -- feet bgs  
**Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15	50/6"	20		NR		SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
								Drilling conditions indicate gravel	
20	42 50/3"	30		0.4	B08-20	SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
								Drilling conditions indicate gravel	
25	50/5"	20		0.2	B08-25	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
								Boring terminated at 25' bgs.	
30									

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 25 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/8" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
 Notes





**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/13/12  
**Surface Conditions:** Grass and thin top soil  
**Well Location N/S:** 5.9' N of NE corner of building 1  
**Well Location E/W:** 29' E of NE corner of building 1  
**Reviewed by:**  
**Date Completed:** 1/13/12

**BORING LOG** | **B09**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

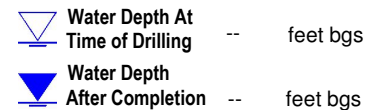
**Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Grass and thin top soil.	
		21 50/4"	50	1.1		SM		Damp, very dense, silty SAND, with gravel, brown to reddish brown, no odor (25-70-5).	
5		39 31 34	NR	0.7	B09-05	SP		Damp, dense, medium to fine SAND, with silt and gravel, light brown, no odor (10-85-5).	
		27 50/6"	30	0.5		SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
10		29 44 50/6"	100	0.3	B09-10	SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
		50/6"	30	0.1		SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
		50/6"	30	NR		SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
15					B09-15			Boring terminated at 15' bgs.	

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** LAR HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 15 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/8" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
Boring terminated at 15' bgs.

Page: 1 of 2



**Project:** Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 1/13/12  
**Surface Conditions:** Grass and thin top soil  
**Well Location N/S:** 12' N of SE corner of basketball court  
**Well Location E/W:** 1.8' E of SE corner of basketball court  
**Reviewed by:**  
**Date Completed:** 1/13/12

**BORING LOG** | **B10**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15								Boring terminated at 15.5 ft bgs.	
20									
25									
30									

**Drilling Co./Driller:** Cascade/James  
**Drilling Equipment:** LAR HSA  
**Sampler Type:** Split-spoon  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 15.5 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/8" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/04/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 24' N of N wall of building 2  
**Well Location E/W:** 15.8' E of W wall (retaining) at west property boundar  
**Reviewed by:**  
**Date Completed:** 01/04/12

**BORING LOG** | **P01**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

**Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						<b>Asphalt</b>	
			100	1.7		SM		Damp, dense, silty SAND. with gravel, light brown, no odor (25-65-10).	
				1.4	P01-04	SM			
5			NR	0.9		SM		Damp, dense, silty SAND. with gravel, light brown, no odor (25-65-10).	
				1.4		SM		Damp, very dense, silty SAND. with gravel, light gray, no odor (25-65-10).	
			NR	2.3	P01-09	SM			
10								Boring terminated at 9' bgs due to refusal.	
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Direct Push  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 9 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/2" inches  
**Well Screened Interval:** 15.8' E of W wall (retaining) at west property boundary  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Asphalt  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
Notes





**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/04/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 17.6' N of W wall of building 2  
**Well Location E/W:** 81' E of W wall (retaining) at W property boundary  
**Reviewed by:**  
**Date Completed:** 01/04/12

**BORING LOG** | **P02**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

**Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0	N/A			1.6	P02-01.5	SP		<b>Asphalt</b>  Damp, dense, medium to fine SAND, with trace silt & wood waste at 1' bgs, light brown, no odor (5-95-0).	
		100		1.6	P02-04	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
						SM			
5		100		0.0	P02-07	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				0.3	P02-07	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
		100		0.3	P02-10				
10								Boring terminated at 10' bgs due to refusal.	
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Direct Push  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 10 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/2" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Asphalt  
**Annular Seal:** Bentonite  
**Monument Type:** --



**Notes/Comments:**  
Notes



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/04/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 19.8' N of NE corner of building 2  
**Well Location E/W:** 11.7' W of NE corner of building 2  
**Reviewed by:**  
**Date Completed:** 01/04/12

**BORING LOG** | **P03**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

 **Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A				SM		Asphalt	
			100	0.3				Damp, dense, silty SAND, trace gravel, light brown, no odor (25-70-5).	
				0.4					
					P03-04	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
5			100	0.1					
				0.0		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
			100		P03-08				
				0.0					
10			100			SM		Damp, very dense, silty SAND, with gravel, light gray, no odor (25-65-10).	
				0.3	P03-12				
								Boring terminated at 12' bgs due to refusal.	
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Direct Push  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 12 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/2" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Asphalt  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**  
Notes



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/04/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 18.7' S of NE corner of building 2  
**Well Location E/W:** 17.0' E of NE corner of building 2  
**Reviewed by:**  
**Date Completed:** 01/04/12

**BORING LOG** | **P04**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

**Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						<b>Asphalt</b>	
			100			SP		Damp, loose, medium to fine SAND, brown, no odor (5-95-0).	
				3.3	P04-02	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				4.1	P04-04	SM			
5			100	1.4		SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				4.8	P04-08	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
			100	4.6		SM			
10			100	3.5	P04-12	SM			
				3.0		SM			
				2.9	P04-15	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
15								<b>Boring terminated at 15' bgs due to refusal.</b>	

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Direct Push  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 15 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** --/2" inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Asphalt  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/04/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 2.3' S of NE corner of building 2  
**Well Location E/W:** 36.5' E of NE corner of building 2  
**Reviewed by:**  
**Date Completed:** 01/04/12

**BORING LOG** | **P05**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At**  
**Time of Drilling** -- feet bgs  
▽ **Water Depth**  
**After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0	N/A							<b>Asphalt</b>	
			100			SP		Damp, loose, medium to fine SAND, brown, no odor (5-95-0).	
				0.6	P05-02	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				0.6	P05-04	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
5			100	0.6		SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
						SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				0.2	P05-08	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				0.2		SM		Damp, very dense, silty SAND, with gravel, light gray, no odor (25-65-10).	
10			100	1.4		SM		Damp, very dense, silty SAND, with gravel, light gray, no odor (25-65-10).	
				4.1	P05-13	SM		Damp, very dense, silty SAND, with gravel, light gray, no odor (25-65-10).	
								Boring terminated at 13' bgs due to refusal.	
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Direct Push  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 13 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 2 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Coldpatch  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**





**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/04/12  
**Surface Conditions:** Asphalt  
**Well Location N/S:** 26' S of NE corner of building 2  
**Well Location E/W:** 46.2' E of NE corner of building 2  
**Reviewed by:**  
**Date Completed:** 01/04/12

**BORING LOG** | **P06**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

**Water Depth At Time of Drilling** -- feet bgs  
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						<b>Asphalt</b>	
			100			SP		Damp, loose, medium to fine SAND, brown, no odor (5-95-0).	
				1.3	P06-02	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
				2.5	P06-04	SM		Damp, dense, silty SAND, with gravel, light brown, no odor (25-70-5).	
5			NR	1.3		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				1.0		SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
				3.8	P06-08	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
			NR						
				1.9	P06-10	SM		Damp, very dense, silty SAND, with gravel, light gray, no odor (25-65-10).	
10								Boring terminated at 10' bgs due to refusal.	
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Direct Push  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 10 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 2 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Coldpatch  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Concrete  
**Well Location N/S:** 1.8' S of N wall in building 2  
**Well Location E/W:** 29' W of E wall in building 2  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P07**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At**  
**Time of Drilling** -- feet bgs  
▽ **Water Depth**  
**After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						4" of concrete	
			70	65.5	P07-02	SM		Damp, dense, silty SAND, with gravel, brown, slight hydrocarbon odor (25-70-5).	
								Boring terminated at 2' bgs due to refusal.	
5									
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 2 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Concrete  
**Well Location N/S:** 25.9' S of N wall in building 2  
**Well Location E/W:** 30' W of E wall in building 2  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P08**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At**  
Time of Drilling -- feet bgs  
▽ **Water Depth**  
After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						4" of concrete	
			100	0.0	P08-02	SM		Damp, very dense, silty SAND, with gravel, brown, no odor (25-70-5).	
								Boring terminated at 2' bgs due to refusal.	
5									
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 2 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Wood floor  
**Well Location N/S:** 40.5' S of N wall in building 3  
**Well Location E/W:** 22' W of E wall in building 3  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P09**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At**  
**Time of Drilling** -- feet bgs  
▽ **Water Depth**  
**After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						<b>2' void between wood floor and ground surface.</b>	
			50	0.0	P09-02	SM		<b>Damp, dense, silty SAND, with gravel, reddish brown, no odor (25-65-10).</b>	
								<b>Boring terminated at 2' bgs due to refusal.</b>	
5									
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 2 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:**  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**





**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Grass and thin top soil  
**Well Location N/S:** 15' S of N wall courtyard outside building 4  
**Well Location E/W:** 26' E of west wall outside building 4  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P10**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At Time of Drilling** -- feet bgs  
▽ **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						Grass and thin top soil	
			80	0.0	P10-02	SM		Damp, dense, silty SAND, with gravel, brown, no odor (25-70-5).	
			80	0.0	P10-04	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
5								Boring terminated at 4' bgs due to refusal.	
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 4 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:**  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Grass  
**Well Location N/S:** 7.5' N of E side of House  
**Well Location E/W:** 34' E of E side of House  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P11**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At Time of Drilling** -- feet bgs  
▽ **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						Grass	
			60	0.0	P11-02	SM		Damp, dense, silty SAND, with gravel, brown, no odor (25-70-5).	
			50	0.0	P11-04	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
5								Boring terminated at 4' bgs due to refusal.	
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 4 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:**  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Grass and thin top soil  
**Well Location N/S:** 11' S of NE side of House  
**Well Location E/W:** 15' E of E side of House  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P12**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At**  
**Time of Drilling** -- feet bgs  
▽ **Water Depth**  
**After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						Grass and thin top soil.	
			60		P12-02	SM		Damp, dense, silty SAND, with gravel, reddish brown, no odor (25-70-5).	
					P12-03	SM		Damp, very dense, silty SAND, with gravel, reddish brown, no odor (25-65-10).	
5								Boring terminated at 3' bgs due to refusal.	
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 3 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:**  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**Project:** AMLI Avtech  
**Project Number:** 0789-004  
**Logged by:** RAH  
**Date Started:** 01/05/12  
**Surface Conditions:** Grass  
**Well Location N/S:** 10' N of NE corner of house  
**Well Location E/W:** 1' E of NE corner of house  
**Reviewed by:**  
**Date Completed:** 01/05/12

**BORING LOG** | **P13**  
--

**Site Address:** 3400 Wallingford Ave N  
Seattle, WA 98103

▽ **Water Depth At Time of Drilling** -- feet bgs  
▽ **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0		N/A						Grass and thin top soil.	
			60	0.7	P13-02	SM		Damp, dense, silty SAND, with gravel, reddish brown, no odor (25-70-5).	
			10	0.0	P13-04	SM		Damp, very dense, silty SAND, with gravel, light brown, no odor (25-65-10).	
5								Boring terminated at 4' bgs due to refusal.	
10									
15									

**Drilling Co./Driller:** ESN/Marty  
**Drilling Equipment:** Roto Hammer Probe  
**Sampler Type:** Macro-core  
**Hammer Type/Weight:** -- lbs  
**Total Boring Depth:** 4 feet bgs  
**Total Well Depth:** -- feet bgs  
**State Well ID No.:** --

**Well/Auger Diameter:** 1 inches  
**Well Screened Interval:** -- feet bgs  
**Screen Slot Size:** -- inches  
**Filter Pack Used:** --  
**Surface Seal:**  
**Annular Seal:** Bentonite  
**Monument Type:** --

**Notes/Comments:**



**ATTACHMENT C**  
**LABORATORY ANALYTICAL REPORTS**

***Friedman & Bruya, Inc. #201018***

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
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January 16, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 4, 2012 from the SOU\_0789\_20120104, F&BI 201018 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0116R.DOC

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 4, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789\_20120104, F&BI 201018 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201018-01	P01-04
201018-02	P01-09
201018-03	P02-1.5
201018-04	P02-04
201018-05	P02-07
201018-06	P02-10
201018-07	P03-04
201018-08	P03-08
201018-09	P03-12
201018-10	P04-02
201018-11	P04-04
201018-12	P04-08
201018-13	P04-12
201018-14	P04-15
201018-15	P05-02
201018-16	P05-04
201018-17	P05-08
201018-18	P05-13
201018-19	P06-02
201018-20	P06-04
201018-21	P06-08
201018-22	P06-10

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

Date Extracted: 01/06/12

Date Analyzed: 01/06/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR BENZENE, TOLUENE, ETHYLBENZENE,  
XYLENES AND TPH AS GASOLINE  
USING EPA METHOD 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
P04-08 201018-12	<0.02	<0.02	<0.02	<0.06	<2	93
P04-15 201018-14	<0.02	<0.02	<0.02	<0.06	<2	94
P05-08 201018-17	<0.02	<0.02	<0.02	<0.06	<2	92
P06-08 201018-21	<0.02	<0.02	<0.02	<0.06	<2	97
Method Blank 02-0033 MB	<0.02	<0.02	<0.02	<0.06	<2	87



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

Date Extracted: 01/06/12

Date Analyzed: 01/06/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
P02-1.5 201018-03	<50	<250	93
P03-04 201018-07	<50	<250	94
P04-15 201018-14	<50	<250	96
P05-08 201018-17	<50	<250	93
P06-08 201018-21	<50	<250	94
Method Blank 02-036 MB	<50	<250	96

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P01-04	Client:	SoundEarth Strategies
Date Received:	01/04/12	Project:	SOU_0789_20120104, F&BI 201018
Date Extracted:	01/06/12	Lab ID:	201018-01
Date Analyzed:	01/06/12	Data File:	201018-01.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	89	60	125
Indium	88	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	10.6
Arsenic	1.31
Selenium	<1
Silver	<1
Cadmium	<1
Barium	29.7
Lead	1.41

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P02-1.5	Client:	SoundEarth Strategies
Date Received:	01/04/12	Project:	SOU_0789_20120104, F&BI 201018
Date Extracted:	01/06/12	Lab ID:	201018-03
Date Analyzed:	01/06/12	Data File:	201018-03.018
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	86	60	125
Indium	86	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	5.08
Arsenic	1.52
Selenium	<1
Silver	<1
Cadmium	<1
Barium	13.5
Lead	1.20

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120104, F&BI 201018
Date Extracted:	01/05/12	Lab ID:	I2-18 mb
Date Analyzed:	01/06/12	Data File:	I2-18.011
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	80	60	125
Indium	84	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

Date Extracted: 01/06/12

Date Analyzed: 01/06/12

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Total Mercury</u>
P01-04 201018-01	<0.1
P02-1.5 201018-03	<0.1
Method Blank	<0.1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: P01-04	Client: SoundEarth Strategies
Date Received: 01/04/12	Project: SOU_0789_20120104, F&BI 201018
Date Extracted: 01/09/12	Lab ID: 201018-01
Date Analyzed: 01/09/12	Data File: 010909.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P02-1.5	Client:	SoundEarth Strategies
Date Received:	01/04/12	Project:	SOU_0789_20120104, F&BI 201018
Date Extracted:	01/09/12	Lab ID:	201018-03
Date Analyzed:	01/09/12	Data File:	010910.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120104, F&BI 201018
Date Extracted:	01/09/12	Lab ID:	02-0043 mb
Date Analyzed:	01/09/12	Data File:	010908.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

Date Extracted: 01/10/12

Date Analyzed: 01/11/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR PCBs REPORTED AS AROCLORS  
USING EPA METHOD 8082A**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	Aroclor							Surrogate (% Rec.) (Limit 50-150)
	<u>1221</u>	<u>1232</u>	<u>1016</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	
P03-04 201018-07	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	85
Method Blank 02-063 MB	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR BENZENE, TOLUENE, ETHYLBENZENE,  
XYLENES, AND TPH AS GASOLINE  
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 201036-01 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	90	69-120
Toluene	mg/kg (ppm)	0.5	93	70-117
Ethylbenzene	mg/kg (ppm)	0.5	94	65-123
Xylenes	mg/kg (ppm)	1.5	94	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 201039-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	99	73-135	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	74-139



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 201037-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	18.7	111 b	106 b	51-132	5 b
Arsenic	mg/kg (ppm)	10	4.45	102 b	88 b	44-151	15 b
Selenium	mg/kg (ppm)	5	<1	86	86	52-128	0
Silver	mg/kg (ppm)	10	<1	104	98	69-125	6
Cadmium	mg/kg (ppm)	10	<1	107	99	83-120	8
Barium	mg/kg (ppm)	50	61.8	144 b	112 b	47-147	25 b
Lead	mg/kg (ppm)	50	12.7	108 b	101 b	65-126	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	114	79-125
Arsenic	mg/kg (ppm)	10	88	80-120
Selenium	mg/kg (ppm)	5	88	81-121
Silver	mg/kg (ppm)	10	97	84-117
Cadmium	mg/kg (ppm)	10	99	89-116
Barium	mg/kg (ppm)	50	99	88-113
Lead	mg/kg (ppm)	50	103	81-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201037-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	115	115	45-162	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	102	63-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 201034-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	38	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	61	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	62	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	69	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	72	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	72	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	75	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	77	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	77	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	80	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	79	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	81	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	81	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	81	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	81	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	81	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	82	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	81	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	79	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	81	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.03	83	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	84	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	83	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	82	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	92	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	86	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	82	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	83	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	30-142
2-Hexanone	mg/kg (ppm)	12.5	<0.5	89	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	85	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	80	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	84	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	85	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	82	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	86	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	81	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	87	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	90	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	84	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	90	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	86	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	88	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	84	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	89	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	81	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	81	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	88	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	87	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	88	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	87	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	82	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	83	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	81	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	80	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	76	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	83	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	69	19-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	93	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	88	20-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	47	47	10-146	0
Chloromethane	mg/kg (ppm)	2.5	68	69	27-133	1
Vinyl chloride	mg/kg (ppm)	2.5	75	76	22-139	1
Bromomethane	mg/kg (ppm)	2.5	73	75	38-114	3
Chloroethane	mg/kg (ppm)	2.5	75	77	20-153	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	77	76	10-196	1
Acetone	mg/kg (ppm)	12.5	85	86	52-141	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	83	78	47-128	6
Methylene chloride	mg/kg (ppm)	2.5	81	82	42-132	1
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	88	88	60-123	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	88	86	67-127	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	90	90	68-115	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	94	92	57-133	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	97	72-113	0
Chloroform	mg/kg (ppm)	2.5	93	91	66-120	2
2-Butanone (MEK)	mg/kg (ppm)	12.5	96	98	57-123	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	90	87	56-135	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	93	94	62-131	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	98	96	69-128	2
Carbon tetrachloride	mg/kg (ppm)	2.5	92	92	60-139	0
Benzene	mg/kg (ppm)	2.5	94	93	68-114	1
Trichloroethene	mg/kg (ppm)	2.5	97	96	68-114	1
1,2-Dichloropropane	mg/kg (ppm)	2.5	98	96	72-127	2
Bromodichloromethane	mg/kg (ppm)	2.5	96	93	72-130	3
Dibromomethane	mg/kg (ppm)	2.5	95	94	70-120	1
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	101	102	45-145	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	101	99	75-136	2
Toluene	mg/kg (ppm)	2.5	96	94	66-126	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	98	95	72-132	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	95	93	75-113	2
2-Hexanone	mg/kg (ppm)	12.5	101	100	33-152	1
1,3-Dichloropropane	mg/kg (ppm)	2.5	97	96	72-130	1
Tetrachloroethene	mg/kg (ppm)	2.5	97	95	72-114	2
Dibromochloromethane	mg/kg (ppm)	2.5	100	97	74-125	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	100	97	74-132	3
Chlorobenzene	mg/kg (ppm)	2.5	93	92	76-111	1
Ethylbenzene	mg/kg (ppm)	2.5	99	97	64-123	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	94	92	69-135	2
m,p-Xylene	mg/kg (ppm)	5	101	99	78-122	2
o-Xylene	mg/kg (ppm)	2.5	107	104	77-124	3
Styrene	mg/kg (ppm)	2.5	98	94	74-126	4
Isopropylbenzene	mg/kg (ppm)	2.5	106	102	76-127	4
Bromoform	mg/kg (ppm)	2.5	101	99	56-132	2
n-Propylbenzene	mg/kg (ppm)	2.5	105	103	74-124	2
Bromobenzene	mg/kg (ppm)	2.5	99	96	72-122	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	106	103	76-126	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	96	93	56-143	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	94	92	61-137	2
2-Chlorotoluene	mg/kg (ppm)	2.5	103	101	74-121	2
4-Chlorotoluene	mg/kg (ppm)	2.5	104	101	75-122	3
tert-Butylbenzene	mg/kg (ppm)	2.5	108	105	73-130	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	105	103	76-125	2
sec-Butylbenzene	mg/kg (ppm)	2.5	104	102	71-130	2
p-Isopropyltoluene	mg/kg (ppm)	2.5	98	96	70-132	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	95	94	75-121	1
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	94	93	74-117	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	93	93	76-121	0
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	83	82	61-136	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	93	91	70-129	2
Hexachlorobutadiene	mg/kg (ppm)	2.5	81	83	50-153	2
Naphthalene	mg/kg (ppm)	2.5	99	95	60-125	4
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	97	92	62-130	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/04/12

Project: SOU\_0789\_20120104, F&BI 201018

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
POLYCHLORINATED BIPHENYLS AS  
AROCOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 201018-07 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	<0.1	<0.1	nm
Aroclor 1260	mg/kg (ppm)	<0.1	<0.1	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	94	100	60-142	6
Aroclor 1260	mg/kg (ppm)	0.8	100	98	63-144	2

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

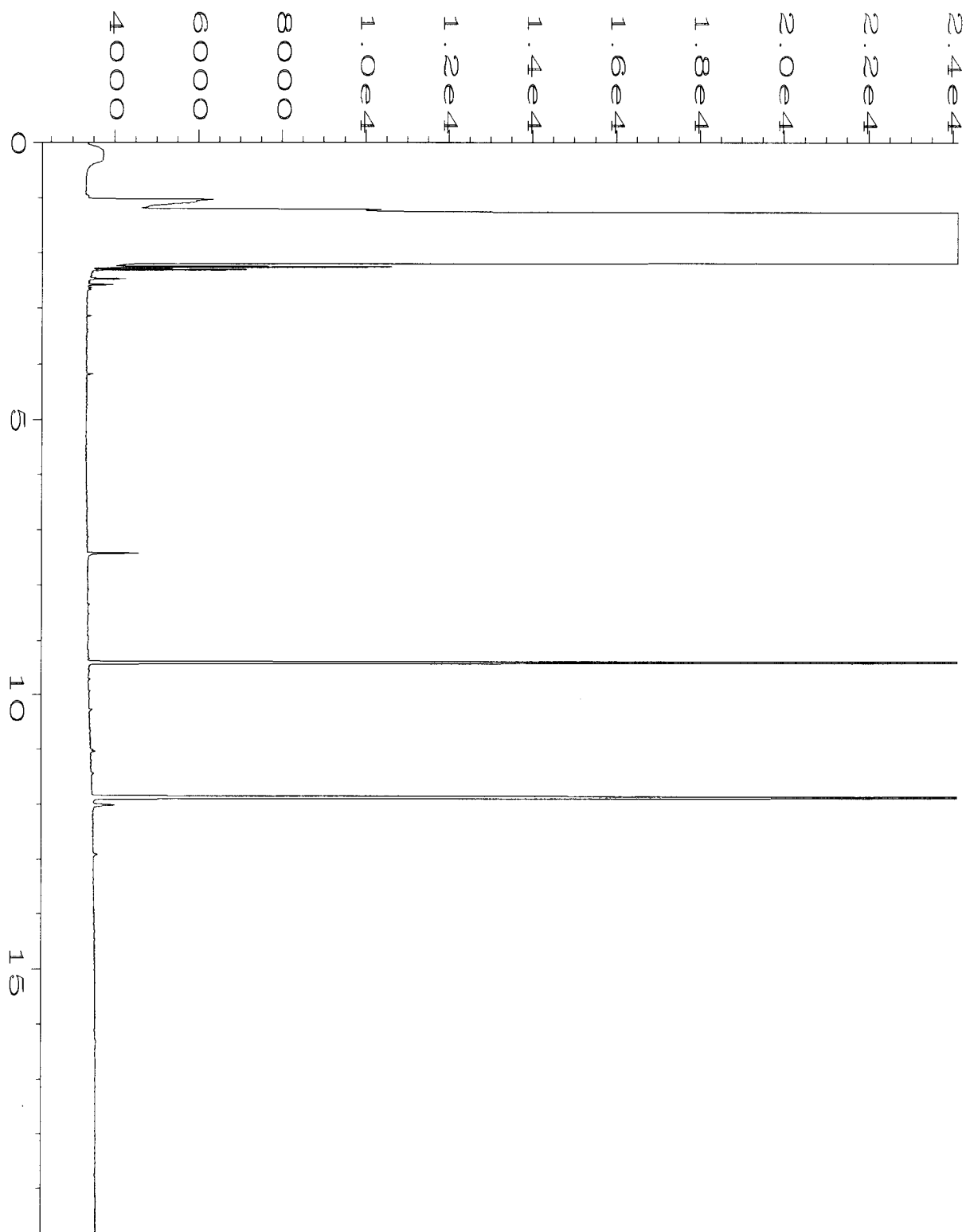
pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

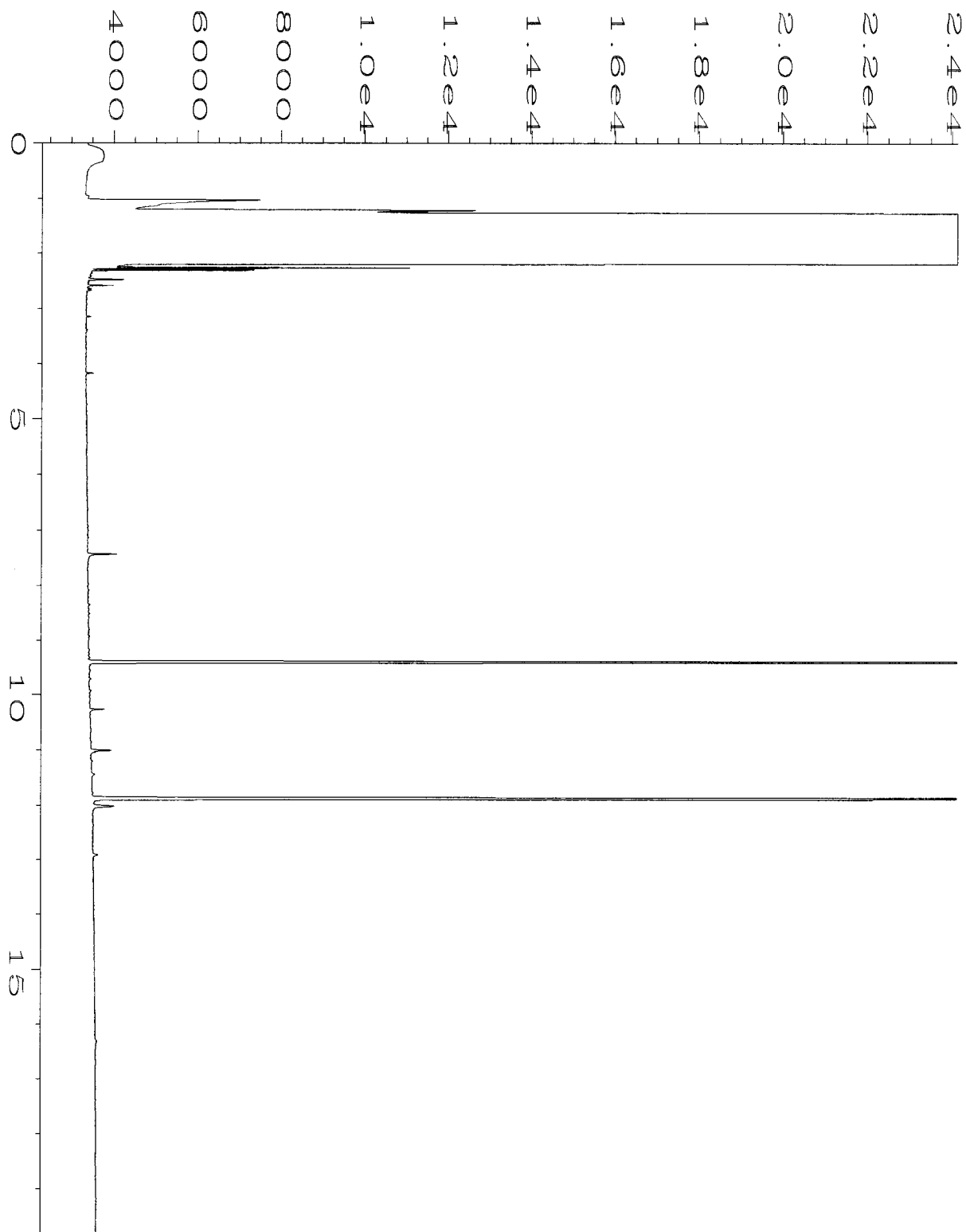
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

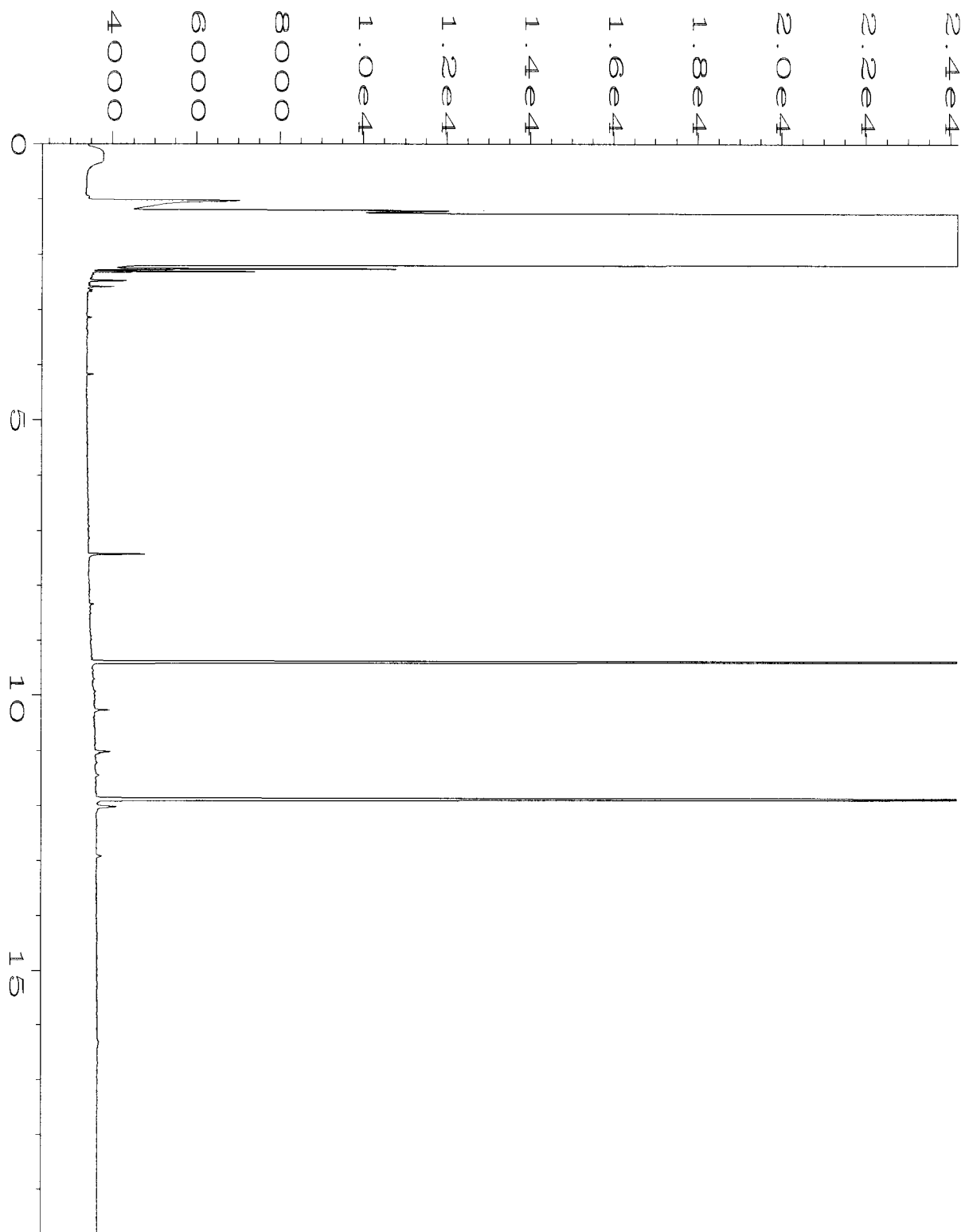




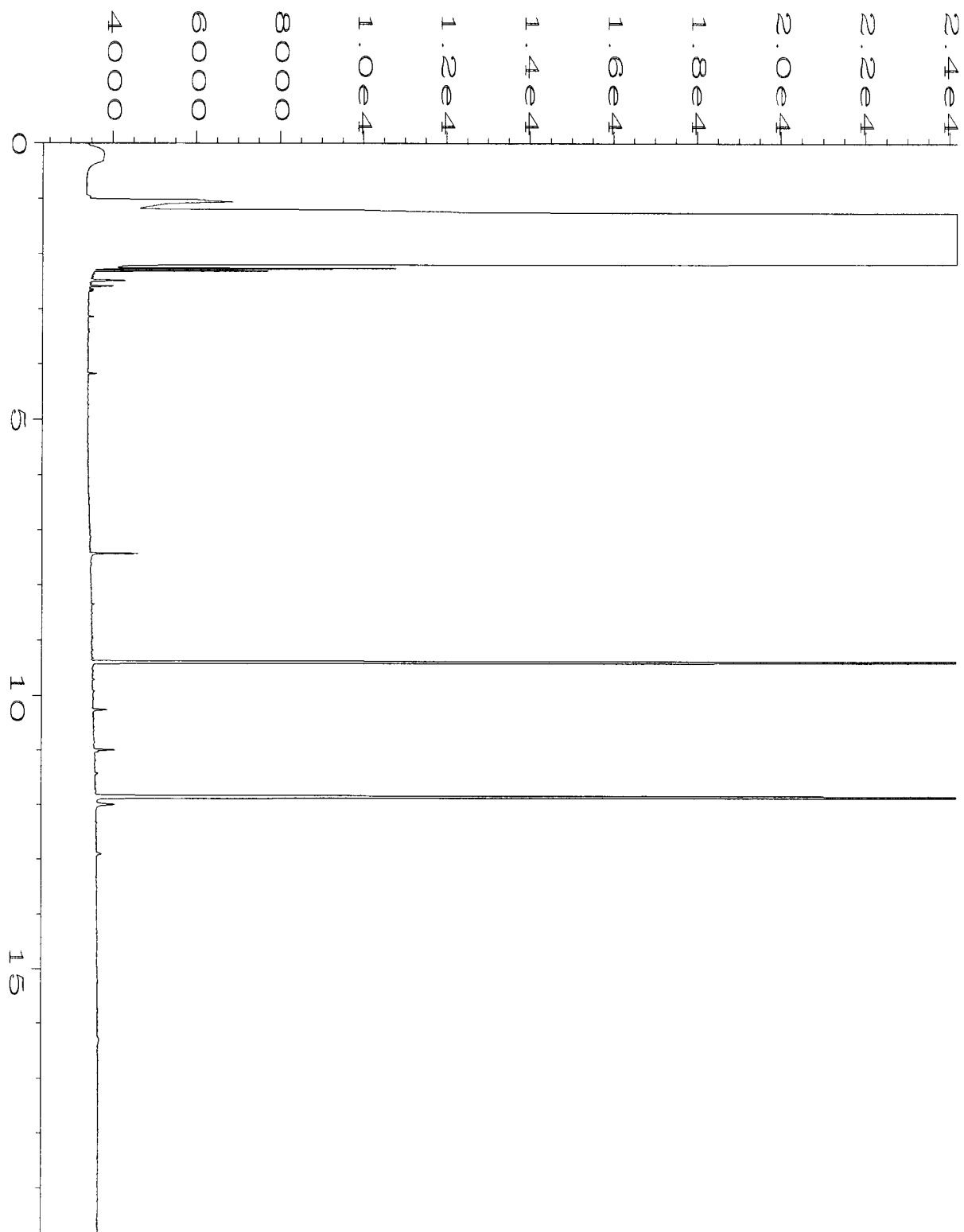
Data File Name	: C:\HPCHEM\4\DATA\01-06-12\025F0901.D	Page Number	: 1
Operator	: ML	Vial Number	: 25
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 201018-03	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 06 Jan 12 08:56 PM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 09:25 AM		



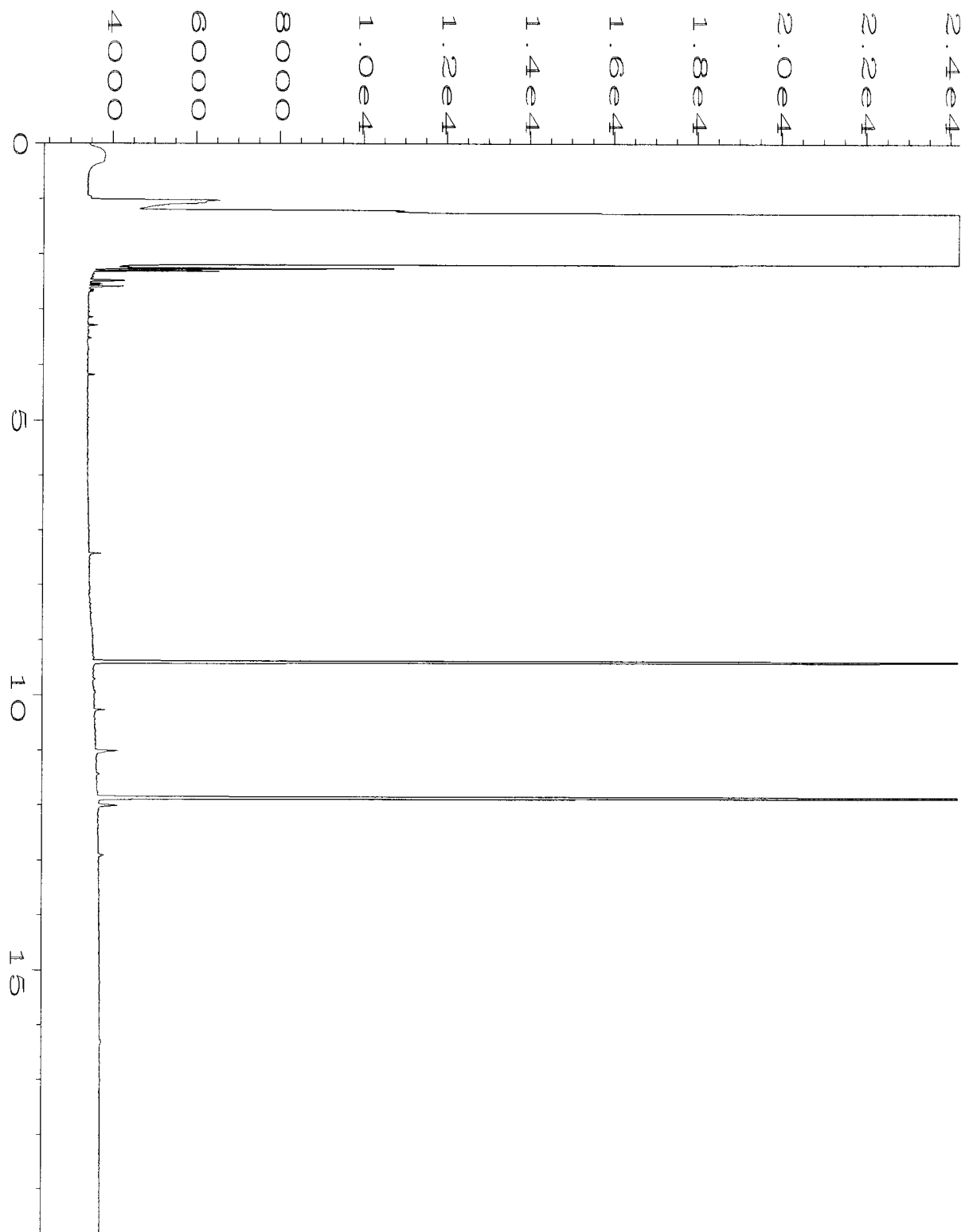
Data File Name	: C:\HPCHEM\4\DATA\01-06-12\026F0901.D	Page Number	: 1
Operator	: ML	Vial Number	: 26
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 201018-07	Sequence Line	: 9
Run Time Bar Code:		Instrument Method	: TPHD.MTH
Acquired on	: 06 Jan 12 09:22 PM	Analysis Method	: TPHD.MTH
Report Created on:	: 09 Jan 12 09:27 AM		



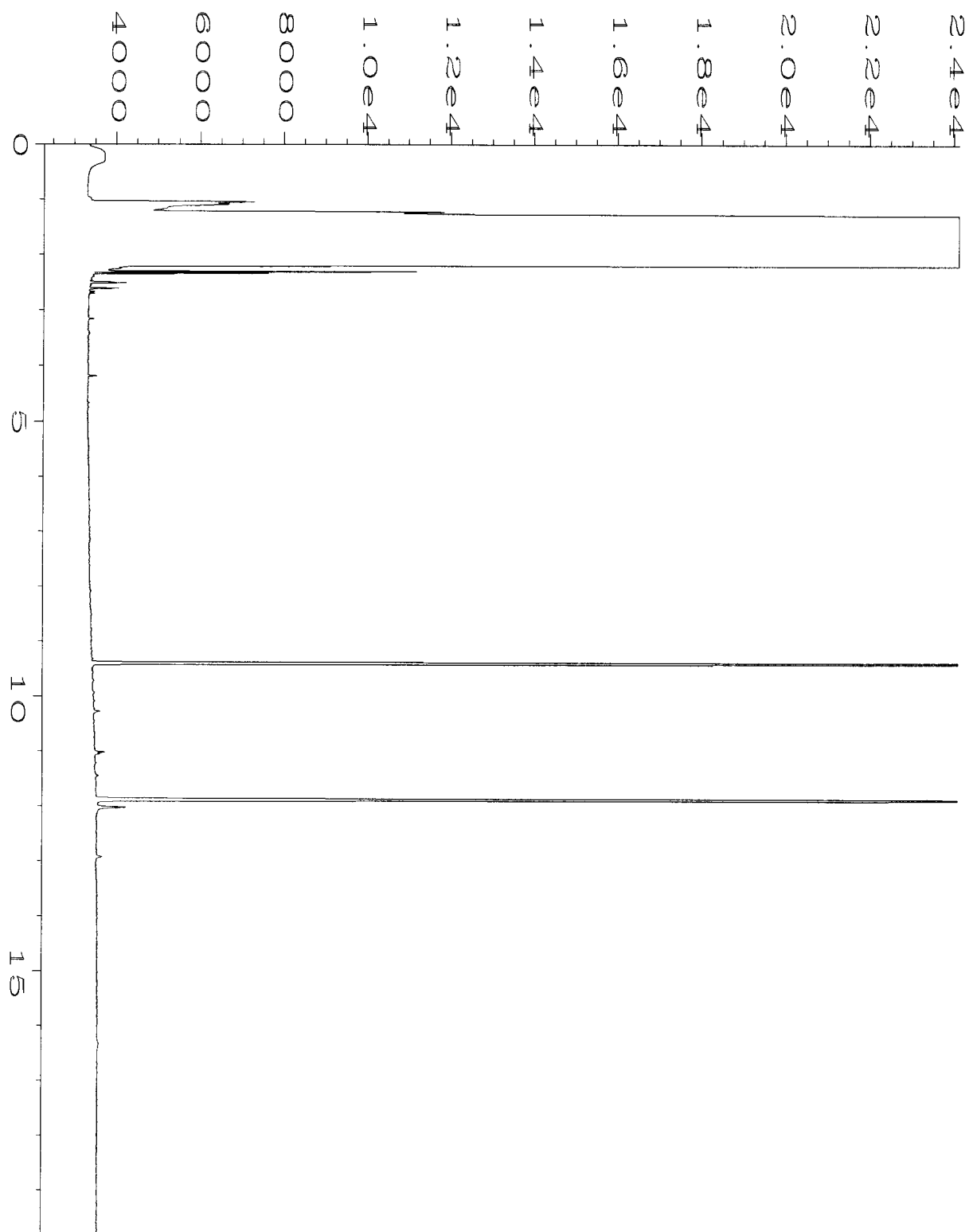
Data File Name	: C:\HPCHEM\4\DATA\01-06-12\027F1101.D	Page Number	: 1
Operator	: ML	Vial Number	: 27
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 201018-14	Sequence Line	: 11
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 06 Jan 12 10:40 PM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 09:27 AM		



Data File Name	: C:\HPCHEM\4\DATA\01-06-12\028F1101.D	Page Number	: 1
Operator	: ML	Vial Number	: 28
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 201018-17	Sequence Line	: 11
Run Time Bar Code:		Instrument Method	: TPHD.MTH
Acquired on	: 06 Jan 12 11:06 PM	Analysis Method	: TPHD.MTH
Report Created on:	: 09 Jan 12 09:27 AM		

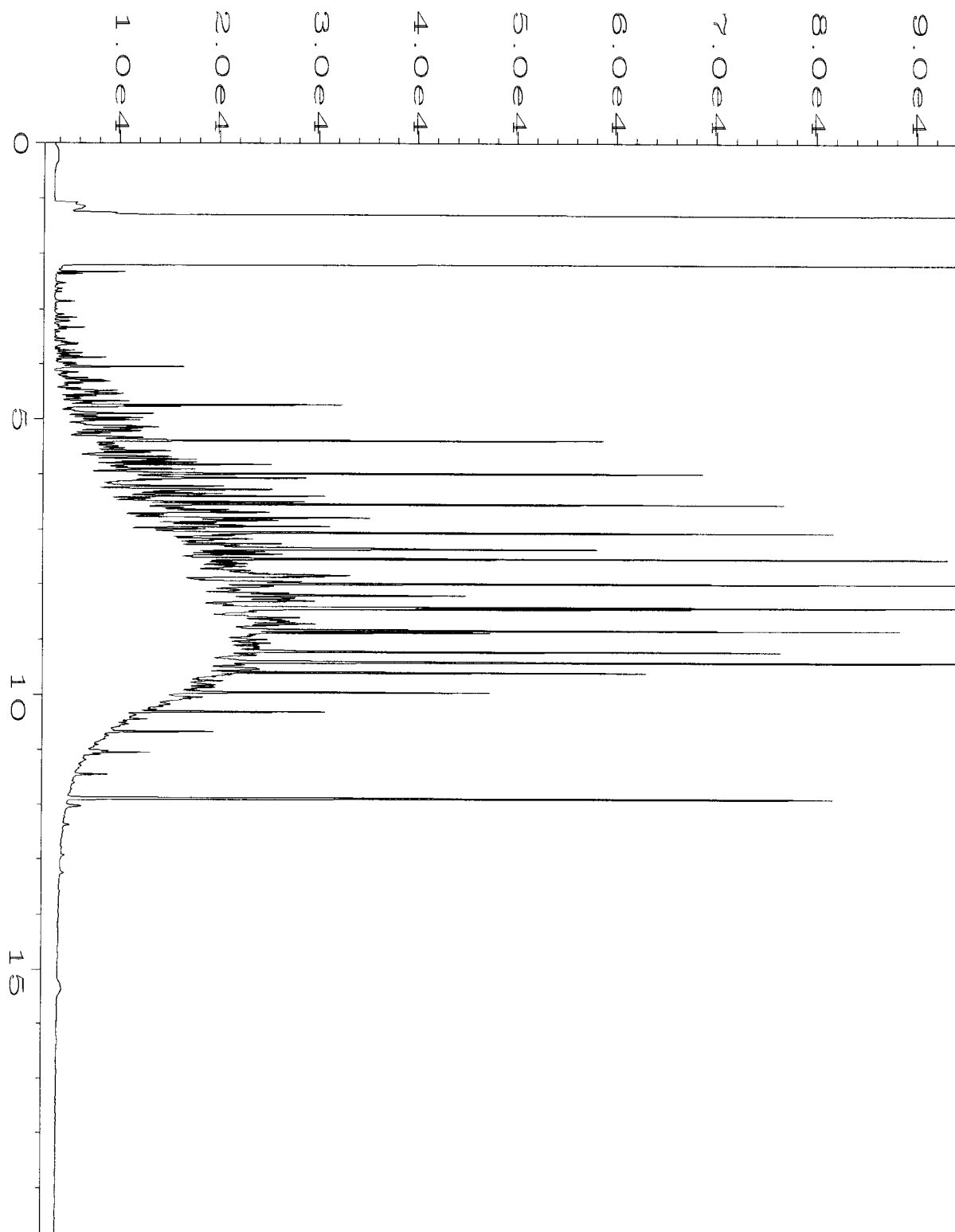


Data File Name	: C:\HPCHEM\4\DATA\01-06-12\029F1101.D	Page Number	: 1
Operator	: ML	Vial Number	: 29
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 201018-21	Sequence Line	: 11
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 06 Jan 12 11:32 PM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 09:27 AM		



Data File Name	: C:\HPCHEM\4\DATA\01-06-12\015F0901.D	Page Number	: 1
Operator	: ML	Vial Number	: 15
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 02-036 mb	Sequence Line	: 9
Run Time Bar Code:		Instrument Method	: TPHD.MTH
Acquired on	: 06 Jan 12 04:37 PM	Analysis Method	: TPHD.MTH
Report Created on:	: 09 Jan 12 09:21 AM		





Data File Name	: C:\HPCHEM\4\DATA\01-06-12\003F0201.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 06 Jan 12 09:03 AM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 09:20 AM		

201018

## SAMPLE CHAIN OF CUSTODY

ME 01-04-12

VS3/A05

Send Report To

Rob Roberts

Company

SES

Address 2811 Fairview Ave E Suite 2000

City, State, ZIP Seattle WA 98102

Phone # 206 306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO.

Autoch

0789

PO #

REMARKS

X-analyse as marked per  
RR 1/5/12 MEGEMS Y /  
N

Page # 1 of 2

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	RCRA-8 Metals	PAH	PCBs	
P01-04	P01	04	01A-E	1-4-12	0805	So.1	5				X		X			Hold
P01-09	P01	09	02A-E		0820	So.1	5				X		X			Hold
P02-1.5	P02	01.5	03		0850	So.1	1	X			X		X			Hold
P02-04	I	04	04A-E		0855	So.1	5									Hold
P02-07	I	07	05		0900	So.1	5									Hold
P02-10	I	10	06		0905	So.1	5									Hold
P03-04	P03	04	07		0915	So.1	5	X							X	Hold
P03-08	I	08	08		0920	So.1	5									Hold
P03-12	I	12	09		0930	So.1	5									Hold
P04-02	P04	02	10		0945	So.1	1									Hold
P04-04	I	04	11A-E		0950	So.1	5									Hold
P04-08	I	08	12		1000	So.1	5		X	X						Hold
P04-12	I	12	13		1010	So.1	5									Hold

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119

Ph. (206) 285-8282

Fax (206) 283-5044

## SIGNATURE

Relinquished by: [Signature]

Received by: [Signature]

Relinquished by:

Received by:

## PRINT NAME

Robert A. Honsberger

Nhan Phan

## COMPANY

SES

FeBI

## DATE

1-4-12

1/4/12

## TIME

1355

1355

201018

## SAMPLE CHAIN OF CUSTODY

ME 01-04-12

V33/A05

Send Report To \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, ZIP \_\_\_\_\_

Phone # \_\_\_\_\_

Fax # \_\_\_\_\_

SAMPLERS (signature) *[Signature]*

PROJECT NAME/NO.

Autah

0789

PO # \_\_\_\_\_

REMARKS \_\_\_\_\_

GEMS Y /  
N

Page # 2 of 2

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by: \_\_\_\_\_

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED							Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	PAH	
P01-15	P01	15	14AE	1-4-12	1015	Soil	5	X	X	X					Field
P05-02	P05	02	15		1025	Soil	1								Field
P05-04		04	16AE		1030	Soil	5								Field
P05-08		08	17		1040	Soil	5	X	X	X					Field
P05-13		13	18		1050	Soil	5								Field
P06-02	P06	02	19		1100	Soil	1								Field
P06-04		04	20AE		1105	Soil	5								Field
P06-08		08	21		1125	Soil	5	X	X	X					Field
P06-10		10	22		1130	Soil	5								Field

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	Robert A. Huxley	SFS	1-4-12	1355
Received by: <i>[Signature]</i>	Nhan Phan	FeBI	1-4-12	1355
Relinquished by:				
Received by:				

***Friedman & Bruya, Inc. #201034 and additional***

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

January 16, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 5, 2012 from the SOU\_0789\_20120105, F&BI 201034 project. There are 28 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0116R.DOC

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 5, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789\_20120105, F&BI 201034 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201034-01	P07-02
201034-02	P08-02
201034-03	P09-02
201034-04	P10-0.5
201034-05	P10-02
201034-06	P10-04
201034-07	P11-02
201034-08	P11-04
201034-09	P12-02
201034-10	P12-03
201034-11	P13-02
201034-12	P13-04

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

Date Extracted: 01/06/12

Date Analyzed: 01/08/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
P07-02 201034-01	<50	<250	111
P08-02 201034-02	<50	<250	110
Method Blank 02-037 MB	<50	<250	108



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P07-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-01
Date Analyzed:	01/06/12	Data File:	201034-01.019
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	88	60	125
Indium	87	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	18.6
Arsenic	1.47
Selenium	<1
Silver	<1
Cadmium	<1
Barium	44.3
Lead	172

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P08-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-02
Date Analyzed:	01/06/12	Data File:	201034-02.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	79	60	125
Indium	80	60	125
Holmium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	8.75
Arsenic	1.36
Selenium	<1
Silver	<1
Cadmium	<1
Barium	30.1
Lead	1.51

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P09-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-03
Date Analyzed:	01/06/12	Data File:	201034-03.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	89	60	125
Indium	86	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	15.0
Arsenic	3.11
Selenium	<1
Silver	<1
Cadmium	<1
Barium	79.4
Lead	4.48

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P10-0.5	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-04
Date Analyzed:	01/06/12	Data File:	201034-04.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125
Indium	85	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	16.7
Arsenic	7.90
Selenium	<1
Silver	<1
Cadmium	<1
Barium	191
Lead	71.0

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P12-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-09
Date Analyzed:	01/06/12	Data File:	201034-09.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	86	60	125
Indium	88	60	125
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	12.3
Arsenic	12.2
Selenium	<1
Silver	<1
Cadmium	<1
Barium	161
Lead	193

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P13-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-11
Date Analyzed:	01/06/12	Data File:	201034-11.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	83	60	125
Indium	84	60	125
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	12.4
Arsenic	16.0
Selenium	<1
Silver	<1
Cadmium	1.37
Barium	163
Lead	296

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/05/12	Lab ID:	I2-18 mb
Date Analyzed:	01/06/12	Data File:	I2-18.011
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	80	60	125
Indium	84	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

Date Extracted: 01/06/12

Date Analyzed: 01/06/12

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Total Mercury</u>
P07-02 201034-01	<0.1
P08-02 201034-02	<0.1
P09-02 201034-03	<0.1
P10-0.5 201034-04	0.28
P12-02 201034-09	0.12
P13-02 201034-11	0.18
Method Blank	<0.1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: P07-02	Client: SoundEarth Strategies
Date Received: 01/05/12	Project: SOU_0789_20120105, F&BI 201034
Date Extracted: 01/09/12	Lab ID: 201034-01
Date Analyzed: 01/09/12	Data File: 010911.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: P09-02	Client: SoundEarth Strategies
Date Received: 01/05/12	Project: SOU_0789_20120105, F&BI 201034
Date Extracted: 01/09/12	Lab ID: 201034-03
Date Analyzed: 01/09/12	Data File: 010912.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	104	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: P10-04	Client: SoundEarth Strategies
Date Received: 01/05/12	Project: SOU_0789_20120105, F&BI 201034
Date Extracted: 01/09/12	Lab ID: 201034-06
Date Analyzed: 01/09/12	Data File: 010913.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: P11-04	Client: SoundEarth Strategies
Date Received: 01/05/12	Project: SOU_0789_20120105, F&BI 201034
Date Extracted: 01/09/12	Lab ID: 201034-08
Date Analyzed: 01/09/12	Data File: 010914.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	104	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P13-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/09/12	Lab ID:	201034-11
Date Analyzed:	01/09/12	Data File:	010915.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/09/12	Lab ID:	02-0043 mb
Date Analyzed:	01/09/12	Data File:	010908.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

Date Extracted: 01/10/12

Date Analyzed: 01/11/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR PCBs REPORTED AS AROCLORS  
USING EPA METHOD 8082A**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	Aroclor							Surrogate (% Rec.) (Limit 50-150)
	<u>1221</u>	<u>1232</u>	<u>1016</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	
P10-0.5 201034-04	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	69
Method Blank 02-063 MB	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	92

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	P07-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-01 1/5
Date Analyzed:	01/06/12	Data File:	010618.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	100	50	150
Benzo(a)anthracene-d12	100	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	P10-0.5	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	201034-04 1/5
Date Analyzed:	01/06/12	Data File:	010624.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	50	150
Benzo(a)anthracene-d12	82	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.027
Acenaphthylene	0.079
Acenaphthene	0.012
Fluorene	0.032
Phenanthrene	0.37
Anthracene	0.059
Fluoranthene	0.30
Pyrene	0.41
Benz(a)anthracene	0.15
Chrysene	0.22
Benzo(a)pyrene	0.24
Benzo(b)fluoranthene	0.25
Benzo(k)fluoranthene	0.082
Indeno(1,2,3-cd)pyrene	0.21
Dibenz(a,h)anthracene	0.044
Benzo(g,h,i)perylene	0.22

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/06/12	Lab ID:	02-0020 mb2 1/5
Date Analyzed:	01/06/12	Data File:	010608.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	50	150
Benzo(a)anthracene-d12	106	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 201036-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	92	91	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	93	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 201037-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	18.7	111 b	106 b	51-132	5 b
Arsenic	mg/kg (ppm)	10	4.45	102 b	88 b	44-151	15 b
Selenium	mg/kg (ppm)	5	<1	86	86	52-128	0
Silver	mg/kg (ppm)	10	<1	104	98	69-125	6
Cadmium	mg/kg (ppm)	10	<1	107	99	83-120	8
Barium	mg/kg (ppm)	50	61.8	144 b	112 b	47-147	25 b
Lead	mg/kg (ppm)	50	12.7	108 b	101 b	65-126	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	114	79-125
Arsenic	mg/kg (ppm)	10	88	80-120
Selenium	mg/kg (ppm)	5	88	81-121
Silver	mg/kg (ppm)	10	97	84-117
Cadmium	mg/kg (ppm)	10	99	89-116
Barium	mg/kg (ppm)	50	99	88-113
Lead	mg/kg (ppm)	50	103	81-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201037-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	115	115	45-162	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	102	63-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 201034-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	38	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	61	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	62	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	69	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	72	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	72	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	75	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	77	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	77	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	80	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	79	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	81	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	81	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	81	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	81	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	81	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	82	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	81	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	79	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	81	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.03	83	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	84	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	83	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	82	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	92	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	86	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	82	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	83	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	30-142
2-Hexanone	mg/kg (ppm)	12.5	<0.5	89	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	85	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	80	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	84	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	85	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	82	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	86	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	81	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	87	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	90	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	84	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	90	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	86	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	88	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	84	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	89	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	81	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	81	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	88	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	87	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	88	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	87	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	82	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	83	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	81	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	80	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	76	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	83	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	69	19-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	93	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	88	20-144



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	47	47	10-146	0
Chloromethane	mg/kg (ppm)	2.5	68	69	27-133	1
Vinyl chloride	mg/kg (ppm)	2.5	75	76	22-139	1
Bromomethane	mg/kg (ppm)	2.5	73	75	38-114	3
Chloroethane	mg/kg (ppm)	2.5	75	77	20-153	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	77	76	10-196	1
Acetone	mg/kg (ppm)	12.5	85	86	52-141	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	83	78	47-128	6
Methylene chloride	mg/kg (ppm)	2.5	81	82	42-132	1
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	88	88	60-123	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	88	86	67-127	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	90	90	68-115	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	94	92	57-133	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	97	72-113	0
Chloroform	mg/kg (ppm)	2.5	93	91	66-120	2
2-Butanone (MEK)	mg/kg (ppm)	12.5	96	98	57-123	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	90	87	56-135	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	93	94	62-131	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	98	96	69-128	2
Carbon tetrachloride	mg/kg (ppm)	2.5	92	92	60-139	0
Benzene	mg/kg (ppm)	2.5	94	93	68-114	1
Trichloroethene	mg/kg (ppm)	2.5	97	96	68-114	1
1,2-Dichloropropane	mg/kg (ppm)	2.5	98	96	72-127	2
Bromodichloromethane	mg/kg (ppm)	2.5	96	93	72-130	3
Dibromomethane	mg/kg (ppm)	2.5	95	94	70-120	1
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	101	102	45-145	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	101	99	75-136	2
Toluene	mg/kg (ppm)	2.5	96	94	66-126	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	98	95	72-132	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	95	93	75-113	2
2-Hexanone	mg/kg (ppm)	12.5	101	100	33-152	1
1,3-Dichloropropane	mg/kg (ppm)	2.5	97	96	72-130	1
Tetrachloroethene	mg/kg (ppm)	2.5	97	95	72-114	2
Dibromochloromethane	mg/kg (ppm)	2.5	100	97	74-125	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	100	97	74-132	3
Chlorobenzene	mg/kg (ppm)	2.5	93	92	76-111	1
Ethylbenzene	mg/kg (ppm)	2.5	99	97	64-123	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	94	92	69-135	2
m,p-Xylene	mg/kg (ppm)	5	101	99	78-122	2
o-Xylene	mg/kg (ppm)	2.5	107	104	77-124	3
Styrene	mg/kg (ppm)	2.5	98	94	74-126	4
Isopropylbenzene	mg/kg (ppm)	2.5	106	102	76-127	4
Bromoform	mg/kg (ppm)	2.5	101	99	56-132	2
n-Propylbenzene	mg/kg (ppm)	2.5	105	103	74-124	2
Bromobenzene	mg/kg (ppm)	2.5	99	96	72-122	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	106	103	76-126	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	96	93	56-143	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	94	92	61-137	2
2-Chlorotoluene	mg/kg (ppm)	2.5	103	101	74-121	2
4-Chlorotoluene	mg/kg (ppm)	2.5	104	101	75-122	3
tert-Butylbenzene	mg/kg (ppm)	2.5	108	105	73-130	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	105	103	76-125	2
sec-Butylbenzene	mg/kg (ppm)	2.5	104	102	71-130	2
p-Isopropyltoluene	mg/kg (ppm)	2.5	98	96	70-132	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	95	94	75-121	1
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	94	93	74-117	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	93	93	76-121	0
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	83	82	61-136	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	93	91	70-129	2
Hexachlorobutadiene	mg/kg (ppm)	2.5	81	83	50-153	2
Naphthalene	mg/kg (ppm)	2.5	99	95	60-125	4
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	97	92	62-130	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
POLYCHLORINATED BIPHENYLS AS  
AROCOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 201018-07 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	<0.1	<0.1	nm
Aroclor 1260	mg/kg (ppm)	<0.1	<0.1	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	94	100	60-142	6
Aroclor 1260	mg/kg (ppm)	0.8	100	98	63-144	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/16/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL  
SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: 201011-01 1/250 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Naphthalene	mg/kg (ppm)	4.2	4.1	2
Acenaphthylene	mg/kg (ppm)	<0.5	<0.5	nm
Acenaphthene	mg/kg (ppm)	<0.5	<0.5	nm
Fluorene	mg/kg (ppm)	1.8	1.8	0
Phenanthrene	mg/kg (ppm)	4.5	4.3	5
Anthracene	mg/kg (ppm)	<0.5	4.4	nm
Fluoranthene	mg/kg (ppm)	<0.5	<0.5	nm
Pyrene	mg/kg (ppm)	<0.5	<0.5	nm
Benz(a)anthracene	mg/kg (ppm)	<0.5	<0.5	nm
Chrysene	mg/kg (ppm)	<0.5	<0.5	nm
Benzo(b)fluoranthene	mg/kg (ppm)	<0.5	<0.5	nm
Benzo(k)fluoranthene	mg/kg (ppm)	<0.5	<0.5	nm
Benzo(a)pyrene	mg/kg (ppm)	<0.5	<0.5	nm
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	<0.5	<0.5	nm
Dibenz(a,h)anthracene	mg/kg (ppm)	<0.5	<0.5	nm
Benzo(g,h,i)perylene	mg/kg (ppm)	<0.5	<0.5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	102	104	61-115	2
Acenaphthylene	mg/kg (ppm)	0.17	99	97	63-110	2
Acenaphthene	mg/kg (ppm)	0.17	101	100	60-115	1
Fluorene	mg/kg (ppm)	0.17	99	100	59-116	1
Phenanthrene	mg/kg (ppm)	0.17	101	100	60-113	1
Anthracene	mg/kg (ppm)	0.17	95	93	56-103	2
Fluoranthene	mg/kg (ppm)	0.17	96	99	60-116	3
Pyrene	mg/kg (ppm)	0.17	94	93	60-116	1
Benz(a)anthracene	mg/kg (ppm)	0.17	89	90	53-109	1
Chrysene	mg/kg (ppm)	0.17	99	98	61-116	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	94	94	57-118	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	99	100	61-118	1
Benzo(a)pyrene	mg/kg (ppm)	0.17	89	86	53-108	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	100	96	46-127	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	117	109	55-121	7
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	103	98	56-118	5

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

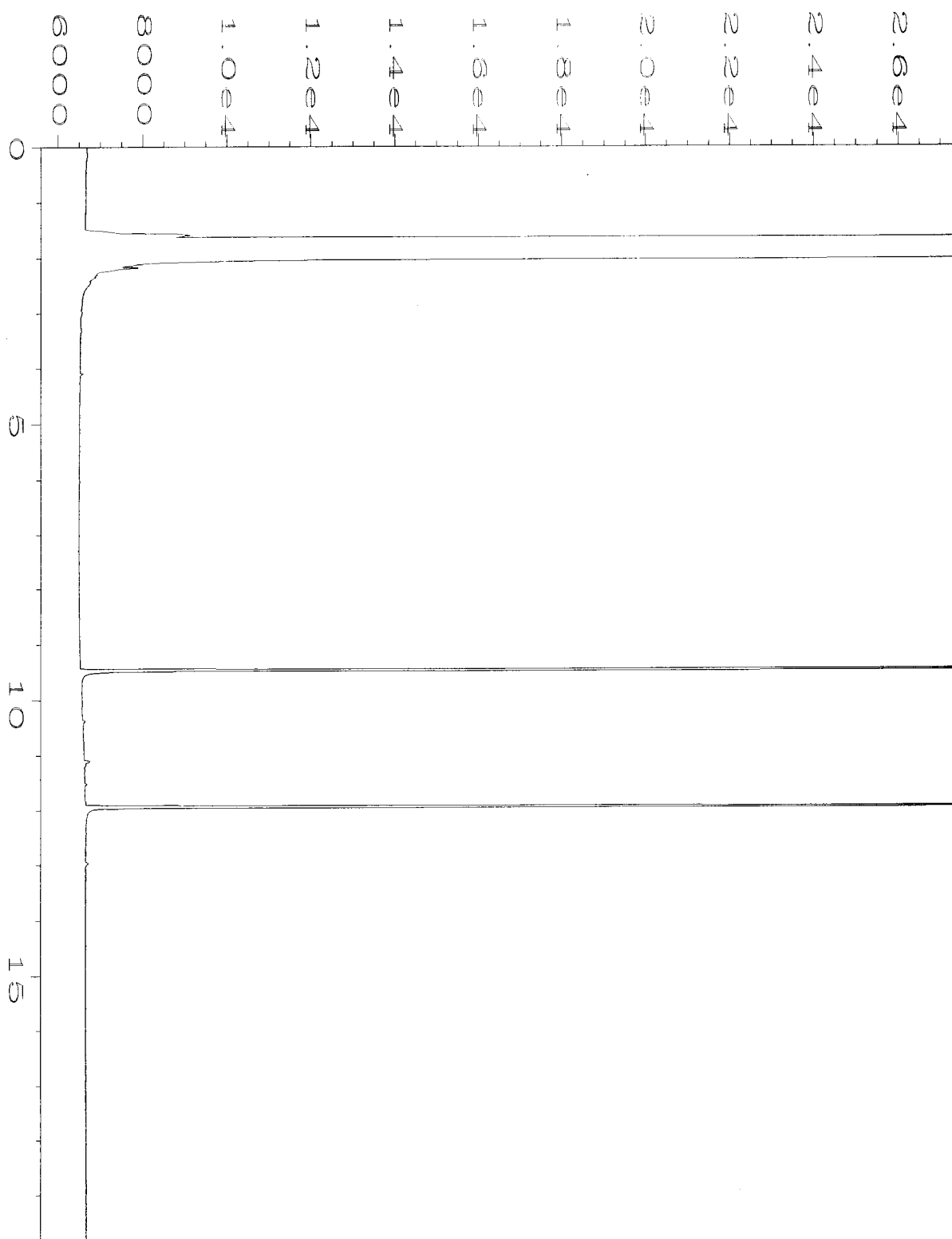
pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

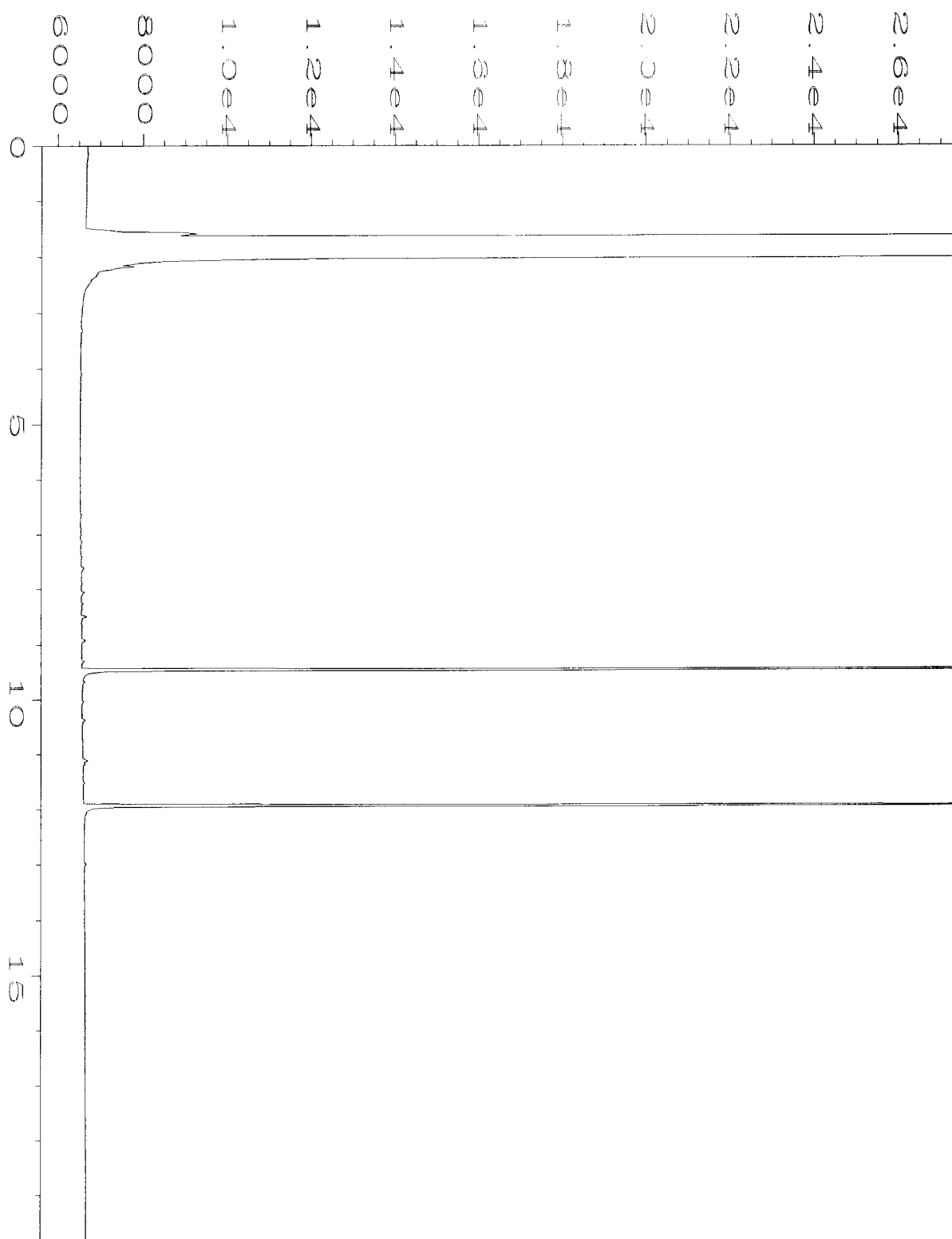
ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

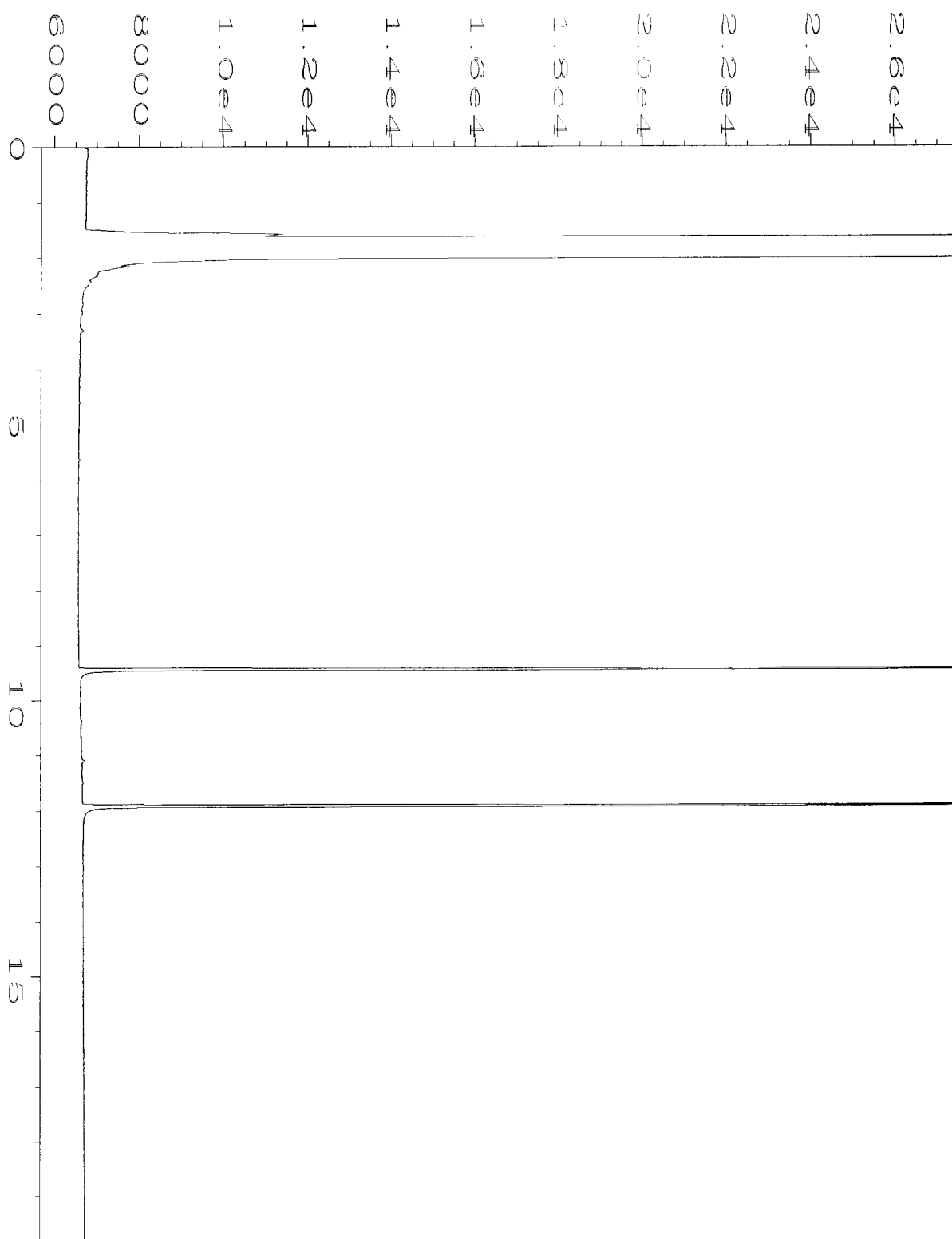
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



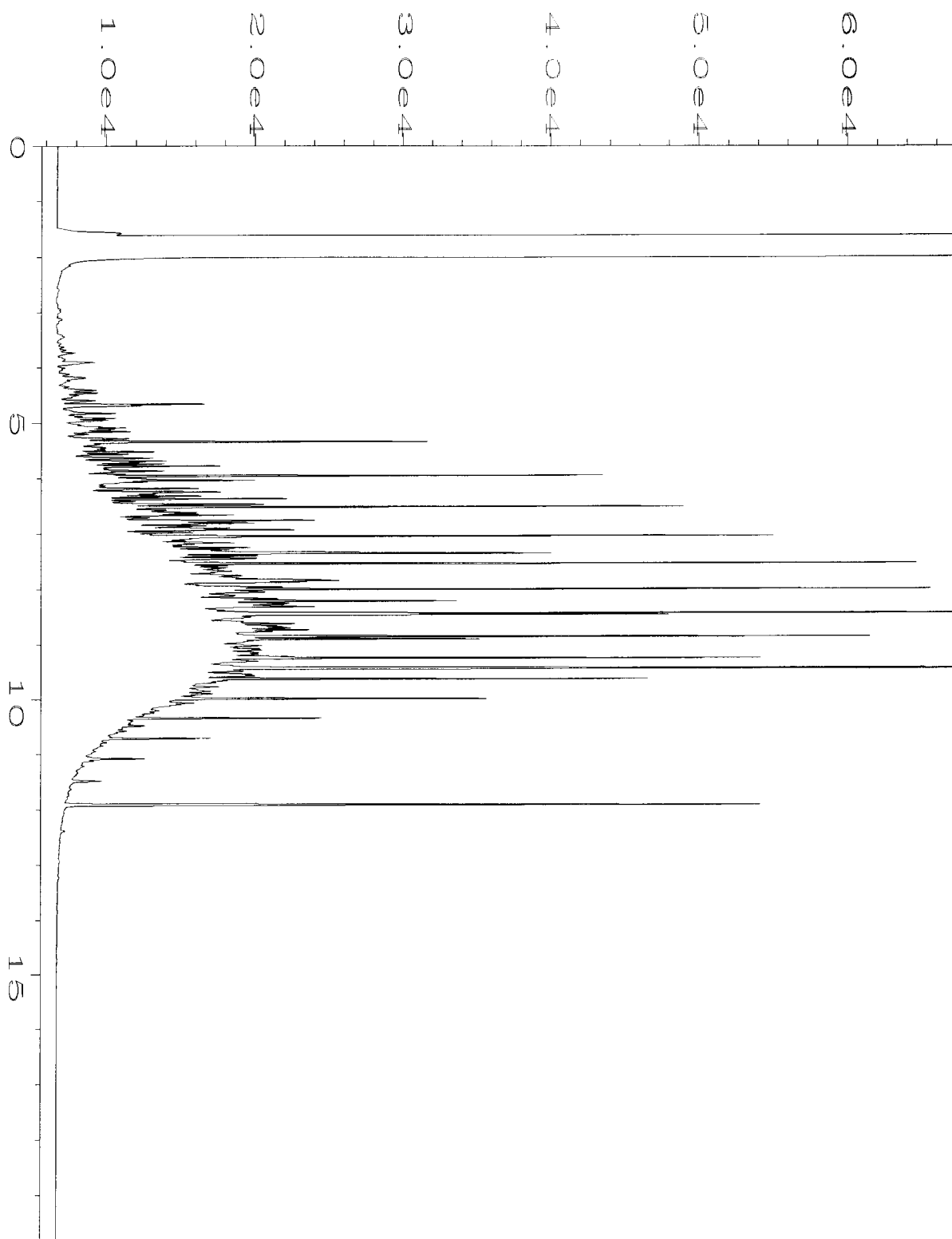
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Operator	: ML	Vial Number	: 36
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201034-01	Sequence Line	: 11
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 08 Jan 12 01:49 AM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 08:58 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-06-12\037F1101.D	Page Number	: 1
Operator	: ML	Vial Number	: 37
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201034-02	Sequence Line	: 11
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 08 Jan 12 02:16 AM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 08:58 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-06-12\010F0501.D	Page Number	: 1
Operator	: ML	Vial Number	: 10
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-037 mb	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 06 Jan 12 02:33 PM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 08:58 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-06-12\003F0401.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 4
Run Time Bar Code:		Instrument Method	: TPHD.MTH
Acquired on	: 06 Jan 12 02:06 PM	Analysis Method	: TPHD.MTH
Report Created on:	09 Jan 12 08:58 AM		



201034

## SAMPLE CHAIN OF CUSTODY

ME 01-05-12 VS3 / A04

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907SAMPLERS (signature) [Signature]PROJECT NAME/NO. hutch  
0789.

PO #

REMARKS

X- per R21/6/12  
ML

GEMS Y / N

Page # 1 of 1

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED								Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	PAH's	PCBs	
P07-02	P07	02	01 A-F	1-5-12	0840	Soil	6	X			X		X	X		Hold
P08-02	P08	02	02 A-F		0910	Soil	6	X					X			Hold
P09-02	P09	02	03 A-E		0950	Soil	5				X		X			Hold
P10-0.5	P10	0.5	04		1000	Soil	1						X	X	X	Hold
P10-02	1	02	05 A-E		1005	Soil	5									Hold
P10-04	1	04	06		1010	Soil	5				X					Hold
P11-02	P11	02	07		1045	Soil	5									Hold
P11-04	P11	04	08		1110	Soil	5				X					Hold
P12-02	P12	02	09		1115	Soil	5						X			Hold
P12-03	P12	03	10		1120	Soil	5									Hold
P13-02	P13	02	11		1125	Soil	5				X		X			Hold
P13-04	P13	04	12 A-D		1130	Soil	4									Hold

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Robert A. Hunsberger	SES	1-5-12	12:15
Received by: <u>[Signature]</u>	Jon Shimazu	FBI	1-5-12	12:15
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

February 3, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the additional results from the testing of material submitted on January 5, 2012 from the SOU\_0789\_20120105, F&BI 201034 project. There are 8 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0203R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 5, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789\_20120105, F&BI 201034 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201034 -01	P07-02
201034 -02	P08-02
201034 -03	P09-02
201034 -04	P10-0.5
201034 -05	P10-02
201034 -06	P10-04
201034 -07	P11-02
201034 -08	P11-04
201034 -09	P12-02
201034 -10	P12-03
201034 -11	P13-02
201034 -12	P13-04

The samples P08-02 and P09-02 were sent to Amtest for cyanide analysis. Review of the enclosed report indicates that all quality assurance were acceptable.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

Date of Report: 02/03/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

Date Extracted: 01/17/12

Date Analyzed: 01/18/12

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

Sample ID  
Laboratory ID

Total Mercury

P10-02  
201034-05

<0.1

Method Blank

<0.1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	P10-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/17/12	Lab ID:	201034-05 1/5
Date Analyzed:	01/17/12	Data File:	011710.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	50	150
Benzo(a)anthracene-d12	88	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	0.019
Anthracene	<0.01
Fluoranthene	0.023
Pyrene	0.028
Benz(a)anthracene	0.013
Chrysene	0.015
Benzo(a)pyrene	0.015
Benzo(b)fluoranthene	0.016
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	0.015
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	0.013

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	P12-02	Client:	SoundEarth Strategies
Date Received:	01/05/12	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/17/12	Lab ID:	201034-09 1/5
Date Analyzed:	01/17/12	Data File:	011712.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	50	150
Benzo(a)anthracene-d12	82	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.012
Acenaphthylene	0.016
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	0.064
Anthracene	0.013
Fluoranthene	0.15
Pyrene	0.18
Benz(a)anthracene	0.070
Chrysene	0.11
Benzo(a)pyrene	0.13
Benzo(b)fluoranthene	0.13
Benzo(k)fluoranthene	0.046
Indeno(1,2,3-cd)pyrene	0.12
Dibenz(a,h)anthracene	0.018
Benzo(g,h,i)perylene	0.14

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120105, F&BI 201034
Date Extracted:	01/17/12	Lab ID:	02-0092 mb 1/5
Date Analyzed:	01/17/12	Data File:	011709.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benzo(a)anthracene-d12	84	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/03/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201148-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	114	118	45-162	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	114	63-144



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/03/12

Date Received: 01/05/12

Project: SOU\_0789\_20120105, F&BI 201034

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL  
SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: 201034-05 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	<0.01	99	44-129
Acenaphthylene	mg/kg (ppm)	0.17	<0.01	96	52-121
Acenaphthene	mg/kg (ppm)	0.17	<0.01	94	51-123
Fluorene	mg/kg (ppm)	0.17	<0.01	97	37-137
Phenanthrene	mg/kg (ppm)	0.17	0.019	92	45-124
Anthracene	mg/kg (ppm)	0.17	<0.01	90	32-124
Fluoranthene	mg/kg (ppm)	0.17	0.023	94	50-125
Pyrene	mg/kg (ppm)	0.17	0.028	91	41-135
Benz(a)anthracene	mg/kg (ppm)	0.17	0.013	88	23-144
Chrysene	mg/kg (ppm)	0.17	0.015	93	45-122
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.016	87	31-144
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	94	45-130
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.015	89	39-128
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.015	86	28-146
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	99	46-129
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	0.013	90	37-133

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	99	99	61-115	0
Acenaphthylene	mg/kg (ppm)	0.17	96	95	63-110	1
Acenaphthene	mg/kg (ppm)	0.17	96	96	60-115	0
Fluorene	mg/kg (ppm)	0.17	97	97	59-116	0
Phenanthrene	mg/kg (ppm)	0.17	96	93	60-113	3
Anthracene	mg/kg (ppm)	0.17	88	86	56-103	2
Fluoranthene	mg/kg (ppm)	0.17	97	94	60-116	3
Pyrene	mg/kg (ppm)	0.17	90	89	60-116	1
Benz(a)anthracene	mg/kg (ppm)	0.17	87	87	53-109	0
Chrysene	mg/kg (ppm)	0.17	96	97	61-116	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	105	106	57-118	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	100	96	61-118	4
Benzo(a)pyrene	mg/kg (ppm)	0.17	87	85	53-108	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	95	46-127	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	112	107	55-121	5
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	100	99	56-118	1

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

201034

## SAMPLE CHAIN OF CUSTODY

ME 01-05-12 VS3/A04

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO. Initial  
0789.

PO #

REMARKS

X - per R21 B/R  
M4

GEMS Y / N

Page # 1 of 1

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	PAH's	PCBs	
P07-02	P07	02	01 A-F	1-5-12	0840	Soil	6.8	X			X		X	X		Hold
P08-02	P08	02	02 A-F		0910	Soil	6.5	X					X			Hold
P09-02	P09	02	03 A-E		0950	Soil	5				X		X			Hold
P10-0.5	P10	0.5	04		1000	Soil	1						X	X	X	Hold
P10-02		02	05 A-E		1005	Soil	5							X		Hold
P10-04		04	06 T		1020	Soil	5				X					Hold
P11-02	P11	02	07		1045	Soil	5									Hold
P11-04	P11	04	08		1110	Soil	5				X					Hold
P12-02	P12	02	09		1115	Soil	5						X	X		Hold
P12-03	P12	03	10		1120	Soil	5									Hold
P13-02	P13	02	11		1125	Soil	5				X		X			Hold
P13-04	P13	04	12 A-D		1130	Soil	4									Hold

CYANIDE

H2S

(X) - Per Rob R. 01/10/12 (2)

Friedman & Bruya, Inc.  
3012 16th Avenue West  
Seattle, WA 98119-2029  
Ph. (206) 285-8282  
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Robert A. Hunsberger	SES	1-5-12	12:15
Received by: <u>[Signature]</u>	Jon Shimazon	FBI	1-5-12	12:15
Relinquished by:				
Received by:				

***Friedman & Bruya, Inc. #201188***

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

January 25, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 17, 2012 from the SOU\_0789\_20120117, F&BI 201188 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0125R.DOC

# FRIEDMAN & BRUYA, INC.

---

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 17, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789\_20120117, F&BI 201188 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201188-01	MW05-20120117
201188-02	MW04-20120117
201188-03	MW01-20120117
201188-04	MW99-20120117

The 8260C vinyl chloride concentrations were flagged due to hydrochloric acid preservation per EPA SW-846 table 4-1.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

Date Extracted: 01/19/12

Date Analyzed: 01/20/12

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**  
Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C <sub>10</sub> -C <sub>25</sub> )	(C <sub>25</sub> -C <sub>36</sub> )	(% Recovery)
			(Limit 50-150)
MW01-20120117	<50	<250	104
201188-03			
Method Blank	<50	<250	102
02-091 MB2			

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW05-20120117	Client:	SoundEarth Strategies
Date Received:	01/17/12	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/18/12	Lab ID:	201188-01
Date Analyzed:	01/19/12	Data File:	201188-01.039
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	107	60	125
Indium	102	60	125
Holmium	102	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Arsenic	5.31
Selenium	3.55
Silver	<1
Cadmium	<1
Barium	22.6
Lead	<1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW04-20120117	Client:	SoundEarth Strategies
Date Received:	01/17/12	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/18/12	Lab ID:	201188-02
Date Analyzed:	01/19/12	Data File:	201188-02.040
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	109	60	125
Indium	108	60	125
Holmium	107	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	18.0
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	4.33
Lead	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW01-20120117	Client:	SoundEarth Strategies
Date Received:	01/17/12	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/18/12	Lab ID:	201188-03
Date Analyzed:	01/19/12	Data File:	201188-03.041
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	110	60	125
Indium	109	60	125
Holmium	109	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	1.58
Arsenic	1.43
Selenium	<1
Silver	<1
Cadmium	<1
Barium	3.94
Lead	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW99-20120117	Client:	SoundEarth Strategies
Date Received:	01/17/12	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/18/12	Lab ID:	201188-04
Date Analyzed:	01/19/12	Data File:	201188-04.042
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	110	60	125
Indium	107	60	125
Holmium	105	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	18.6
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	4.65
Lead	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/18/12	Lab ID:	I2-56 mb
Date Analyzed:	01/19/12	Data File:	I2-56 mb.026
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	109	60	125
Indium	107	60	125
Holmium	105	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

Date Extracted: 01/20/12

Date Analyzed: 01/24/12

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES  
FOR DISSOLVED MERCURY  
USING EPA METHOD 1631E**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Dissolved Mercury</u>
MW05-20120117 201188-01	<0.1
MW04-20120117 201188-02	<0.1
MW01-20120117 201188-03	<0.1
MW99-20120117 201188-04	<0.1
Method Blank	<0.1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW05-20120117	Client: SoundEarth Strategies
Date Received: 01/17/12	Project: SOU_0789_20120117, F&BI 201188
Date Extracted: 01/20/12	Lab ID: 201188-01
Date Analyzed: 01/20/12	Data File: 012015.D
Matrix: Water	Instrument: GCMS4
Units: ug/L (ppb)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2 pr	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	3.3	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW04-20120117	Client: SoundEarth Strategies
Date Received: 01/17/12	Project: SOU_0789_20120117, F&BI 201188
Date Extracted: 01/20/12	Lab ID: 201188-02
Date Analyzed: 01/20/12	Data File: 012016.D
Matrix: Water	Instrument: GCMS4
Units: ug/L (ppb)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2 pr	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	110	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW01-20120117	Client:	SoundEarth Strategies
Date Received:	01/17/12	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/20/12	Lab ID:	201188-03
Date Analyzed:	01/20/12	Data File:	012017.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2 pr	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW99-20120117	Client: SoundEarth Strategies
Date Received: 01/17/12	Project: SOU_0789_20120117, F&BI 201188
Date Extracted: 01/20/12	Lab ID: 201188-04
Date Analyzed: 01/20/12	Data File: 012018.D
Matrix: Water	Instrument: GCMS4
Units: ug/L (ppb)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2 pr	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	120	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789_20120117, F&BI 201188
Date Extracted:	01/20/12	Lab ID:	02-0054 mb
Date Analyzed:	01/20/12	Data File:	012012.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	103	107	63-142	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 201189-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	ug/L (ppb)	20	<1	97	99	67-132	2
Arsenic	ug/L (ppb)	10	<1	106	107	56-167	1
Selenium	ug/L (ppb)	5	<1	105	108	54-170	3
Silver	ug/L (ppb)	5	<1	95	97	66-121	2
Cadmium	ug/L (ppb)	5	<1	102	103	86-118	1
Barium	ug/L (ppb)	50	13.0	102 b	106 b	63-133	4 b
Lead	ug/L (ppb)	10	1.16	96	98	76-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	101	66-135
Arsenic	ug/L (ppb)	10	104	55-128
Selenium	ug/L (ppb)	5	104	59-134
Silver	ug/L (ppb)	5	103	64-136
Cadmium	ug/L (ppb)	5	104	66-135
Barium	ug/L (ppb)	50	104	66-133
Lead	ug/L (ppb)	10	101	67-135

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES FOR  
DISSOLVED MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201188-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	ug/L (ppb)	0.5	<0.1	103	106	48-160	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	ug/L (ppb)	0.5	105	79-126

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 201188-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	96	10-172
Chloromethane	ug/L (ppb)	50	<10	91	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	94	36-166
Bromomethane	ug/L (ppb)	50	<1	93	47-169
Chloroethane	ug/L (ppb)	50	<1	98	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	99	44-165
Acetone	ug/L (ppb)	250	<10	96	10-182
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	60-136
Methylene chloride	ug/L (ppb)	50	<5	89	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	102	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	93	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	91	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	97	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	71-127
Chloroform	ug/L (ppb)	50	<1	94	65-132
2-Butanone (MEK)	ug/L (ppb)	250	<10	110	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	102	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	108	69-133
Carbon tetrachloride	ug/L (ppb)	50	<1	100	56-152
Benzene	ug/L (ppb)	50	<0.35	104	76-125
Trichloroethene	ug/L (ppb)	50	3.3	97	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	99	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	99	61-150
Dibromomethane	ug/L (ppb)	50	<1	97	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	112	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	101	72-132
Toluene	ug/L (ppb)	50	<1	101	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	96	68-131
2-Hexanone	ug/L (ppb)	250	<10	105	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	101	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	100	73-129
Dibromochloromethane	ug/L (ppb)	50	<1	98	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	99	69-134
Chlorobenzene	ug/L (ppb)	50	<1	94	77-122
Ethylbenzene	ug/L (ppb)	50	<1	103	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	95	73-137
m,p-Xylene	ug/L (ppb)	100	<2	106	69-135
o-Xylene	ug/L (ppb)	50	<1	100	68-137
Styrene	ug/L (ppb)	50	<1	100	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	100	65-142
Bromoform	ug/L (ppb)	50	<1	106	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	107	58-144
Bromobenzene	ug/L (ppb)	50	<1	105	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	108	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	92	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	96	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	106	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	109	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	97	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	97	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	104	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	96	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	100	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	97	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	93	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	77	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	91	76-132
Hexachlorobutadiene	ug/L (ppb)	50	<1	89	60-143
Naphthalene	ug/L (ppb)	50	<1	84	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	97	69-148

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/25/12

Date Received: 01/17/12

Project: SOU\_0789\_20120117, F&BI 201188

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	98	98	25-158	0
Chloromethane	ug/L (ppb)	50	96	97	45-156	1
Vinyl chloride	ug/L (ppb)	50	100	102	50-154	2
Bromomethane	ug/L (ppb)	50	99	102	55-143	3
Chloroethane	ug/L (ppb)	50	100	109	58-146	9
Trichlorofluoromethane	ug/L (ppb)	50	98	96	50-150	2
Acetone	ug/L (ppb)	250	95	95	60-155	0
1,1-Dichloroethene	ug/L (ppb)	50	94	94	67-136	0
Methylene chloride	ug/L (ppb)	50	83	85	39-148	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	107	110	64-147	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	95	96	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	93	96	79-121	3
2,2-Dichloropropane	ug/L (ppb)	50	109	112	55-143	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	107	111	80-123	4
Chloroform	ug/L (ppb)	50	96	98	80-121	2
2-Butanone (MEK)	ug/L (ppb)	250	112	112	57-149	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	90	92	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	104	105	83-130	1
1,1-Dichloropropene	ug/L (ppb)	50	112	112	77-129	0
Carbon tetrachloride	ug/L (ppb)	50	102	103	75-158	1
Benzene	ug/L (ppb)	50	109	110	69-134	1
Trichloroethene	ug/L (ppb)	50	100	101	80-120	1
1,2-Dichloropropane	ug/L (ppb)	50	102	105	77-123	3
Bromodichloromethane	ug/L (ppb)	50	99	102	81-133	3
Dibromomethane	ug/L (ppb)	50	100	102	82-125	2
4-Methyl-2-pentanone	ug/L (ppb)	250	115	116	70-140	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	110	113	82-132	3
Toluene	ug/L (ppb)	50	103	106	72-122	3
trans-1,3-Dichloropropene	ug/L (ppb)	50	103	105	80-136	2
1,1,2-Trichloroethane	ug/L (ppb)	50	98	100	75-124	2
2-Hexanone	ug/L (ppb)	250	105	105	64-152	0
1,3-Dichloropropane	ug/L (ppb)	50	102	106	76-126	4
Tetrachloroethene	ug/L (ppb)	50	106	109	76-121	3
Dibromochloromethane	ug/L (ppb)	50	101	104	84-133	3
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	102	105	82-125	3
Chlorobenzene	ug/L (ppb)	50	98	99	83-114	1
Ethylbenzene	ug/L (ppb)	50	107	109	77-124	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	97	99	84-127	2
m,p-Xylene	ug/L (ppb)	100	109	112	83-125	3
o-Xylene	ug/L (ppb)	50	103	106	86-121	3
Styrene	ug/L (ppb)	50	102	103	85-127	1
Isopropylbenzene	ug/L (ppb)	50	101	104	87-122	3
Bromoform	ug/L (ppb)	50	107	111	74-136	4
n-Propylbenzene	ug/L (ppb)	50	110	112	74-126	2
Bromobenzene	ug/L (ppb)	50	109	112	80-121	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	111	113	80-126	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	93	94	66-126	1
1,2,3-Trichloropropane	ug/L (ppb)	50	94	95	67-124	1
2-Chlorotoluene	ug/L (ppb)	50	109	111	77-127	2
4-Chlorotoluene	ug/L (ppb)	50	110	113	78-128	3
tert-Butylbenzene	ug/L (ppb)	50	101	103	85-127	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	99	101	82-125	2
sec-Butylbenzene	ug/L (ppb)	50	106	108	80-125	2
p-Isopropyltoluene	ug/L (ppb)	50	98	100	82-127	2
1,3-Dichlorobenzene	ug/L (ppb)	50	101	105	85-116	4
1,4-Dichlorobenzene	ug/L (ppb)	50	99	102	84-121	3
1,2-Dichlorobenzene	ug/L (ppb)	50	96	99	85-116	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	79	78	57-141	1
1,2,4-Trichlorobenzene	ug/L (ppb)	50	97	98	72-130	1
Hexachlorobutadiene	ug/L (ppb)	50	96	93	53-141	3
Naphthalene	ug/L (ppb)	50	87	88	64-133	1
1,2,3-Trichlorobenzene	ug/L (ppb)	50	100	102	65-136	2

## **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

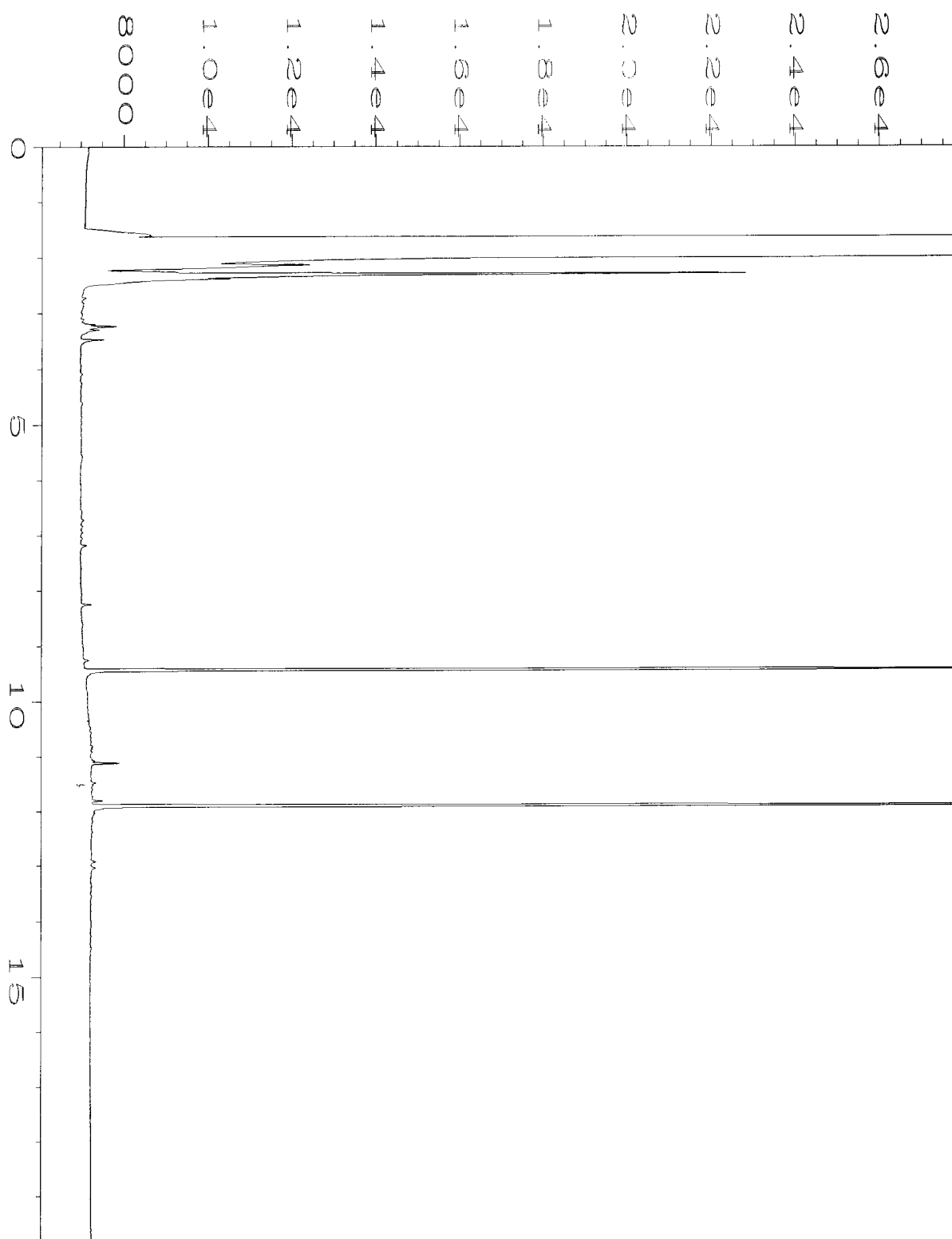
pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

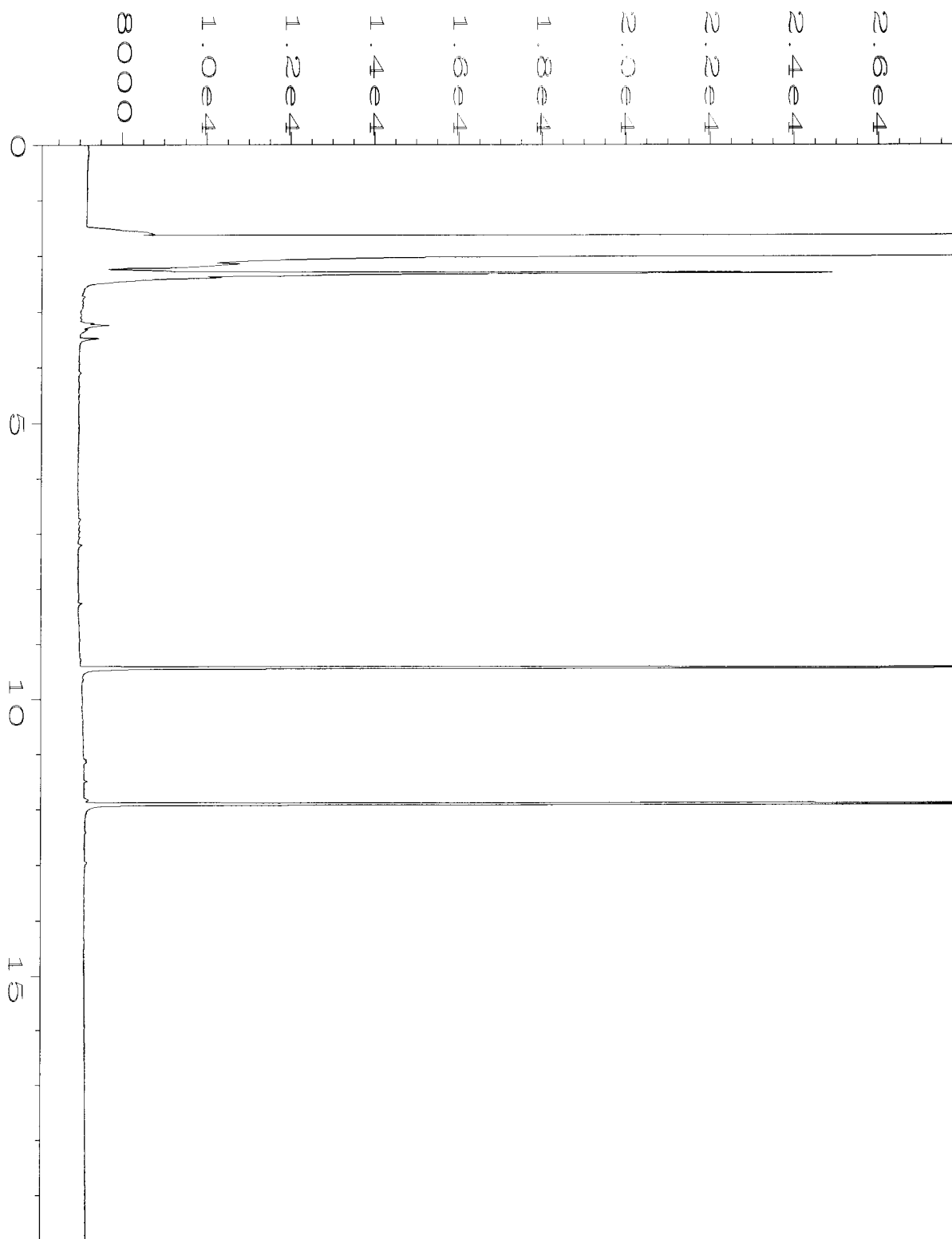
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

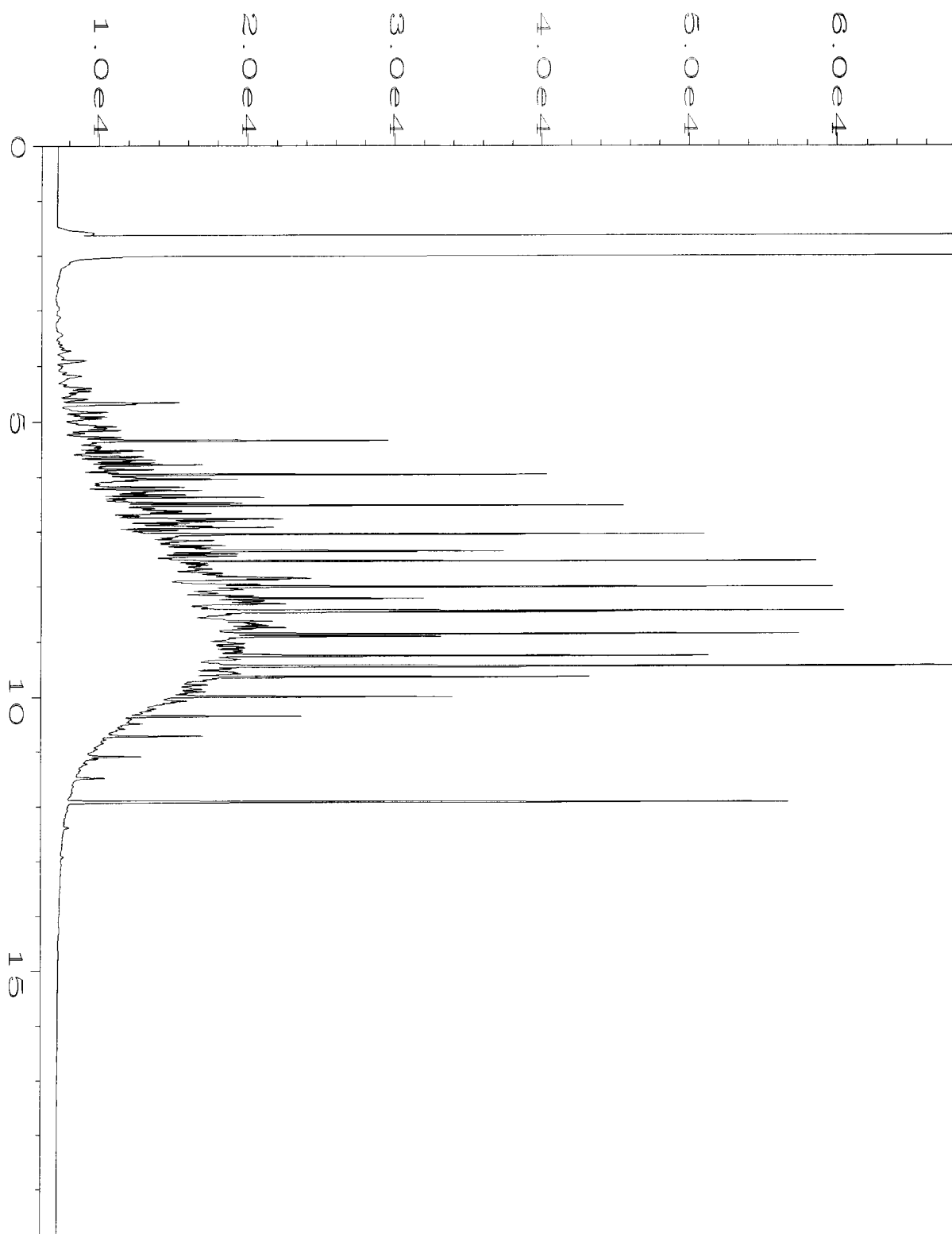




Data File Name	: C:\HPCHEM\1\DATA\01-20-12\010F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 10
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201188-03	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 20 Jan 12 11:51 AM	Analysis Method	: TPHD.MTH
Report Created on:	23 Jan 12 09:42 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-20-12\006F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-091 mb2	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 20 Jan 12 10:04 AM	Analysis Method	: TPHD.MTH
Report Created on:	23 Jan 12 09:42 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-20-12\003F0201.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 20 Jan 12 09:38 AM	Analysis Method	: TPHD.MTH
Report Created on:	23 Jan 12 09:42 AM		

201188

## SAMPLE CHAIN OF CUSTODY

ME 01-17-12

$\frac{A-I_3}{\text{of } 1} \sqrt{2}/ca^2$

Send Report To Rob Roberts

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 200

City, State, ZIP Seattle, WA, 98102

Phone # 206-306-1900 Fax # 206-306-1907

**SAMPLERS (signature)**

PROJECT NAME/NO.

AVTECH 0789

PO #

REMARKS

**GEMS Y / N**

Page #

of

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

**Rush charges authorized by:**

## SAMPLE DISPOSAL

☒ Dispose after 30 days

- ☐ Return samples

☐ Will call with instructions



[illegible]

**Friedman & Bruya, Inc.**  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

**Fax (206) 283-5044**

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	WILL CAMARDA	SES	1/17/12	1557
Received by: 	Nham Phan	FeBT	1/17/12	1557
Relinquished by:				
Received by:				

Samples received at 4 °C

***Friedman & Bruya, Inc. #201123***

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

January 23, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 11, 2012 from the SOU\_0789-004\_20120111, F&BI 201123 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0123R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 11, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789-004\_20120111, F&BI 201123 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201123 -01	B01-03
201123 -02	B01-05
201123 -03	B01-08
201123 -04	B01-10
201123 -05	B01-13
201123 -06	B01-15
201123 -07	B01-20
201123 -08	B01-25
201123 -09	B01-30
201123 -10	B01-35
201123 -11	B02-03
201123 -12	B02-05
201123 -13	B02-08
201123 -14	B02-10
201123 -15	B02-13
201123 -16	B02-15
201123 -17	B02-20
201123 -18	B02-25
201123 -19	B02-30
201123 -20	B02-35
201123 -21	B03-03
201123 -22	B03-10
201123 -23	B03-13
201123 -24	B03-15
201123 -25	B03-20
201123 -26	B03-25
201123 -27	B03-30
201123 -28	B03-35

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

Date Extracted: 01/20/12

Date Analyzed: 01/20/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR BENZENE, TOLUENE, ETHYLBENZENE,  
XYLENES AND TPH AS GASOLINE  
USING EPA METHOD 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
B03-10 201123-22	<0.02	<0.02	<0.02	<0.06	<2	85
Method Blank 02-0105 MB	<0.02	<0.02	<0.02	<0.06	<2	85



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

Date Extracted: 01/12/12

Date Analyzed: 01/12/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
B01-03 201123-01	<50	<250	95
B02-03 201123-11	<50	<250	93
B03-03 201123-21	<50	<250	99
B03-10 201123-22	<50	<250	97
Method Blank 02-076 MB	<50	<250	96

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	B01-03	Client:	SoundEarth Strategies
Date Received:	01/11/12	Project:	SOU_0789-004_20120111, F&BI 201123
Date Extracted:	01/12/12	Lab ID:	201123-01
Date Analyzed:	01/13/12	Data File:	201123-01.064
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	82	60	125
Indium	85	60	125
Holmium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	9.68
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	43.3
Lead	1.59

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	B02-03	Client:	SoundEarth Strategies
Date Received:	01/11/12	Project:	SOU_0789-004_20120111, F&BI 201123
Date Extracted:	01/12/12	Lab ID:	201123-11
Date Analyzed:	01/13/12	Data File:	201123-11.065
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	83	60	125
Indium	84	60	125
Holmium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	6.54
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	28.6
Lead	1.18

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	B03-10	Client:	SoundEarth Strategies
Date Received:	01/11/12	Project:	SOU_0789-004_20120111, F&BI 201123
Date Extracted:	01/12/12	Lab ID:	201123-22
Date Analyzed:	01/13/12	Data File:	201123-22.066
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	81	60	125
Indium	81	60	125
Holmium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	10.6
Arsenic	1.55
Selenium	<1
Silver	<1
Cadmium	<1
Barium	29.2
Lead	1.61

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789-004_20120111, F&BI 201123
Date Extracted:	01/11/12	Lab ID:	I2-35 mb
Date Analyzed:	01/13/12	Data File:	I2-35 mb.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125
Indium	92	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

Date Extracted: 01/12/12

Date Analyzed: 01/18/12

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Total Mercury</u>
B01-03 201123-01	<0.1
B02-03 201123-11	<0.1
B03-10 201123-22	<0.1
Method Blank	<0.1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: B01-13	Client: SoundEarth Strategies
Date Received: 01/11/12	Project: SOU_0789-004_20120111, F&BI 201123
Date Extracted: 01/13/12	Lab ID: 201123-05
Date Analyzed: 01/13/12	Data File: 011328.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B03-10	Client:	SoundEarth Strategies
Date Received:	01/11/12	Project:	SOU_0789-004_20120111, F&BI 201123
Date Extracted:	01/13/12	Lab ID:	201123-22
Date Analyzed:	01/14/12	Data File:	011329.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank	Client: SoundEarth Strategies
Date Received: NA	Project: SOU_0789-004_20120111, F&BI 201123
Date Extracted: 01/13/12	Lab ID: 02-0049 mb
Date Analyzed: 01/13/12	Data File: 011319.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

Date Extracted: 01/11/12

Date Analyzed: 01/17/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR PCBs REPORTED AS AROCLORS  
USING EPA METHOD 8082A**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	Aroclor							Surrogate (% Rec.) (Limit 50-150)
	<u>1221</u>	<u>1232</u>	<u>1016</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	
B02-03 201123-11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	95
Method Blank 02-063 MB2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR BENZENE, TOLUENE, ETHYLBENZENE,  
XYLENES, AND TPH AS GASOLINE  
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	0.5	81	80	69-120	1
Toluene	mg/kg (ppm)	0.5	88	85	70-117	3
Ethylbenzene	mg/kg (ppm)	0.5	88	87	65-123	1
Xylenes	mg/kg (ppm)	1.5	88	86	66-120	2
Gasoline	mg/kg (ppm)	20	105	115	71-131	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 201123-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	100	99	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	102	79-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 201119-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	18.4	88 b	89 b	51-132	1 b
Arsenic	mg/kg (ppm)	10	3.24	83 b	85 b	44-151	2 b
Selenium	mg/kg (ppm)	5	<1	83	83	52-128	0
Silver	mg/kg (ppm)	10	<1	92	94	69-125	2
Cadmium	mg/kg (ppm)	10	<1	99	102	83-120	3
Barium	mg/kg (ppm)	50	71.4	93 b	94 b	47-147	1 b
Lead	mg/kg (ppm)	50	568	1300 b	0 b	65-126	200 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	101	79-125
Arsenic	mg/kg (ppm)	10	88	80-120
Selenium	mg/kg (ppm)	5	91	81-121
Silver	mg/kg (ppm)	10	94	84-117
Cadmium	mg/kg (ppm)	10	99	89-116
Barium	mg/kg (ppm)	50	99	88-113
Lead	mg/kg (ppm)	50	101	81-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201119-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	0.23	152 b	46 b	45-162	107 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	110	63-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 201123-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	23	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	50	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	48	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	64	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	70	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	67	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	76	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	81	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	77	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	76	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	89	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	79	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	81	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	79	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	79	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	80	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	79	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	79	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.03	76	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	81	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	82	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	81	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	88	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	90	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	80	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	88	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	80	30-142
2-Hexanone	mg/kg (ppm)	12.5	<0.5	90	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	83	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	75	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	83	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	81	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	80	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	84	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	82	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	85	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	90	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	84	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	85	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	87	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	87	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	83	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	80	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	81	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	86	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	86	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	90	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	89	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	89	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	84	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	82	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	80	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	81	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	77	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	81	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	79	19-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	82	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	76	20-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	45	44	10-146	2
Chloromethane	mg/kg (ppm)	2.5	67	65	27-133	3
Vinyl chloride	mg/kg (ppm)	2.5	73	70	22-139	4
Bromomethane	mg/kg (ppm)	2.5	82	78	38-114	5
Chloroethane	mg/kg (ppm)	2.5	77	74	20-153	4
Trichlorofluoromethane	mg/kg (ppm)	2.5	77	81	10-196	5
Acetone	mg/kg (ppm)	12.5	86	82	52-141	5
1,1-Dichloroethene	mg/kg (ppm)	2.5	84	82	47-128	2
Methylene chloride	mg/kg (ppm)	2.5	96	90	42-132	6
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	91	86	60-123	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	90	85	67-127	6
1,1-Dichloroethane	mg/kg (ppm)	2.5	90	88	68-115	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	120	118	57-133	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	95	92	72-113	3
Chloroform	mg/kg (ppm)	2.5	91	88	66-120	3
2-Butanone (MEK)	mg/kg (ppm)	12.5	93	92	57-123	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	90	88	56-135	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	90	89	62-131	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	97	95	69-128	2
Carbon tetrachloride	mg/kg (ppm)	2.5	96	92	60-139	4
Benzene	mg/kg (ppm)	2.5	92	90	68-114	2
Trichloroethene	mg/kg (ppm)	2.5	88	85	68-114	3
1,2-Dichloropropane	mg/kg (ppm)	2.5	94	92	72-127	2
Bromodichloromethane	mg/kg (ppm)	2.5	94	92	72-130	2
Dibromomethane	mg/kg (ppm)	2.5	94	92	70-120	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	101	99	45-145	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	107	104	75-136	3
Toluene	mg/kg (ppm)	2.5	94	92	66-126	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	103	100	72-132	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	93	90	75-113	3
2-Hexanone	mg/kg (ppm)	12.5	98	97	33-152	1
1,3-Dichloropropane	mg/kg (ppm)	2.5	96	94	72-130	2
Tetrachloroethene	mg/kg (ppm)	2.5	92	90	72-114	2
Dibromochloromethane	mg/kg (ppm)	2.5	95	94	74-125	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	94	93	74-132	1
Chlorobenzene	mg/kg (ppm)	2.5	93	91	76-111	2
Ethylbenzene	mg/kg (ppm)	2.5	98	96	64-123	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	92	89	69-135	3
m,p-Xylene	mg/kg (ppm)	5	99	97	78-122	2
o-Xylene	mg/kg (ppm)	2.5	104	102	77-124	2
Styrene	mg/kg (ppm)	2.5	95	93	74-126	2
Isopropylbenzene	mg/kg (ppm)	2.5	97	95	76-127	2
Bromoform	mg/kg (ppm)	2.5	99	98	56-132	1
n-Propylbenzene	mg/kg (ppm)	2.5	103	100	74-124	3
Bromobenzene	mg/kg (ppm)	2.5	96	94	72-122	2
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	104	101	76-126	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	92	89	56-143	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	93	89	61-137	4
2-Chlorotoluene	mg/kg (ppm)	2.5	100	97	74-121	3
4-Chlorotoluene	mg/kg (ppm)	2.5	101	99	75-122	2
tert-Butylbenzene	mg/kg (ppm)	2.5	105	102	73-130	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	105	101	76-125	4
sec-Butylbenzene	mg/kg (ppm)	2.5	105	102	71-130	3
p-Isopropyltoluene	mg/kg (ppm)	2.5	99	96	70-132	3
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	95	92	75-121	3
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	93	91	74-117	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	95	92	76-121	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	90	86	61-136	5
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	101	96	70-129	5
Hexachlorobutadiene	mg/kg (ppm)	2.5	96	94	50-153	2
Naphthalene	mg/kg (ppm)	2.5	99	94	60-125	5
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	96	90	62-130	6



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/11/12

Project: SOU\_0789-004\_20120111, F&BI 201123

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
POLYCHLORINATED BIPHENYLS AS  
AROCLOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 201018-07 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	<0.1	<0.1	nm
Aroclor 1260	mg/kg (ppm)	<0.1	<0.1	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	94	100	60-142	6
Aroclor 1260	mg/kg (ppm)	0.8	100	98	63-144	2

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

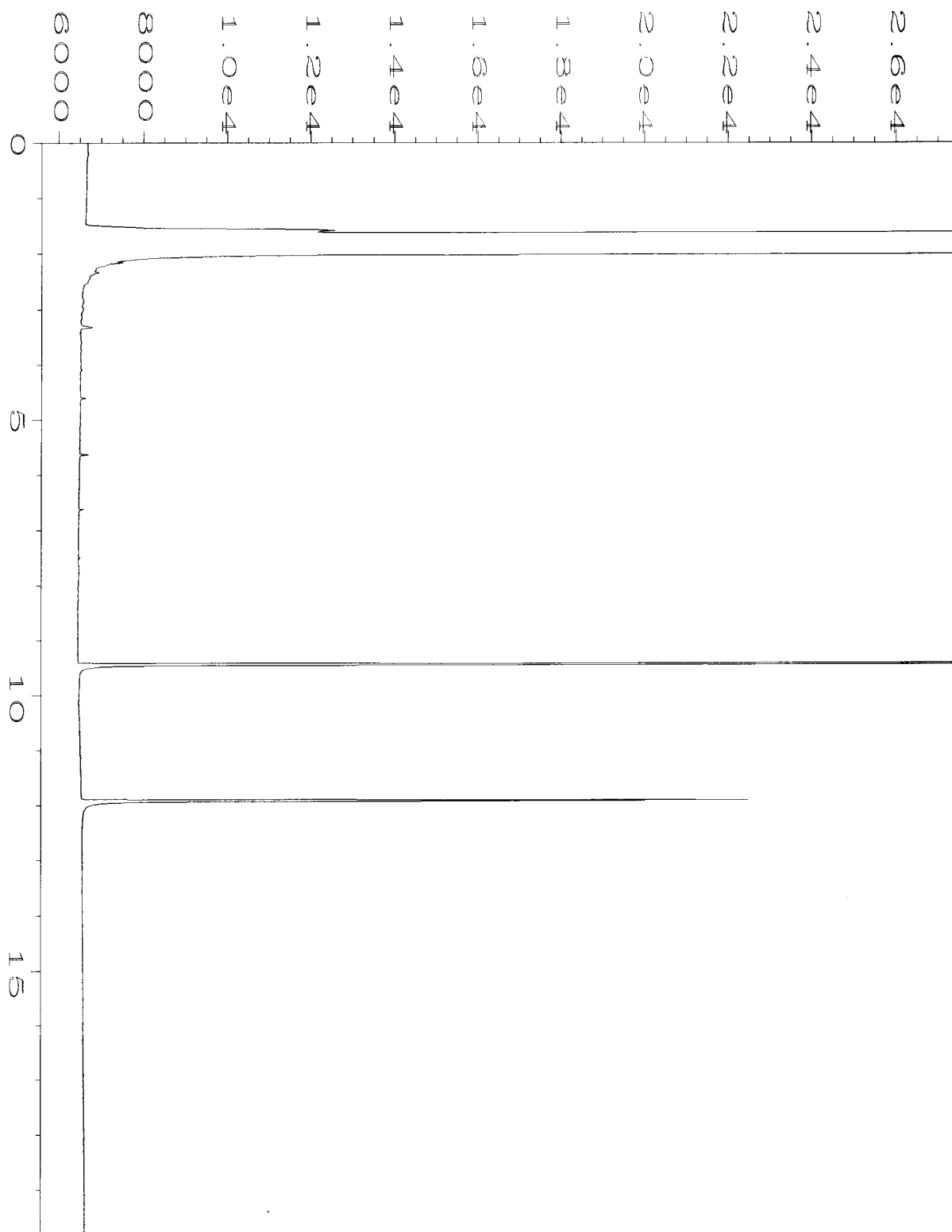
pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

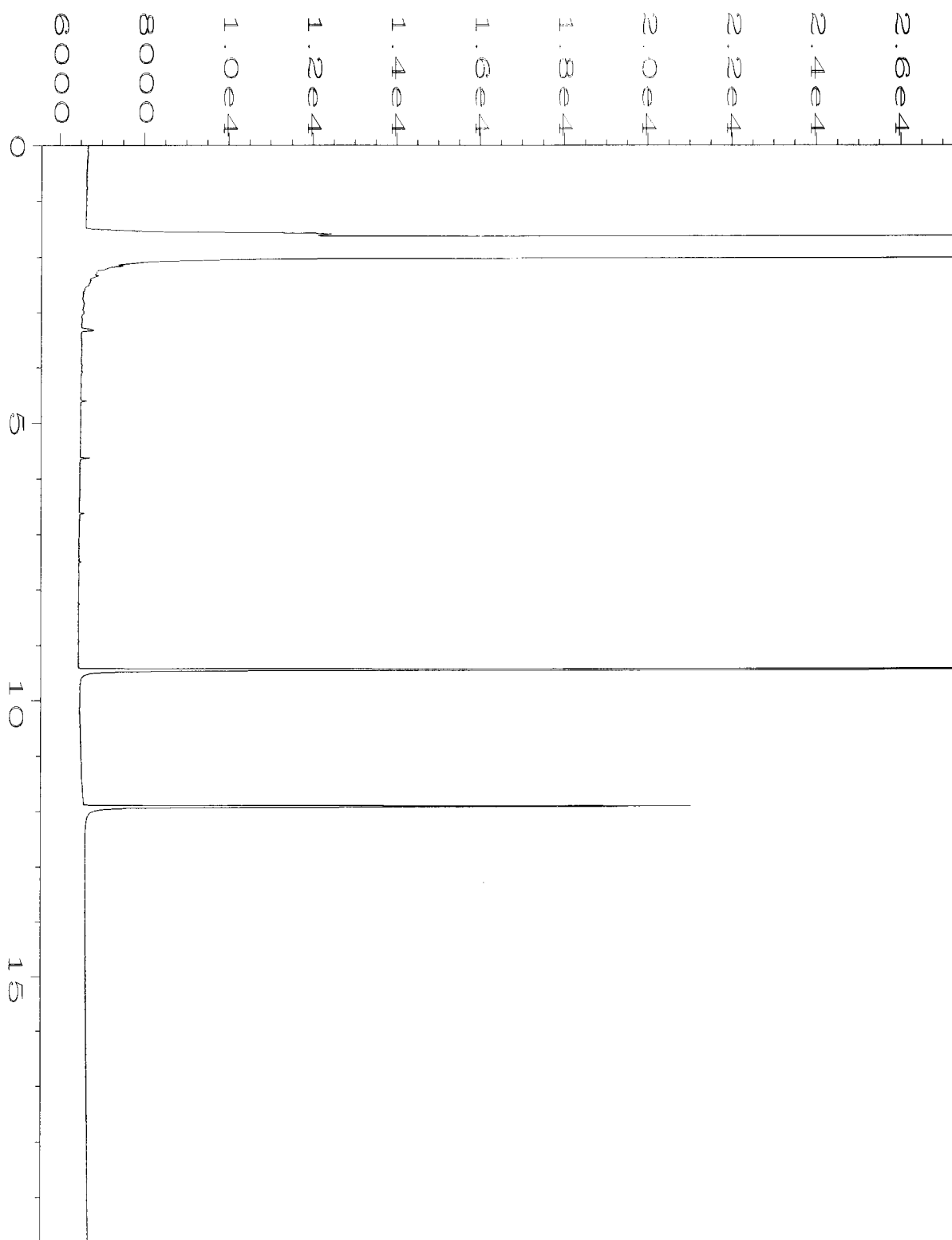
ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

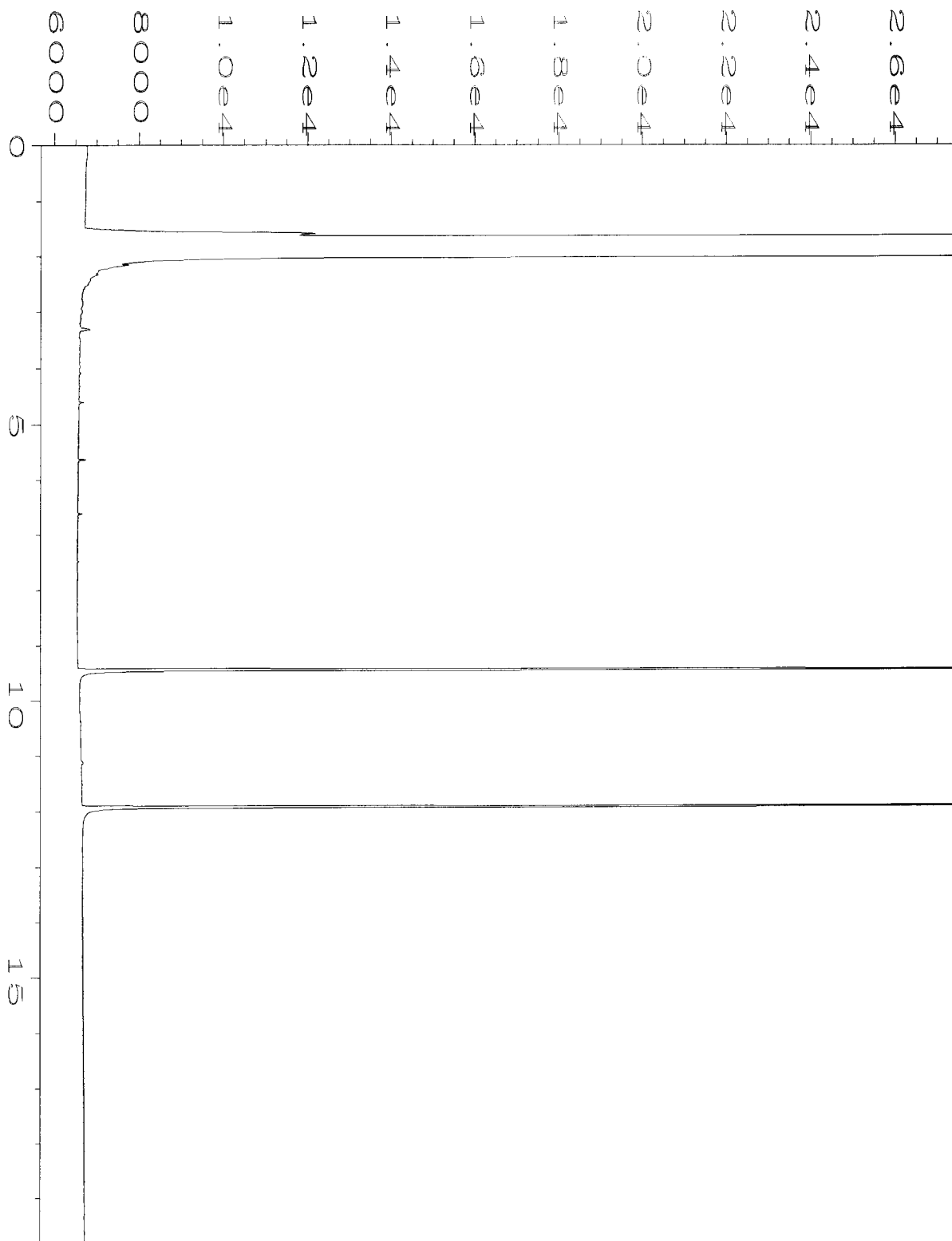
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



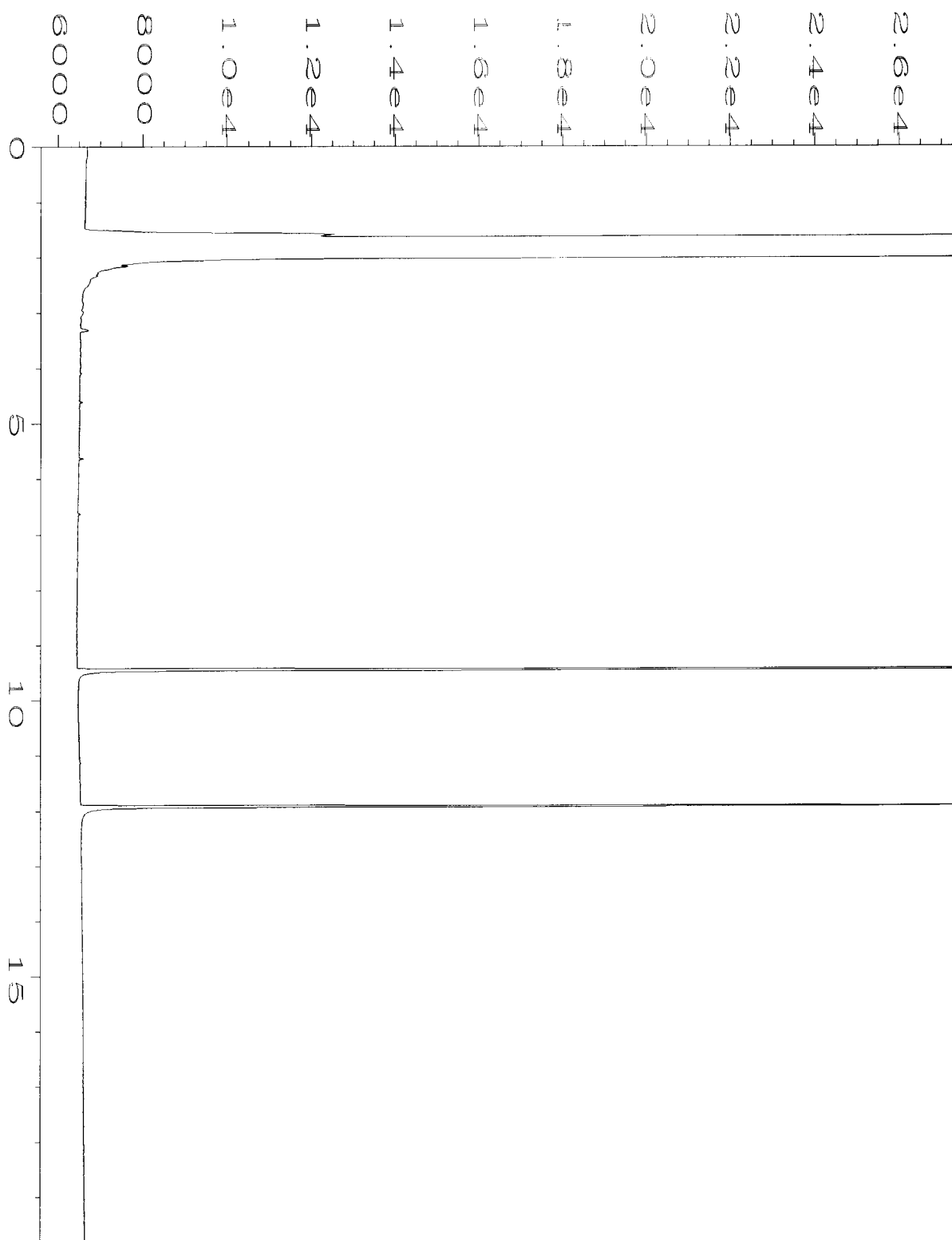
Data File Name	: C:\HPCHEM\1\DATA\01-12-12\016F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 16
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201123-01	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 12 Jan 12 03:45 PM	Analysis Method	: TPHD.MTH
Report Created on:	13 Jan 12 09:08 AM		



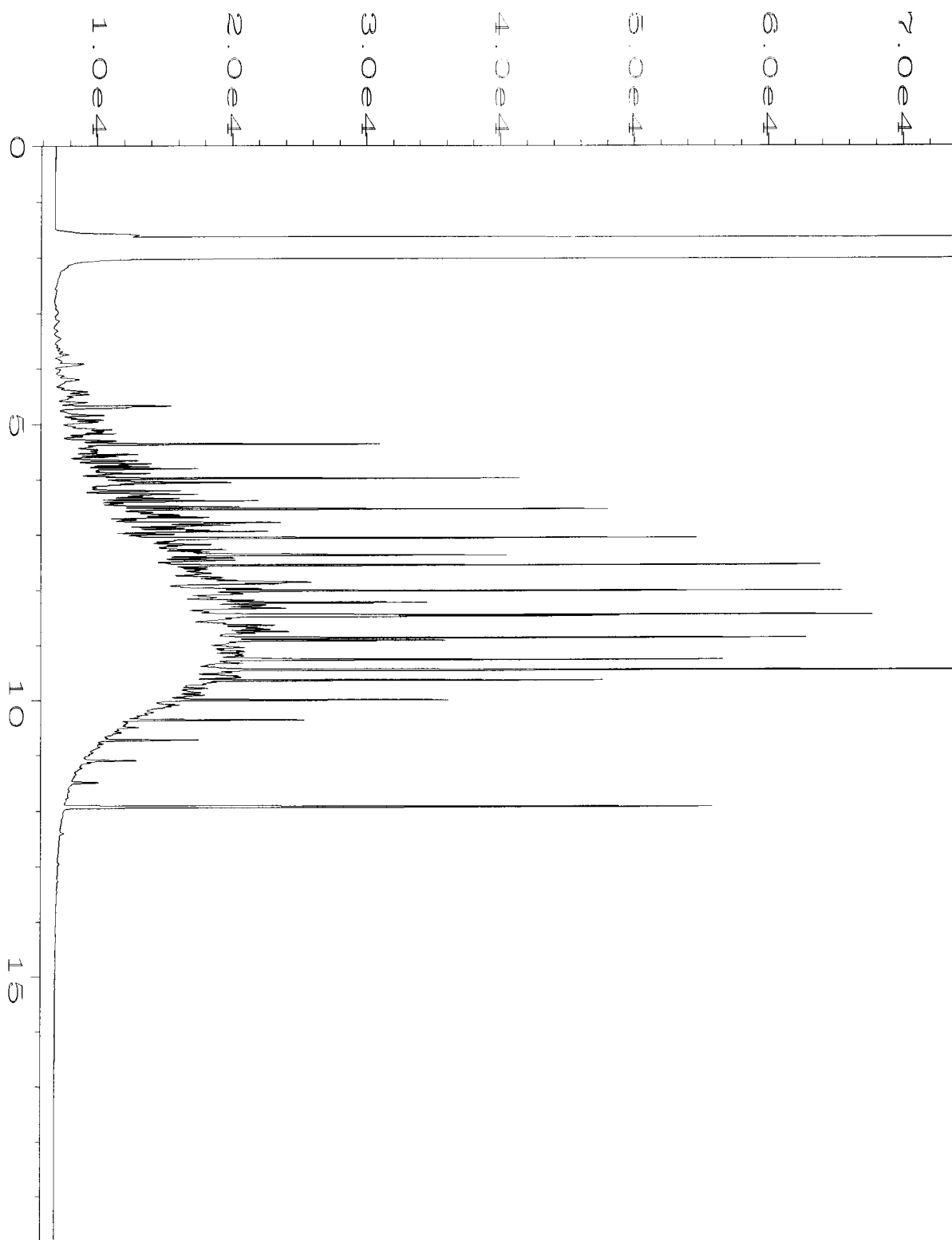
Data File Name	: C:\HPCHEM\1\DATA\01-12-12\017F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 17
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201123-11	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 12 Jan 12 04:12 PM	Analysis Method	: TPHD.MTH
Report Created on:	13 Jan 12 09:08 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-12-12\018F0501.D	Page Number	: 1
Operator	: ML	Vial Number	: 18
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201123-21	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 12 Jan 12 05:33 PM	Analysis Method	: TPHD.MTH
Report Created on:	13 Jan 12 09:08 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-12-12\012F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 12
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-076 mb	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 12 Jan 12 01:59 PM	Analysis Method	: TPHD.MTH
Report Created on:	13 Jan 12 09:07 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-12-12\003F0201.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 12 Jan 12 09:13 AM	Analysis Method	: TPHD.MTH
Report Created on:	13 Jan 12 09:07 AM		

( ) 201123

SAMPLE CHAIN OF CUSTODY ME 01/11/12

Send Report To Rob Roberts

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 200

City, State, ZIP Seattle, WA, 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO.

AMLI Avtech 0789-004

PO #

REMARKS

Rob Roberts added Analysis  
1-11-12

GEMS Y / N

Page #

TURNAROUND TIME

☒ Standard (3 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED							Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	PCBs	
B01-03	B01	03	01 A-E	1-10-12	0900	Soil	5	X					X		
B01-05		05	02		0905	Soil	5								
B01-08		08	03		0915	Soil	5								
B01-10		10	04		0920	Soil	5								
B01-13		13	05		0925	Soil	5				X				
B01-15		15	06		0930	Soil	5								
B01-20		20	07		0935	Soil	5								
B01-25		25	08		0945	Soil	5								
B01-30		30	09		0955	Soil	5								
B01-35		35	10		1005	Soil	5								
B02-03	B02	03	11		1135	Soil	5	X					X	X	
B02-05		05	12		1140	Soil	5								
B02-08		08	13 Y		1145	Soil	5								

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	Rob Roberts	SES	1-11-12	12:00
Received by: <i>[Signature]</i>	DD VO	FHBI	11	12:15
Relinquished by:				
Received by:				

Samples received at 2 °C



# SAMPLE CHAIN OF CUSTODY

ME 01/11/12

VS3/BA3

Send Report To Rob Roberts  
 Company SoundEarth Strategies  
 Address 2811 Fairview Ave E, Suite 200  
 City, State, ZIP Seattle, WA, 98102  
 Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)	
PROJECT NAME/NO.  AMLI Avtech 0789-004	PO #
REMARKS	GEMS Y / N

Page # 1

TURNAROUND TIME  
☒ Standard (2 Weeks)  
☐ RUSH  
 Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL  
☐ Dispose after 30 days  
☐ Return samples  
☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED								Notes
								NWTPH-DX	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals			
B02-10	B02	10	14AE	1-10-12	1150	Soil	5									*-per RR
B02-13		13	15		1155	Soil	5									1/11/12 ME
B02-15		15	16		1200	Soil	5									
B02-20		20	17		1205	Soil	5									cancel
B02-25		25	18		1210	Soil	5									*-per RR
B02-30		30	19		1215	Soil	5									1/11/12 ME
B02-35		35	20		1220	Soil	5									
B03-03	B03	03	21		1405	Soil	5	X								
B03-10		10	22		1420	Soil	5	X	X	X	*	X	X			
B03-13		13	23		1425	Soil	5									
B03-15		15	24		1430	Soil	5									
B03-20		20	25		1445	Soil	5									
B03-25		25	26		1455	Soil	5									

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Rob Roberts	SES	1-11-12	12:14
Received by: <u>[Signature]</u>	DO VO	P+BZ	"	12:15
Relinquished by:				
Received by:				

Samples received at 2 °C

ME 01/11/12

3

VS3/  
BIR

Phone # 206-306-1900 Fax # 206-306-1907

GEMS Y / N

☐ Will call with instructions[illegible]

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	<i>Rob Forberts</i>	<i>KS</i>	<i>1-11-12</i>	<i>12:10</i>
Received by: <i>[Signature]</i>	<i>DO VO</i>	<i>F &amp; BE</i>	<i>"</i>	<i>12-11</i>
Relinquished by:				
Received by:				

Samples received at 2 °C

***Friedman & Bruya, Inc. #201167***

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

January 26, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 13, 2012 from the SOU\_0789-004\_20120113, F&BI 201167 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0126R.DOC

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 13, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789-004\_20120113, F&BI 201167 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201167 -01	B09-05
201167 -02	B09-10
201167 -03	B09-15
201167 -04	B10-0.5
201167 -05	B10-15

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/26/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201167

Date Extracted: 01/24/12

Date Analyzed: 01/24/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C <sub>10</sub> -C <sub>25</sub> )	(C <sub>25</sub> -C <sub>36</sub> )	(% Recovery)
			(Limit 50-150)
B10-0.5	<50	<250	104
201167-04			
Method Blank	<50	<250	95
02-111 MB2			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/26/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201167

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 201209-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	99	97	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	74-139

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

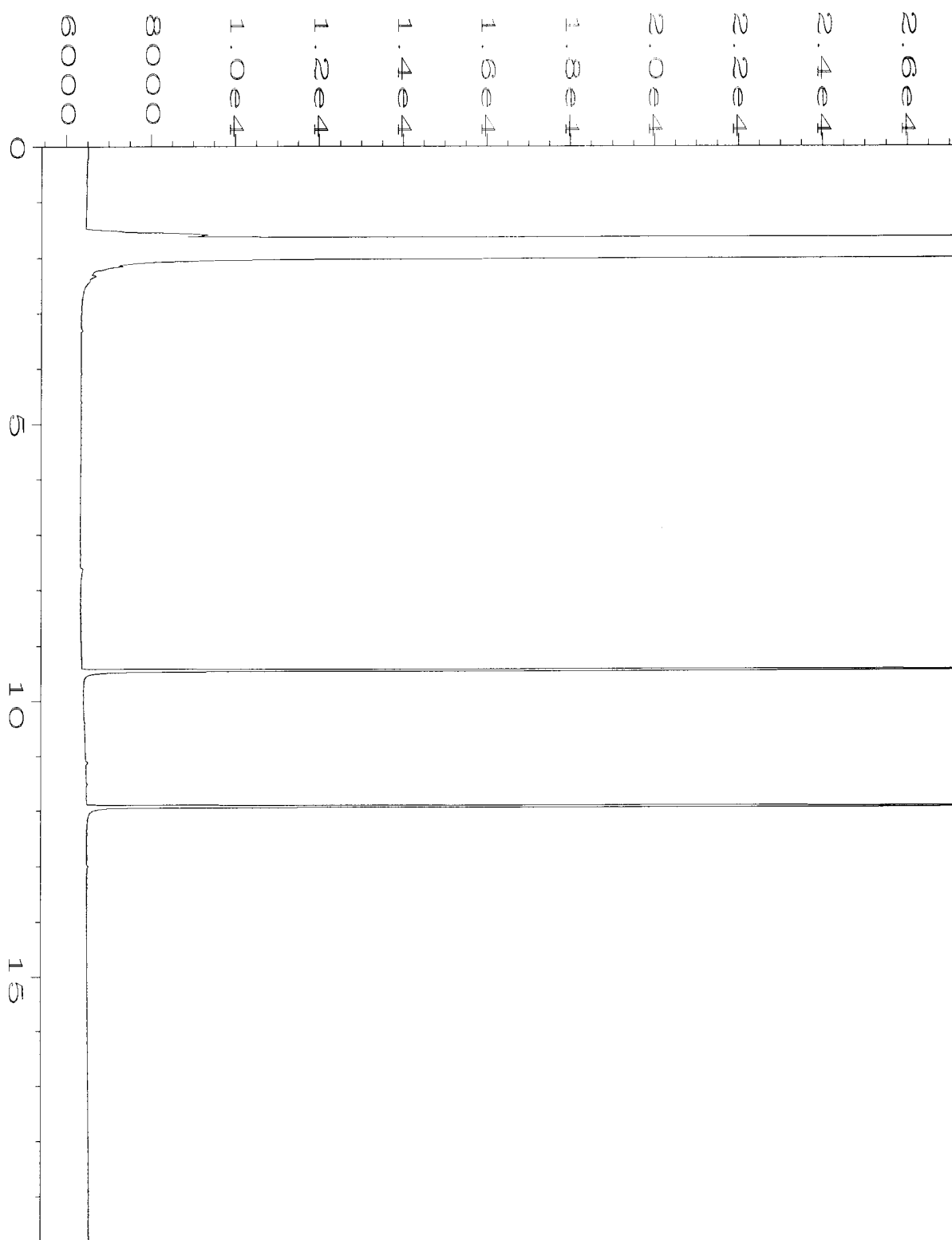
pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

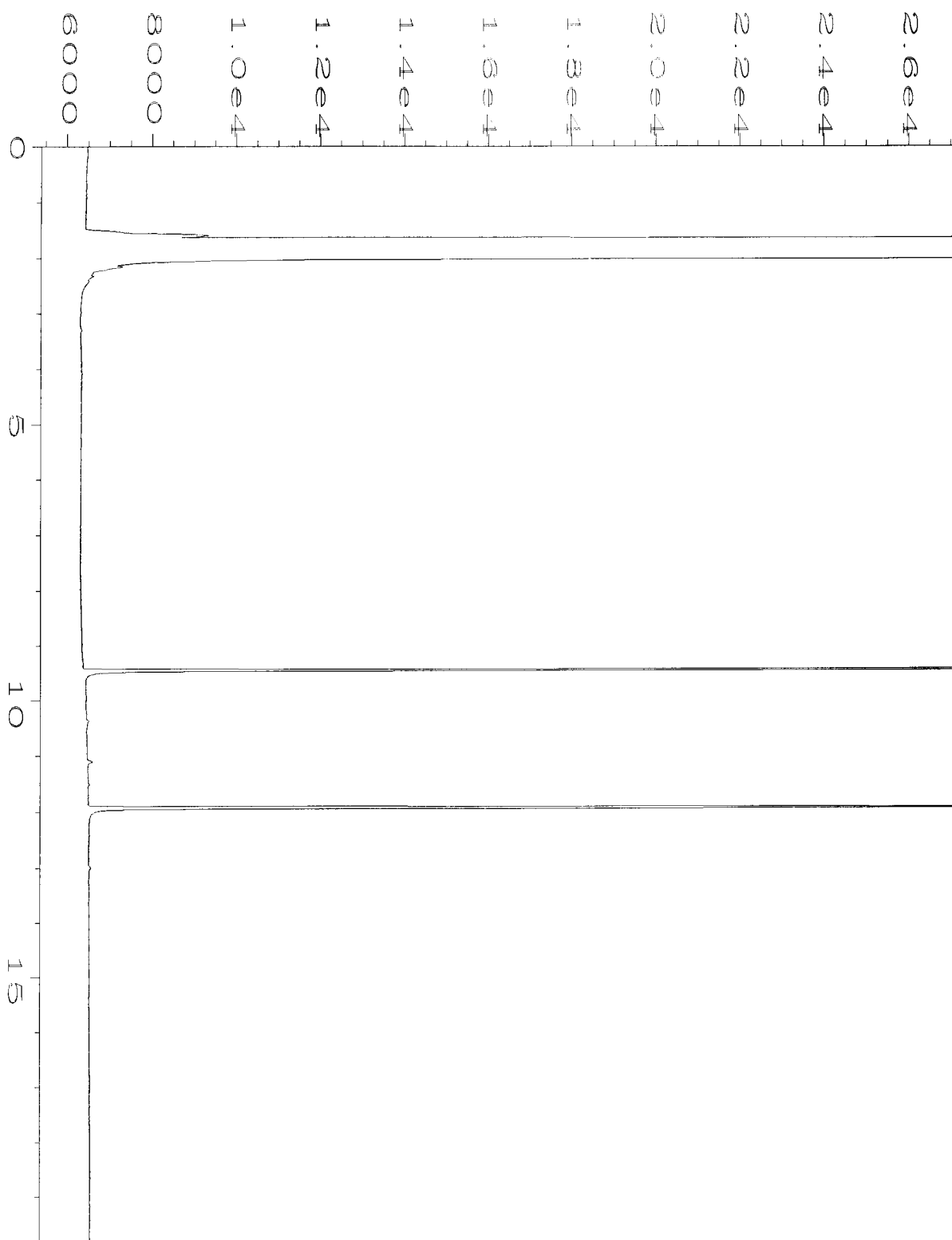
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

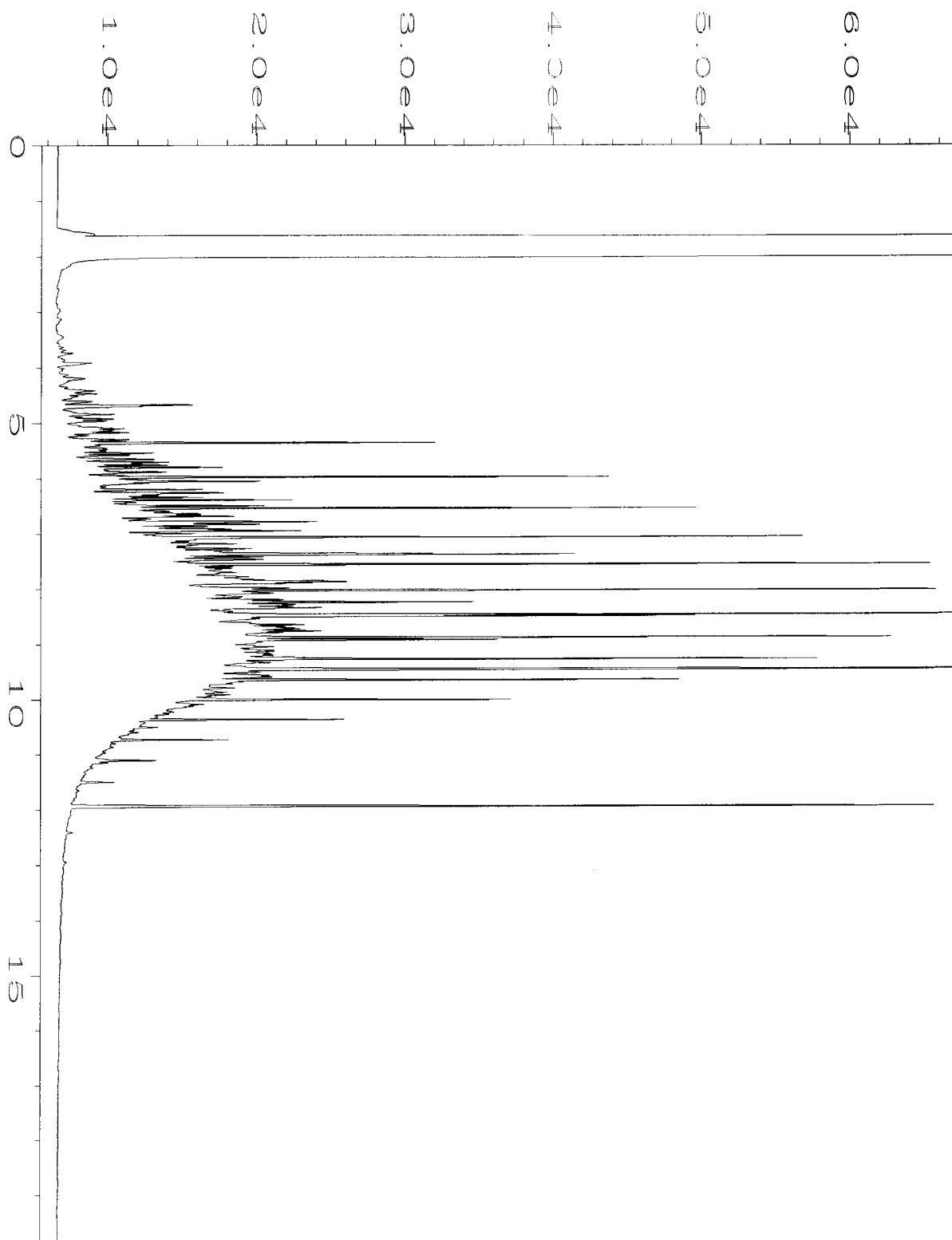




Data File Name	: C:\HPCHEM\1\DATA\01-24-12\018F0501.D	Page Number	: 1
Operator	: ML	Vial Number	: 18
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201167-04	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 24 Jan 12 04:02 PM	Analysis Method	: TPHD.MTH
Report Created on:	25 Jan 12 09:26 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-24-12\017F0501.D	Page Number	: 1
Operator	: ML	Vial Number	: 17
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-111 mb2	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 24 Jan 12 03:35 PM	Analysis Method	: TPHD.MTH
Report Created on:	25 Jan 12 09:24 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-24-12\003F0201.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 24 Jan 12 09:18 AM	Analysis Method	: TPHD.MTH
Report Created on:	25 Jan 12 09:24 AM		

VS1/  
1/B03

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)	
PROJECT NAME/NO.	PO #
AMLI Avtech 0789-004	
REMARKS	GEMSY / N

Page # 1      0.7      1/4

**TURNAROUND TIME**

☒ Standard (2 Weeks)

☐ RUSH \_\_\_\_\_

Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**



☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

[illegible]

**Friedman & Bruya, Inc.**  
3012 16th Avenue West  
Seattle, WA 98119-2029  
Ph. (206) 285-8282  
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	R. A. Hunsberger	SES	1-13-12	1150
Received by: 	V. M. H.	FBI	1-13-12	1150
Relinquished by:				
Received by:				

Samples received at 2 °C

***Friedman & Bruya, Inc. #201168***

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

January 19, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 13, 2012 from the SOU\_0789-004\_20120113, F&BI 201168 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0119R.DOC

# FRIEDMAN & BRUYA, INC.

---

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 13, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789-004\_20120113, F&BI 201168 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201168-01	B07-08
201168-02	B07-10
201168-03	B07-13
201168-04	B07-15
201168-05	B07-20
201168-06	B07-25
201168-07	B07-30
201168-08	B08-08
201168-09	B08-10
201168-10	B08-13
201168-11	B08-15
201168-12	B08-20
201168-13	B08-25

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

Date of Report: 01/19/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201168

Date Extracted: 01/16/12

Date Analyzed: 01/16/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C <sub>10</sub> -C <sub>25</sub> )	(C <sub>25</sub> -C <sub>36</sub> )	(% Recovery)
			(Limit 50-150)
B08-08	<50	<250	99
201168-08			
Method Blank	<50	<250	90
02-085 MB			



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	B07-08	Client:	SoundEarth Strategies
Date Received:	01/13/12	Project:	SOU_0789-004_20120113, F&BI 201168
Date Extracted:	01/17/12	Lab ID:	201168-01
Date Analyzed:	01/17/12	Data File:	201168-01.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	91	60	125
Indium	93	60	125
Holmium	102	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	8.10
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	16.4
Lead	1.31

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	B08-08	Client:	SoundEarth Strategies
Date Received:	01/13/12	Project:	SOU_0789-004_20120113, F&BI 201168
Date Extracted:	01/17/12	Lab ID:	201168-08
Date Analyzed:	01/17/12	Data File:	201168-08.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	91	60	125
Indium	92	60	125
Holmium	103	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	11.0
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	29.7
Lead	2.90

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789-004_20120113, F&BI 201168
Date Extracted:	01/16/12	Lab ID:	I2-41 mb
Date Analyzed:	01/17/12	Data File:	I2-41 mb.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125
Indium	93	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/19/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201168

Date Extracted: 01/17/12

Date Analyzed: 01/18/12

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

Sample ID  
Laboratory ID

Total Mercury

B07-08  
201168-01

<0.1

B08-08  
201168-08

<0.1

Method Blank

<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/19/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201168

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 201162-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	101	102	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	104	79-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/19/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201168

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 201148-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	8.66	98	103	51-132	5
Arsenic	mg/kg (ppm)	10	1.25	94	92	44-151	2
Selenium	mg/kg (ppm)	5	<1	92	92	52-128	0
Silver	mg/kg (ppm)	10	<1	90	103	69-125	13
Cadmium	mg/kg (ppm)	10	<1	102	102	83-120	0
Barium	mg/kg (ppm)	50	42.3	103 b	102 b	47-147	1 b
Lead	mg/kg (ppm)	50	2.02	103	108	65-126	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	107	79-125
Arsenic	mg/kg (ppm)	10	99	80-120
Selenium	mg/kg (ppm)	5	98	81-121
Silver	mg/kg (ppm)	10	94	84-117
Cadmium	mg/kg (ppm)	10	103	89-116
Barium	mg/kg (ppm)	50	107	88-113
Lead	mg/kg (ppm)	50	106	81-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/19/12

Date Received: 01/13/12

Project: SOU\_0789-004\_20120113, F&BI 201168

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201148-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	114	118	45-162	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	114	63-144

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

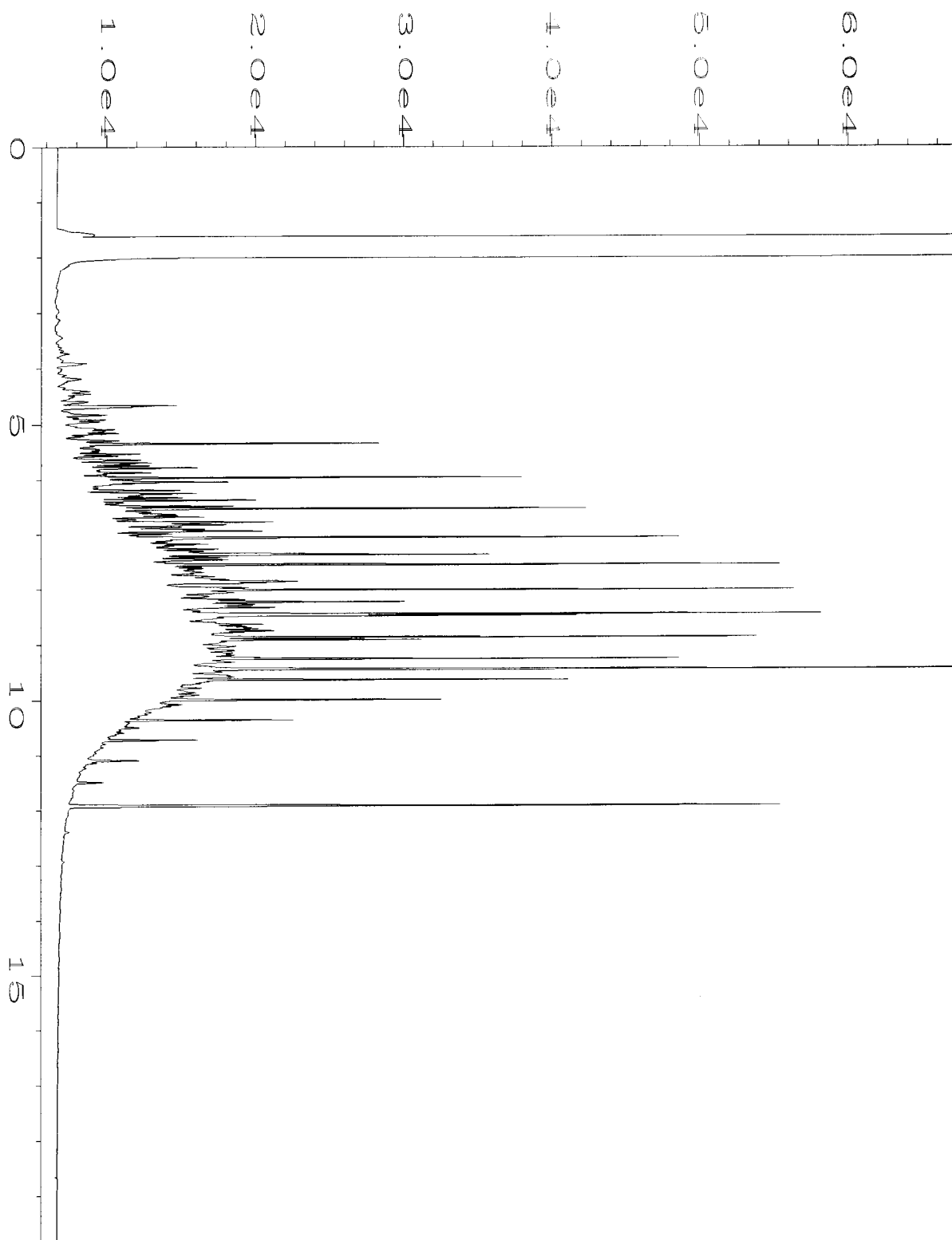
pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

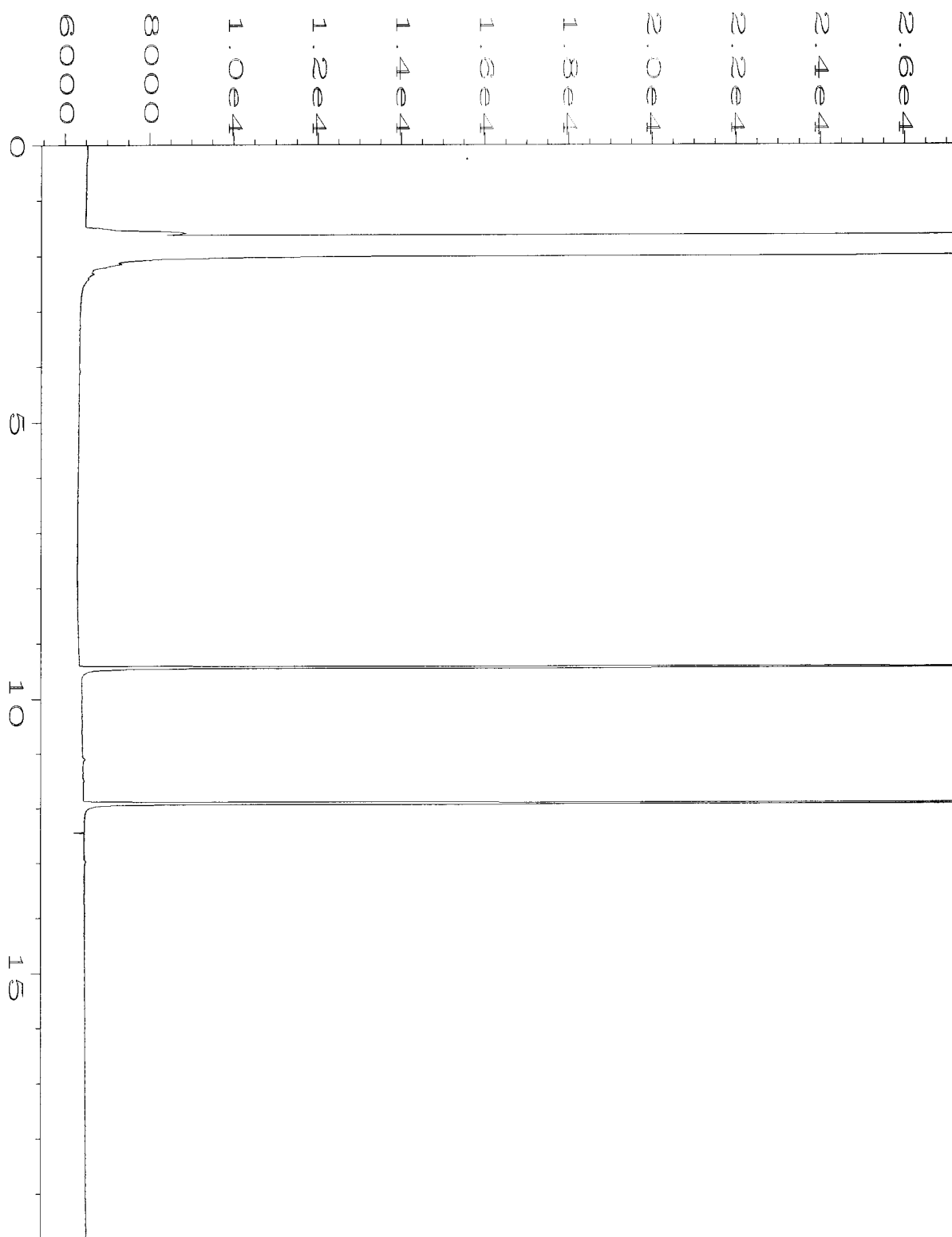
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

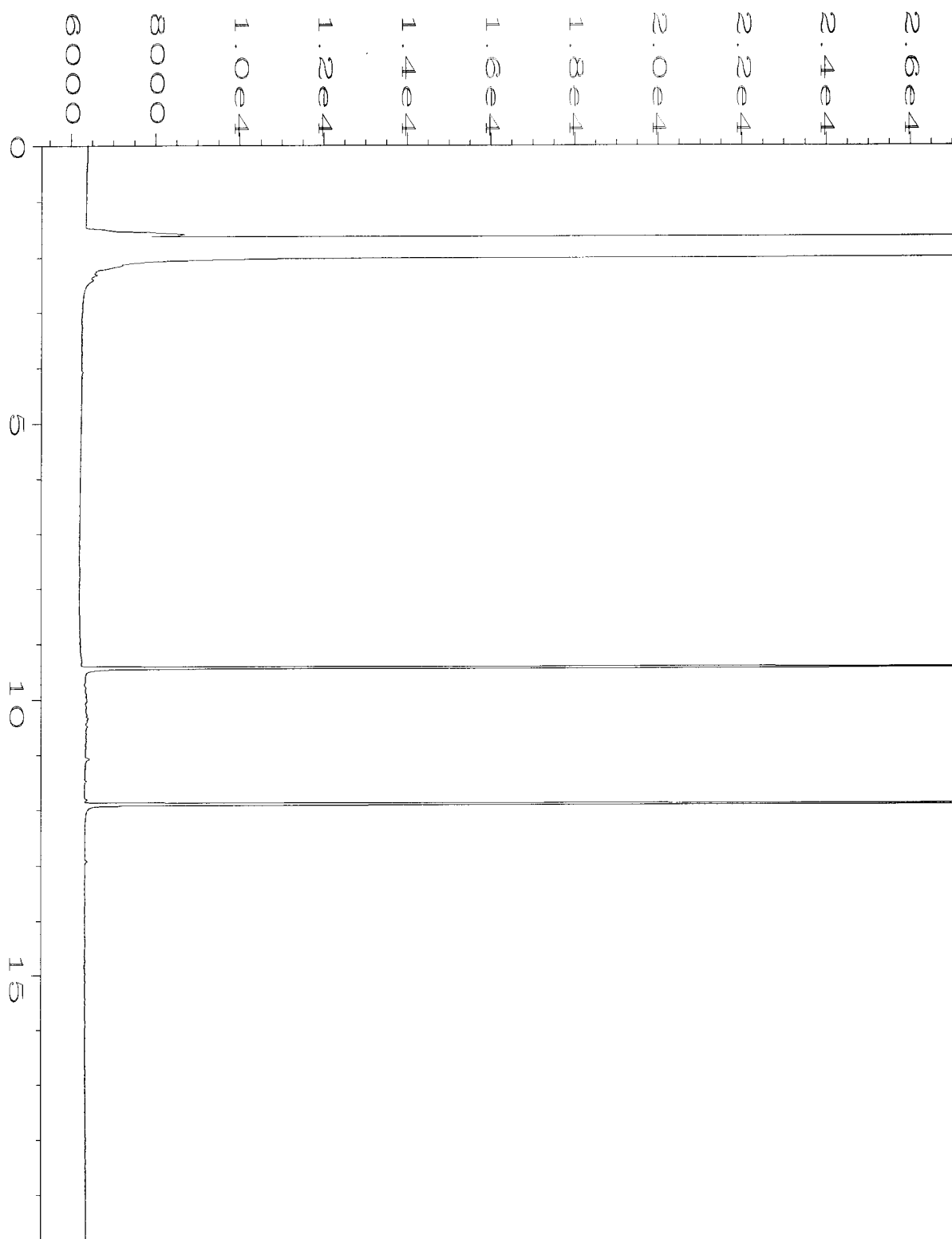




Data File Name	: C:\HPCHEM\1\DATA\01-16-12\003F0201.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 16 Jan 12 09:19 AM	Analysis Method	: END.MTH
Report Created on:	17 Jan 12 09:13 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-16-12\011F0601.D	Page Number	: 1
Operator	: ML	Vial Number	: 11
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-085 mb	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: TPHD.MTH
Acquired on	: 16 Jan 12 03:06 PM	Analysis Method	: END.MTH
Report Created on:	: 17 Jan 12 09:13 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-16-12\018F0601.D	Page Number	: 1
Operator	: ML	Vial Number	: 18
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201168-08	Sequence Line	: 6
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 16 Jan 12 06:14 PM	Analysis Method	: END.MTH
Report Created on:	17 Jan 12 09:14 AM		

201168

## SAMPLE CHAIN OF CUSTODY

ME 01-13-12

BE3

VR3

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA, 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

Rob H

PROJECT NAME/NO.

AMLI Avtech 0789-004

PO #

REMARKS

GEMS Y / N

Page #

0.

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

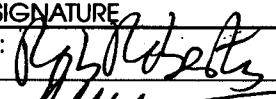
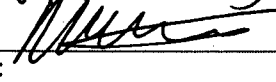
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals		
B07-08	B07	08	01 A+E	1-12-12	0945	Soil	5								
B07-10		10	02	1-12-12	0950	Soil	5								
B07-13		13	03		1000	Soil	5								
B07-15		15	04		1010	Soil	5								
B07-20		20	05		1020	Soil	5								
B07-25		25	06		1030	Soil	5								
B07-30		30	07		1040	Soil	5								
B08-08	B08	08	08		1215	Soil	5	X					X		
B08-10		10	09		1220	Soil	5								
B08-13		13	10		1225	Soil	5								
B08-15		15	11		1230	Soil	5								
B08-20		20	12		1240	Soil	5								
B08-25		25	13		1255	Soil	5								

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	ROB ROBERTS	SES	1-13-12	1230
Received by: 	Matt Lyngstov	SEB Inc	1/13/12	1230
Relinquished by:				
Received by:		Samples received at 4 °C		

***Friedman & Bruya, Inc. #201148 and additional***

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

January 23, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on January 12, 2012 from the SOU\_0789-004-02\_20120112, F&BI 201148 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0123R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 12, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789-004-02\_20120112, F&BI 201148 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201148-01	B04-03
201148-02	B04-05
201148-03	B04-10
201148-04	B04-13
201148-05	B04-15
201148-06	B04-20
201148-07	B04-25
201148-08	B05-08
201148-09	B05-10
201148-10	B05-13
201148-11	B05-15
201148-12	B05-20
201148-13	B05-25
201148-14	B05-30
201148-15	B05-35
201148-16	B06-08
201148-17	B06-10
201148-18	B06-13
201148-19	B06-15
201148-20	B06-20
201148-21	B06-25
201148-22	B06-30
201148-23	B06-35
201148-24	B06-40

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

Date Extracted: 01/13/12

Date Analyzed: 01/13/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C <sub>10</sub> -C <sub>25</sub> )	(C <sub>25</sub> -C <sub>36</sub> )	(% Recovery)
			(Limit 50-150)
B04-05	<50	<250	88
201148-02			
Method Blank	<50	<250	88
02-079 MB			



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	B04-05	Client:	SoundEarth Strategies
Date Received:	01/12/12	Project:	SOU_0789-004-02, F&BI 201148
Date Extracted:	01/16/12	Lab ID:	201148-02
Date Analyzed:	01/16/12	Data File:	201148-02.052
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	84	60	125
Indium	83	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	8.66
Arsenic	1.25
Selenium	<1
Silver	<1
Cadmium	<1
Barium	42.3
Lead	2.02

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004-02, F&BI 201148
Date Extracted:	01/16/12	Lab ID:	I2-41 mb
Date Analyzed:	01/17/12	Data File:	I2-41 mb.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125
Indium	93	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

Date Extracted: 01/16/12

Date Analyzed: 01/18/12

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

Sample ID  
Laboratory ID

Total Mercury

B04-05  
201148-02

<0.1

Method Blank

<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 201148-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	100	99	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	93	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 201148-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	8.66	98	103	51-132	5
Arsenic	mg/kg (ppm)	10	1.25	94	92	44-151	2
Selenium	mg/kg (ppm)	5	<1	92	92	52-128	0
Silver	mg/kg (ppm)	10	<1	90	103	69-125	13
Cadmium	mg/kg (ppm)	10	<1	102	102	83-120	0
Barium	mg/kg (ppm)	50	42.3	103 b	102 b	47-147	1 b
Lead	mg/kg (ppm)	50	2.02	103	108	65-126	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	88	79-125
Arsenic	mg/kg (ppm)	10	96	80-120
Selenium	mg/kg (ppm)	5	99	81-121
Silver	mg/kg (ppm)	10	94	84-117
Cadmium	mg/kg (ppm)	10	102	89-116
Barium	mg/kg (ppm)	50	102	88-113
Lead	mg/kg (ppm)	50	108	81-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/23/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 201148-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	114	118	45-162	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	114	63-144

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

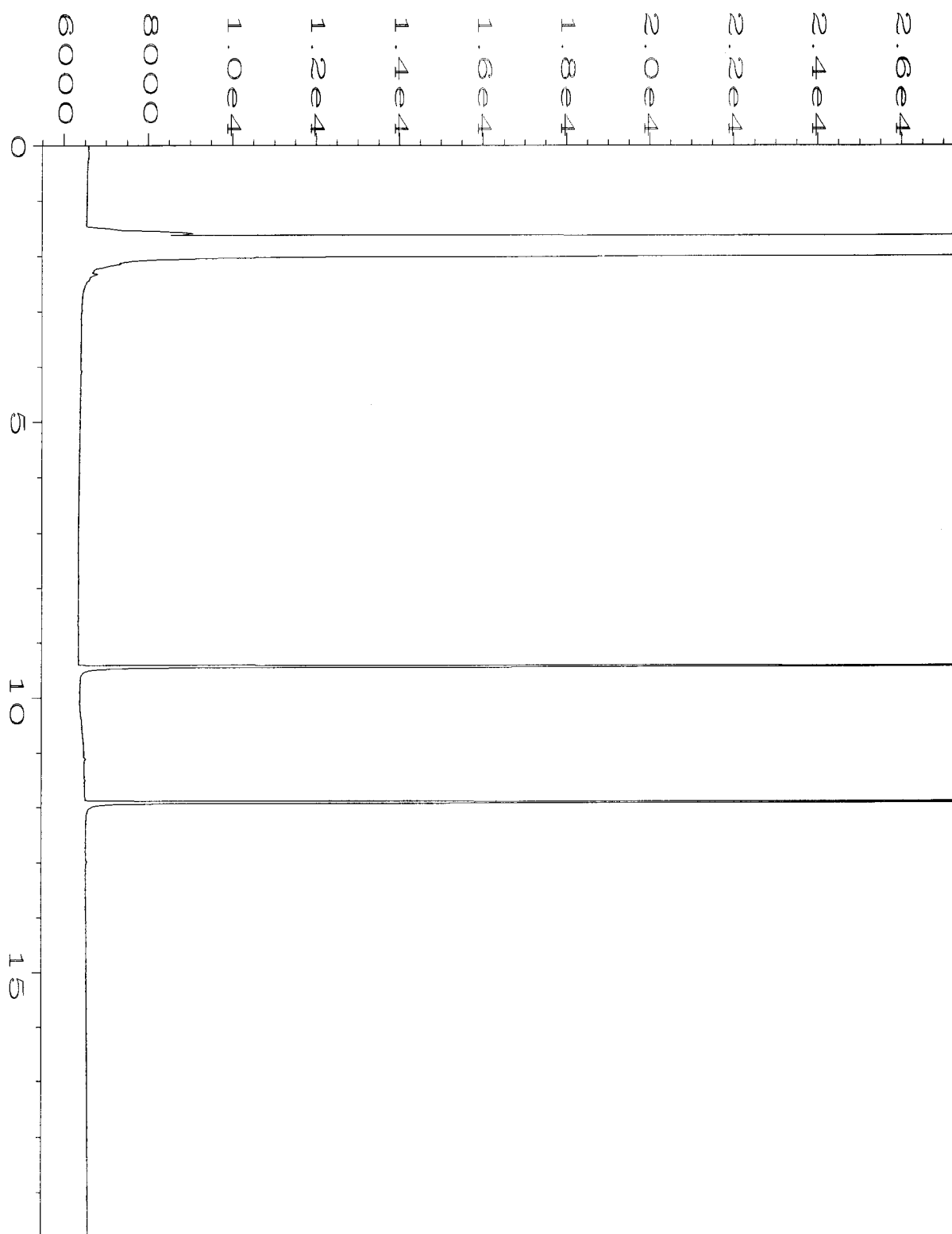
pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

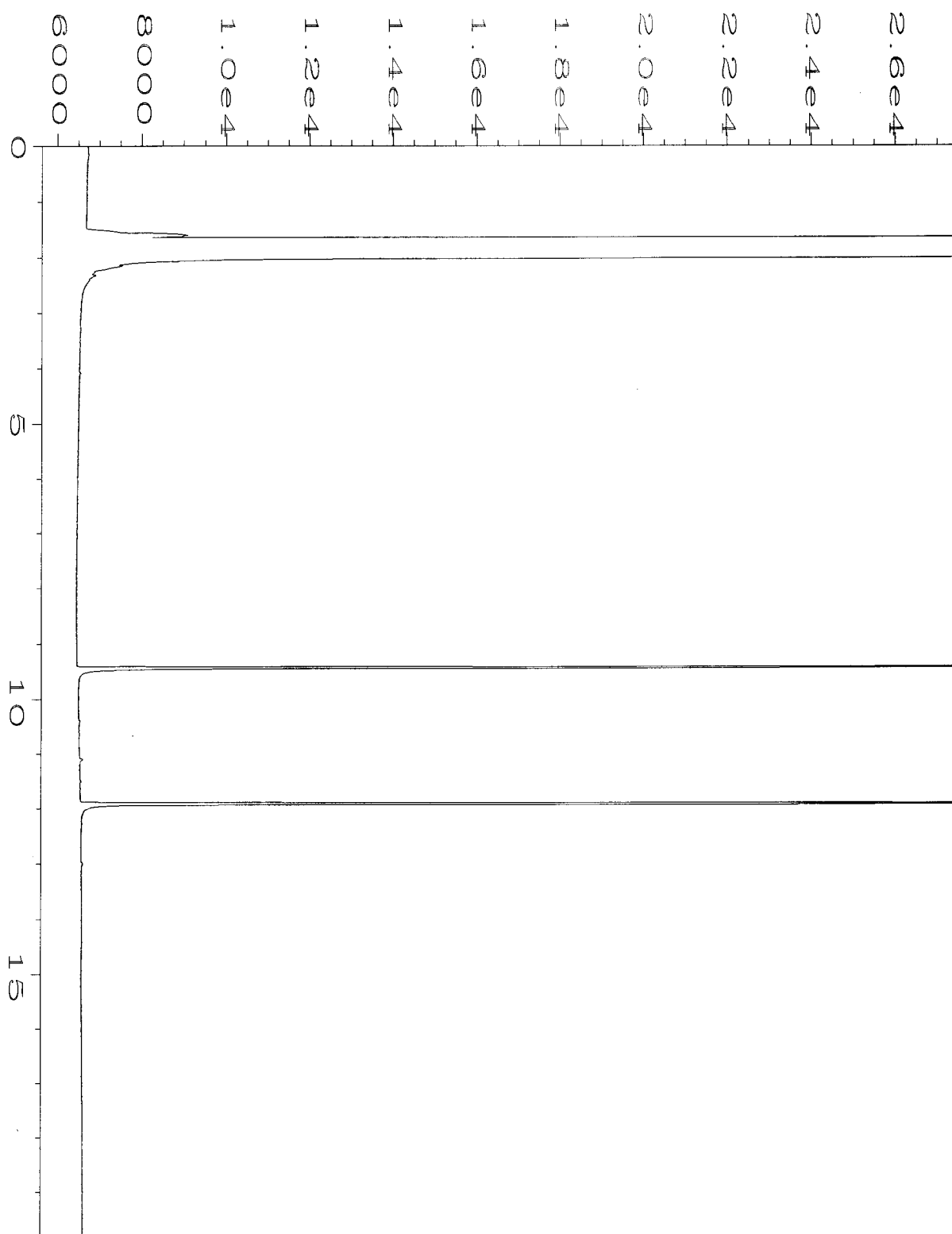
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

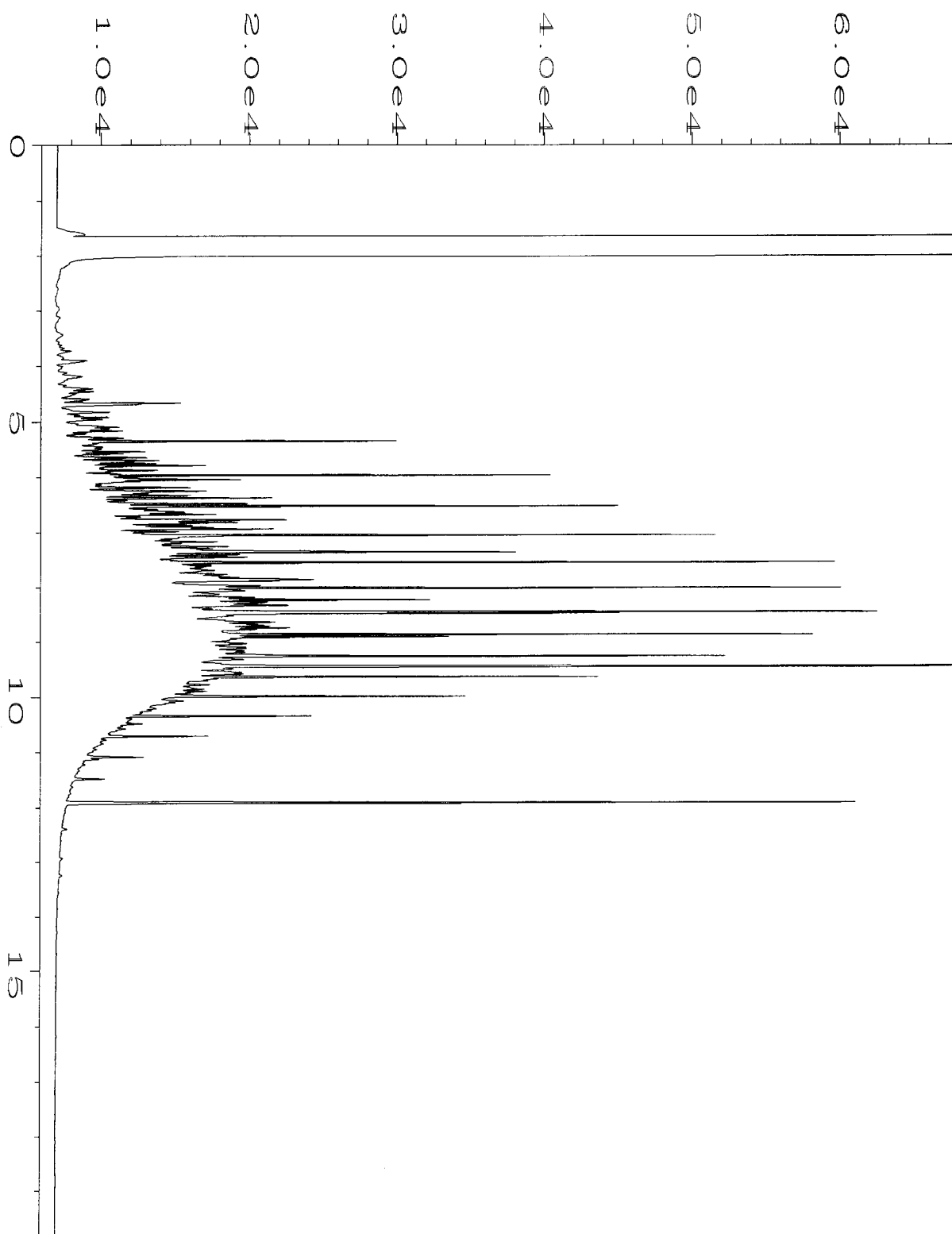


Data File Name	: C:\HPCHEM\1\DATA\01-13-12\017F0501.D	Page Number	: 1
Operator	: ML	Vial Number	: 17
Instrument	: GC1	Injection Number	: 1
Sample Name	: 201148-02	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 13 Jan 12 05:18 PM	Analysis Method	: END.MTH
Report Created on:	16 Jan 12 08:59 AM		





Data File Name	: C:\HPCHEM\1\DATA\01-13-12\013F0501.D	Page Number	: 1
Operator	: ML	Vial Number	: 13
Instrument	: GC1	Injection Number	: 1
Sample Name	: 02-079 mb	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 13 Jan 12 03:32 PM	Analysis Method	: END.MTH
Report Created on:	16 Jan 12 08:59 AM		



Data File Name	: C:\HPCHEM\1\DATA\01-13-12\003F0201.D	Page Number	: 1
Operator	: ML	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 WADF 37-06B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method	: TPHD.MTH
Acquired on	: 13 Jan 12 09:26 AM	Analysis Method	: END.MTH
Report Created on:	: 16 Jan 12 08:58 AM		

201148

## SAMPLE CHAIN OF CUSTODY ME 01-12-12

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA, 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

Rob Roberts

PROJECT NAME/NO.

AMLI Avtech 0789-004 - 02  
TAG# 300

PO #

REMARKS

GEMS Y / N

Page # 1

## TURNAROUND TIME

☒ Standard (1 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions


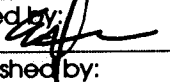
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals		
B04-03	B04	03	01A-E	1-11-12	0835	Soil	5								
B04-05		05	02		0840	Soil	5	X					X		
B04-08		1008	03		0845	Soil	5								
B04-13		13	04		0855	Soil	5								
B04-15		15	05		0900	Soil	5								
B04-20		20	06		0910	Soil	5								
B04-25		25	07		0915	Soil	5								
B05-08	B05	08	08		1030	Soil	5								
B05-10		10	09		1040	Soil	5								
B05-13		13	10		1045	Soil	5								
B05-15		15	11		1050	Soil	5								
B05-20		20	12		1055	Soil	5								
B05-25		25	13		1105	Soil	5								

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Rob Roberts	SE3	1/12/12	9:00
Received by: 	Eric Farnsworth	F&B	1/12/12	12:16
Relinquished by:				
Received by:				

Samples received at 2 °C

## SAMPLE CHAIN OF CUSTODY

ME 01-12-12

BLY/VS3

201148

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA, 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO.

AMLI Avtech 0789-004

PO #

REMARKS

GEMS Y / N

Page # 2 of 2

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

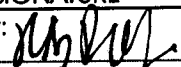
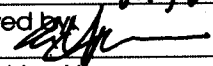
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals			
B05-30	R05	30	14 A-E	1-11-12	1110	Soil	5									
B05-35	1	35	15 T		1120	Soil	5									
R06-08	R06	08	16		1310	Soil	5									
B06-10		10	17		1315	Soil	5									
B06-13		13	18		1320	Soil	5									
B06-15		15	19		1325	Soil	5									
B06-20		20	20		1330	Soil	5									
B06-25		25	21		1335	Soil	5									
B06-30		30	22		1345	Soil	5									
B06-35		35	23		1400	Soil	5									
B06-40		40	24		1405	Soil	5									

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Rob Roberts	SES	1/12/12	9:10
Received by: 	Eric Jones	F&B	1/14/12	12:16
Relinquished by:				
Received by:				

Samples received at 21 °C

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
e-mail: fbi@isomedia.com

February 2, 2012

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the additional results from the testing of material submitted on January 12, 2012 from the SOU\_0789-004-02\_20120112, F&BI 201148 project. There are 7 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
SOU0202R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 12, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0789-004-02\_20120112, F&BI 201148 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
201148 -01	B04-03
201148 -02	B04-05
201148 -03	B04-10
201148 -04	B04-13
201148 -05	B04-15
201148 -06	B04-20
201148 -07	B04-25
201148 -08	B05-08
201148 -09	B05-10
201148 -10	B05-13
201148 -11	B05-15
201148 -12	B05-20
201148 -13	B05-25
201148 -14	B05-30
201148 -15	B05-35
201148 -16	B06-08
201148 -17	B06-10
201148 -18	B06-13
201148 -19	B06-15
201148 -20	B06-20
201148 -21	B06-25
201148 -22	B06-30
201148 -23	B06-35
201148 -24	B06-40

The samples were requested to be analyzed outside of the holding time. The data were flagged accordingly.

The 8260C laboratory control sample and laboratory control sample duplicate failed the relative percent difference for chloroethane. The analyte was not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: B06-20 ht	Client: SoundEarth Strategies
Date Received: 01/12/12	Project: SOU_0789-004-02_20120112, F&BI 201148
Date Extracted: 01/30/12	Lab ID: 201148-20
Date Analyzed: 01/31/12	Data File: 013112.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: B06-35 ht	Client: SoundEarth Strategies
Date Received: 01/12/12	Project: SOU_0789-004-02_20120112, F&BI 201148
Date Extracted: 01/30/12	Lab ID: 201148-23
Date Analyzed: 01/31/12	Data File: 013113.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	0.046	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank	Client: SoundEarth Strategies
Date Received: Not Applicable	Project: SOU_0789-004-02_20120112, F&BI 201148
Date Extracted: 01/30/12	Lab ID: 02-0129 mb
Date Analyzed: 01/31/12	Data File: 013111.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	104	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 02/02/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 201148-20 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	23	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	53	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	53	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	61	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	48	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	65	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	78	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	62	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	80	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	72	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	78	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	94	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	80	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	82	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	85	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	82	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	82	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	82	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	80	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	80	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.03	79	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	85	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	87	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	85	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	93	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	93	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	84	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	91	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	85	30-142
2-Hexanone	mg/kg (ppm)	12.5	<0.5	88	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	89	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	83	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	89	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	87	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	85	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	88	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	88	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	90	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	90	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	89	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	89	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	89	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	91	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	86	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	84	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	84	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	90	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	92	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	90	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	88	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	91	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	87	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	84	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	88	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	86	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	84	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	85	19-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	79	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	81	20-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 02/02/12

Date Received: 01/12/12

Project: SOU\_0789-004-02\_20120112, F&BI 201148

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	47	44	10-146	7
Chloromethane	mg/kg (ppm)	2.5	74	71	27-133	4
Vinyl chloride	mg/kg (ppm)	2.5	78	74	22-139	5
Bromomethane	mg/kg (ppm)	2.5	81	78	38-114	4
Chloroethane	mg/kg (ppm)	2.5	56	82	20-153	38 vo
Trichlorofluoromethane	mg/kg (ppm)	2.5	90	83	10-196	8
Acetone	mg/kg (ppm)	12.5	91	83	52-141	9
1,1-Dichloroethene	mg/kg (ppm)	2.5	93	88	47-128	6
Methylene chloride	mg/kg (ppm)	2.5	80	73	42-132	9
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	97	94	60-123	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	88	67-127	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	96	96	68-115	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	112	120	57-133	7
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	99	72-113	1
Chloroform	mg/kg (ppm)	2.5	99	98	66-120	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	104	103	57-123	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	98	97	56-135	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	102	103	62-131	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	102	102	69-128	0
Carbon tetrachloride	mg/kg (ppm)	2.5	102	100	60-139	2
Benzene	mg/kg (ppm)	2.5	96	96	68-114	0
Trichloroethene	mg/kg (ppm)	2.5	94	95	68-114	1
1,2-Dichloropropane	mg/kg (ppm)	2.5	100	101	72-127	1
Bromodichloromethane	mg/kg (ppm)	2.5	104	103	72-130	1
Dibromomethane	mg/kg (ppm)	2.5	100	101	70-120	1
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	109	107	45-145	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	112	111	75-136	1
Toluene	mg/kg (ppm)	2.5	101	100	66-126	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	111	109	72-132	2
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	100	99	75-113	1
2-Hexanone	mg/kg (ppm)	12.5	102	100	33-152	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	104	103	72-130	1
Tetrachloroethene	mg/kg (ppm)	2.5	101	101	72-114	0
Dibromochloromethane	mg/kg (ppm)	2.5	108	107	74-125	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	104	103	74-132	1
Chlorobenzene	mg/kg (ppm)	2.5	101	99	76-111	2
Ethylbenzene	mg/kg (ppm)	2.5	105	104	64-123	1
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	103	102	69-135	1
m,p-Xylene	mg/kg (ppm)	5	106	106	78-122	0
o-Xylene	mg/kg (ppm)	2.5	103	103	77-124	0
Styrene	mg/kg (ppm)	2.5	103	101	74-126	2
Isopropylbenzene	mg/kg (ppm)	2.5	104	102	76-127	2
Bromoform	mg/kg (ppm)	2.5	108	105	56-132	3
n-Propylbenzene	mg/kg (ppm)	2.5	110	110	74-124	0
Bromobenzene	mg/kg (ppm)	2.5	101	103	72-122	2
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	104	103	76-126	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	100	99	56-143	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	99	99	61-137	0
2-Chlorotoluene	mg/kg (ppm)	2.5	106	107	74-121	1
4-Chlorotoluene	mg/kg (ppm)	2.5	109	109	75-122	0
tert-Butylbenzene	mg/kg (ppm)	2.5	106	106	73-130	0
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	104	103	76-125	1
sec-Butylbenzene	mg/kg (ppm)	2.5	105	104	71-130	1
p-Isopropyltoluene	mg/kg (ppm)	2.5	108	106	70-132	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	103	103	75-121	0
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	100	99	74-117	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	103	101	76-121	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	96	95	61-136	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	92	96	70-129	4
Hexachlorobutadiene	mg/kg (ppm)	2.5	100	95	50-153	5
Naphthalene	mg/kg (ppm)	2.5	85	94	60-125	10
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	86	97	62-130	12

**Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

201148

## SAMPLE CHAIN OF CUSTODY ME 01-12-12

BTH/2/153

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA, 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

Rob Roberts

PROJECT NAME/NO.

AMLI Avtech 0789-004 - 02  
Task 300

PO #

REMARKS

GEMS Y / N

Page # 1

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes
								NWTPH-DX	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals			
B04-03	B04	03	01A-E	1-11-12	0835	Soil	5									
B04-05		05	02		0840	Soil	5	X					X			
B04-08		1008	03		0845	Soil	5									
B04-13		13	04		0855	Soil	5									
B04-15		15	05		0900	Soil	5									
B04-20		20	06		0910	Soil	5									
B04-25		25	07		0915	Soil	5									
B05-08	B05	08	08		1030	Soil	5									
B05-10		10	09		1040	Soil	5									
B05-13		13	10		1045	Soil	5									
B05-15		15	11		1050	Soil	5									
B05-20		20	12		1055	Soil	5									
B05-25		25	13		1105	Soil	5									

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [Signature]	Rob Roberts	SE3	1/12/12	9:00
Received by: [Signature]	Eve [Signature]	F&B	1/12/12	12:16
Relinquished by:				
Received by:				

Samples received at 2 °C

201148

## SAMPLE CHAIN OF CUSTODY

ME 01-12-12

654/VS3

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Ave E, Suite 200City, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO.

AMLI Avtech 0789-004

PO #

REMARKS

GEMS Y / N

Page # 2

## TURNAROUND TIME

☒ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

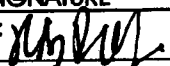
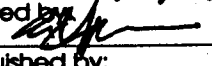
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals			
B05-30	R05	30	14 A-E	1-11-12	1110	Soil	5									* per RR
B05-35		35	15		1120	Soil	5									1/27/12
B06-08	B06	08	16		1310	Soil	5									ML
B06-10		10	17		1315	Soil	5									
B06-13		13	18		1320	Soil	5									
B06-15		15	19		1325	Soil	5									
B06-20		20	20		1330	Soil	5				*					
B06-25		25	21		1335	Soil	5									
B06-30		30	22		1345	Soil	5									
B06-35		35	23		1400	Soil	5				*					
B06-40		40	24		1405	Soil	5									

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	ROB ROBERTS	SES	1/12/12	9:10
Received by: 	ERIC BROWN	F&B	1/14/12	12:15
Relinquished by:				
Received by:				

Samples received at 2 °C