



# Limited Subsurface Investigation Report

**Seattle Times Property  
1120 John Street  
Seattle, Washington**

Prepared For:

**Onni Group  
300 – 550 Robson Street  
Vancouver, BC V6B 2B7**

August 16, 2013

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## 1.0 INTRODUCTION

Environmental Partners, Inc. (EPI) is pleased to submit this Limited Subsurface Investigation Report documenting subsurface investigation activities conducted at the Seattle Times property located at 1120 John Street in Seattle, Washington (the subject property, see Figure 1). The subsurface investigation activities documented herein have been performed to characterize the environmental conditions prior to purchase of the subject property. This report is intended to document the findings of the investigative activities and present the potential environmental implications involved with subject property purchase and redevelopment. At the time of the investigations documented herein, the subject property was owned by The Seattle Times (Seattle Times) and was the historical printing and operations facility used in the production of newspapers since approximately 1940.

The following sections will address the various findings located within distinct locations throughout the subject property and present an evaluation of the potential impact that those findings may have on the current and future value of the subject property.

Portions of the environmental due-diligence work documented herein were initially performed for previous prospective buyers. Under contract, the previous prospective buyers were required to provide the results of any investigation to Seattle Times after their contract to purchase the subject property was expired. The culminating results of the previous investigations were then provided to the Onni Group by Seattle Times. Subsequent follow-up due-diligence work was performed by EPI directly for the Onni Group. This report summarizes all of the environmental due-diligence prepared by EPI to date for the subject property.

This work documented herein was intended to satisfy the requirements of a remedial investigation as defined in the Model Toxics Control Act, (MTCA), WAC 173-340-350. However, due to the complex development history of the subject property and dense nature of subsurface infrastructure, sampling locations were limited. Therefore, it was not possible to fully characterize the nature and extent of contaminants at the subject property. Resultantly, additional sampling will be necessary during redevelopment to provide a complete understanding of the existing conditions.

As a required component of a MTCA-compliant remedial investigation, a full comparative cleanup level analysis is necessary. This analysis is beyond the scope of services for this project. For purposes of the work documented herein, the analytical data collected during this work were compared against the MTCA Method A cleanup levels for soil and ground water using an unrestricted land use standard for screening purposes.

The soil cleanup levels used for screening are the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses (Method A Soil CULs) as documented in MTCA Table 740-1. The ground water cleanup levels used for screening are the MTCA Method A Ground Water Cleanup Levels (Method A Ground Water CULs) as documented in MTCA Table 720-1.

For select metals (silver and barium) where a MTCA Method A cleanup level is not available, the MTCA Method B cleanup level for direct contact using an unrestricted land use scenario (MTCA Method B Soil CUL) was used for data comparison.

Discussions in this letter report regarding compliance are with respect to the MTCA Method A or B CULs only. As previously noted, in order to fully characterize the environmental risks associated with the subject property, a full remedial investigation, including a cleanup levels analysis will be necessary.

Method A Soil CULs for chromium are provided for a totalized chromium value, which includes both chromium III and chromium VI. Chromium VI is not stable in the environment and readily breaks down to chromium III. Therefore, for purposes of this evaluation, chromium detections at the subject property were compared to the chromium III cleanup level of 2,000 mg/kg. However, additional sampling should be conducted prior to development of the property to rule out the presence of chromium VI above its respective cleanup level.

In instances where wipe samples were collected, these results were compared to the Action Level established by the US EPA.

## **2.0 BACKGROUND**

In order to develop a scope of work (SOW) to perform subsurface investigation activities, EPI reviewed a *Phase I Environmental Site Assessment Report* for the subject property dated January 8, 2010, prepared by Farallon Consulting, L.L.C. for Bush Strout & Kornfeld (Phase I ESA). EPI also performed a site reconnaissance the subject property to assess access limitations for drilling and sampling equipment.

The Phase I ESA identified several recognized environmental conditions (RECs) at the subject property. These RECs included:

- The presence of at least 11 underground storage tanks (USTs). The USTs contained a range of compounds including waste oils and liquids, heating oil, diesel fuel, gasoline, and petroleum- and solvent-based inks. The USTs were installed as early as 1930 and at least three have been closed-in-place. The Phase I ESA also indicated that there is the potential for additional unknown or undocumented USTs to be present at the subject property. Five of the USTs and a fuel dispenser are located east of a maintenance garage in the northwestern corner of the subject property.
- Potential releases of inks and/or cleaning compounds from two large newspaper printing presses located on below-grade foundations.
- The presence of a maintenance garage on the property with the known use of solvents and petroleum products for vehicle maintenance since about 1948.
- The presence of a hazardous materials storage room with drains that are connected to an oil/water separator and a UST located west of the building. The age, location, and condition of that UST are not known.
- The potential migration of releases from adjacent or nearby properties onto the subject property.

During the EPI's site reconnaissance, Seattle Times personnel were able to provide plans of the oil/water separator/UST located to the west of the subject property building.

Based EPI's review of the Phase I ESA and observations made during the site reconnaissance, a total of 10 areas of potential concern (AOPCs) were identified for the subject property:

- AOPC 1: Printing Press Areas

AOPC 1 includes two separate rooms within the building. One room consists of four locations which house a total of approximately 38 newspaper printing presses between the four press units, and the second room contains approximately 9 additional printing presses. Within each of the press units, a series of 9 to 10 presses are located on top of sunken concrete pads, which house the presses.

It is understood that these presses were in operation during the 1960's and during EPI's site walk, oily stains were observed and surficial cracking of the concrete pads has occurred. To the best of EPI's knowledge, these presses used hydraulic oils, ink, and compressed air during the printing process.

- AOPC 2: Interior Ink Tanks (centrally located)

AOPC 2 consists of the two interior building ink tanks, which supplied ink to the pressrooms. These two vertical 4,000 (north tank) and 5,000-gallon (south tank) tanks are apparently housed within concrete vaults, which were constructed on top of the native soils of the sub-floor.

- AOPC 3: Ink Room (adjacent to shop in northwest corner)

AOPC 3 consists of the abandoned aboveground ink tanks located within a portion of the maintenance shop/garage area, in the northwest corner of the Site. These ink tanks are similar in their product storage to the ink tanks listed above in AOPC 2, but are above ground. Conditions during the site walk indicated considerable cracking of the concrete floor beneath the tanks and heavy-oil type stains on the surface of the floor which ran into these cracks, causing concern for the potential for considerable contaminant migration to the subsurface.

- AOPC 4: Compressor Room

AOPC 4 consists of the boiler room and compressor room within the Facility. This AOPC consists of two separate floors within a common area, with the upper area consisting of several large reciprocating piston-type compressors and the bottom area consisting of the boilers used to heat the building on the subject property. Each of these respective areas was constructed with concrete floors built on top of native or disturbed soil.

- AOPC 5: Northern UST Complex and Dispenser

This AOPC consists of five known USTs and one fuel dispenser located in the northwest corner of the subject property. This AOPC consists of:

- Two 12,000-gallon active gasoline USTs with cathodic protection;
  - One 8,000-gallon diesel oil UST; and
  - Two 5,000-gallon waste oil USTs.
- AOPC 6: Waste Oil UST (adjacent to the west of the facility)

AOPC 6 consists of one known 2,000-gallon UST used for storage of waste oil located on the west side of the subject property, outside the building.

- AOPC 7: Heating Oil UST (in the office area)

AOPC 7 consists of one 12,000-gallon heating oil UST, oriented east-west, and located beneath the southwest addition to the building. The UST was reportedly installed in 1974 and emptied in 2007. The UST is reportedly constructed of steel with an exterior coating of asphalt.

- AOPC 8: Heating Oil USTs (south-centrally located alleyway)

AOPC 8 consists of two 2,000-gallon heating oil USTs located in the alley south of the boiler room. These USTs were installed in 1930 and were reportedly filled with concrete slurry in 1997.

- AOPC 9: Hoists (located in maintenance garage)

AOPC 9 consists of four hydraulic hoists installed in the floor of the maintenance garage.

- AOPC 10: Sumps (located throughout facility)

AOPC 10 consists of four sumps at locations throughout the facility. The exact construction details of each sump were unknown. The sumps are assumed to be approximately 8 feet deep.

The AOPCs are depicted on Figure 2.

During a review of Ecology files from nearby properties that might have posed some environmental risk, EPI reviewed a document related to the property located adjacent to the north of the subject property, the Troy Laundry facility, a historical dry-cleaning business. That document titled DRAFT *Remedial Investigation*, dated May 2012 indicated that there was a documented release of trichloroethene (TCE) and tetrachloroethene (PCE) to soil and ground water. It also indicated that the regional ground water aquifer is present at a depth of 80 to 90 feet and flows toward the east-southeast. Therefore, the subject property is located cross- to down-gradient from the Troy Laundry facility. In addition to the regional ground water, there are also laterally discontinuous lenses of shallow ground water ranging in depth from about 20 to 35 feet.

The subsurface investigative activities documented herein were focused on addressing the above AOPCs and off-site potential sources of contamination.



The investigation was performed in three mobilization phases as follows:

- July 2012;
- September 2012; and
- May 2013.

The July, 2012 mobilization phase was primarily focused on large-scale, on-site issues associated with AOPCs 1 through 5. The September, 2012 mobilization phase focused on AOPCs 6 through 10 and included ground water monitoring well installation to screen ground water conditions along the northern property boundary. The May, 2013 mobilization phase was performed to address the major data gaps remaining from the initial mobilization phases and included collecting additional samples in AOPC 7 (Heating Oil UST [in the office area]) and installation of an additional well to further screen ground water along the northern property boundary.

### 3.0 OBJECTIVES

The objective of the subsurface investigation was to assess the potential for environmental liability associated with the purchase of the subject property. The investigation work at the subject property has allowed EPI to prepare prospective buyers for the potential of environmental impacts associated with the subject property and to present the potential risks associated with redevelopment.

The specific objective of this subsurface investigation report is to provide a screening-level evaluation of the analytical results and findings from each AOPC.

### 4.0 METHODOLOGY

Five basic methods of investigation were used to collect environmental samples of the medias of concern. These methods included:

- **Drilling and soil sampling.** Hollow-stem auger (HSA) drilling was used to investigate areas that were accessible to large drilling equipment and which required drilling to a depth where it was reasonably expected to detect contaminated soils. Soil borings located exterior of the building were advanced using a full size CME 55 drill rig.

Shallower, direct-push probe drilling was performed in areas with limited space for drilling equipment. This drilling technique was typically performed in areas within the facility building(s). Shallow soil borings were advanced using a limited-access Geoprobe unit model 54LT.

- **Monitoring well installation and ground water sampling.** Ground water samples were collected from wells that were installed in several locations following the installation of monitoring wells. An additional shallow reconnaissance ground water sample was collected from AOPC 5 during soil boring advancement.

- **Sump water sampling.** Samples were collected from several areas throughout the facility where shallow groundwater is pumped from a series of de-watering sumps beneath the facility building(s).
- **Wipe sampling.** Wipe samples were collected within portions of the facility that were considered areas that were likely to contain polychlorinated biphenyls (PCBs). Wipe samples were collected on equipment surfaces, concrete floors, and utility piping.
- **Product sampling.** Samples of the oil (product) found within some of the equipment at the facility were collected and analyzed for the presence of PCBs.

#### 4.1 Drilling and Soil Sampling

EPI advanced a series of soil borings at the subject property using the methods described above for the purposes of collecting soil samples to assess subsurface soil conditions. Prior to boring advancement, each location was screened for utilities by a private utility locator. After utilities were cleared, each boring location was concrete-cored prior to boring advancement. HSA boring locations were first excavated to a minimum of three feet below ground surface (bgs) within each borehole in order to ensure that no utilities were present prior to drilling.

During boring advancement, soils were screened for the potential presence of contamination using a photoionization detector (PID) and using general observations of odor and discoloration. Soil samples were collected in accordance with standard protocols for the collection of soil samples utilizing appropriate sampling techniques for the required analytical method. In addition, soils were investigated as they were removed from the subsurface and were logged according to the Unified Soil Classification System, ASTM D2488. The specific sample locations and depths are summarized for each AOPC-specific section, and are presented on Table 2. Boring logs for each HSA boring location are included in Attachment A. A summary of the DPT borings is also included in Attachment A.

#### 4.2 Monitoring Well Installation and Ground Water Sampling

A total of three ground water monitoring wells were installed on the northern property boundary to assess if off-site ground water impacts from the Troy Laundry facility are potentially migrating on to the subject property. With the exception of MW-3, each monitoring well was installed using standard HSA drilling techniques.

EPI contracted with Cascade Drilling, L.P. (Cascade) to install each monitoring well using hollow stem auger (HSA) drilling and well installation methods. The locations of the monitoring wells are specified on Figure 3. As-built well details and soil boring logs are provided in Attachment A.

Cascade used a truck-mounted HSA drilling rig to advance boreholes and install the monitoring wells. The wells were constructed of 2-inch diameter, flush threaded, schedule 40 PVC casing and screen in conformance with WAC 173-160-430. Well screen assemblies consisted of 15 feet of 0.010-inch (*i.e.*, 10 slot), flush-threaded, machine-slotted screen with a threaded end cap.

A sand filter pack consisting of “20-40 Colorado” silica sand was placed in the annulus of the borehole to a depth of about one foot above the top of the well screen. Bentonite chips were placed in the annular space from the top of the sand pack to within two feet of ground surface, and were then hydrated. The wells were completed with a traffic-rated flush-mount steel well monument and a watertight locking cap. All well installation procedures were performed in accordance with the requirements of WAC 173-160, Minimum Standards for Construction and Maintenance of Wells.

Investigative derived waste (IDW; e.g., drill cuttings, decontamination water, well development fluids, etc.) were contained in 55-gallon drums and stored on-site pending disposal.

Monitoring well MW-1 was installed in the northwest corner of the subject property to a depth of about 100 feet. Ground water was first encountered in this boring at a depth of about 88 feet.

Monitoring well MW-2 was installed in the central portion of the northern property boundary to a depth of about 30 feet. Ground water was first encountered in this boring at a depth of about 14 feet. This well was installed within the laterally discontinuous shallow ground water, typical in the area of the subject property.

Monitoring well MW-3 was installed in the northeast corner of the subject property to a depth of about 100 feet. Ground water was first encountered in this boring at a depth of about 14 feet. Due to the presence of shallow ground water, a conductor casing was installed prior to advancing a boring to deeper ground water to prevent the contamination of deeper water by overlying shallower water. Soil samples were collected to verify the thickness of the shallow water bearing unit prior to installing the conductor casing. Soils exhibited conditions that suggested that the water encountered at the 14-foot depth was about five feet thick (from about 14 to 19 feet). Therefore, it was determined that the conductor casing would be installed to a depth of 30 feet to effectively prevent the downward migration of the shallow ground water. The conductor casing consisted of 12-inch diameter steel casing installed into a 15-inch borehole. After the conductor casing was installed, boring advancement continued to the terminal depth of 100 feet for well installation. Deeper water was encountered at a depth of 95 feet.

Following installation, ground water wells were developed to remove sediment from the vicinity of the well screens and to allow for representative water sample collection. Measurements of pH, conductivity, and temperature were recorded during purging. Consecutive readings of these parameters stabilized to within 10 percent prior to sample collection. Ground water samples were collected using a disposable Teflon® bailers with bottom emptying devices that minimize the volatilization of components during sampling.

In addition to ground water samples collected from the EPI installed monitoring wells, one additional reconnaissance ground water sample was collected from boring U-6, where the laterally discontinuous shallow ground water was encountered in AOPC 5.

Samples were submitted for a range of analyses, as indicated in Table 1.

### **4.3 Sump Water Sampling**

Water samples were collected from a total of three shallow sumps at the subject property that are used to dewater areas of shallow-perched ground water beneath the facility's infrastructure. Disposable Teflon® bailers were used to collect sump samples. The samples were submitted for the range of analyses as indicated in Table 1.

### **4.4 Wipe Sampling**

Wipe samples were collected on the surfaces of various equipment throughout the facility that had the potential for PCB impacts. Wipe samples were collected in accordance with Environmental Protection Agency's (EPA's) document titled *Wipe Sampling and Double Wash/Rinse Cleanup as recommended by the Environmental Protection Agency PCB Spill Cleanup Policy dated June 23, 1987, Revised and Clarified on April 18, 1991.*

Wipe samples were collected using a laboratory-prepared gauze pad saturated with hexane, which was then scrubbed over 100 square centimeters (100 cm<sup>2</sup>) and placed into a laboratory-supplied container. Laboratory prepared cardboard templates were used to gauge 100 cm<sup>2</sup> on flat surfaces. Wipe samples were analyzed for PCB content using EPA Method 8082.

### **4.5 Product Sampling**

A total of three large compressors exist within a portion of the facility that were used to deliver compressed air to various equipment throughout the facility. Each of these compressors used oil to lubricate portions of the compressors. In order to determine the likelihood that PCBs were used in these compressors, EPI collected samples of the oils within the compressors. Samples of the oils in the compressors were collected by using a pipet to remove aliquots of the oils from an oil reservoir located on the compressors.

### **4.6 Analytical Methods**

Soil and ground water samples were submitted to an analytical laboratory under standard chain-of-custody procedures for a range of analyses, depending on the likelihood within each AOPC to detect various compounds. Samples were submitted for the range of analyses indicated in Table 1. The following analytical methods were used for analysis, as appropriate:

- Gasoline-range organics (GRO) by NWTPH-Gx Methods;
- Diesel- and Oil-range organics (DRO and ORO) by NWTPH-Dx Methods;
- Volatile organic compounds (VOCs) by EPA Method 8260;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B;
- Ethylene dibromide (EDB) and ethylene dichloride (EDC) by EPA Method 8260B;
- Methyl tertiary butyl ether (MTBE) by EPA Method 8260B;
- Carcinogenic polyaromatic hydrocarbons (cPAHs) by EPA Method 8270;
- Polychlorinated biphenyls (PCBs) by EPA Method 8082; and

- RCRA Metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver) by EPA 6000/7000 series methods.

All analyses from sampling events at the subject property were submitted to Friedman and Bruya, Inc. (FBI) in Seattle, Washington. Laboratory reports for all of the sample events are provided in Attachment B. A discussion of the findings from within each AOPC is described in detail in the AOPC-specific sections that follow.

## **5.0 FINDINGS**

### **5.1 Subsurface Conditions**

Subsurface conditions at the subject property varied depending on the AOPC investigated and the depth explored. In general, shallow soils beneath the concrete floor in areas of AOPC 1, the printing press areas, consisted of approximately 2 to 6 inches of structurally-supportive, non-native sub-base material. Native soils located beneath the sub-base material generally consisted of well-graded sands, clay-sand mixtures, and clay to approximately 7 feet bgs, where the soils generally transition to poorly graded sands with gravel and thick lean clay, down to the maximum depth explored. The native soils are typical of glacial till, which is common in the area of the subject property.

A regional ground water aquifer is present at depths ranging from of 85 to 95 feet. According to reports reviewed for the northern adjacent property, the regional aquifer flows toward the east-southeast. In addition to the regional ground water table, there are also laterally discontinuous lenses of shallow ground water ranging in depth from about 15 to 20 feet.

### **5.2 Analytical Results and Findings**

#### **5.2.1 AOPC 1: Printing Press Areas**

##### **5.2.1.1 Soil Samples**

AOPC 1 consists of the printing press areas. Depths of soil samples ranged from just beneath the concrete, to a maximum investigated depth of 4.0 feet using DPT methods. A total of 16 subsurface locations were investigated within AOPC 1, as depicted on Figure 4. From these locations, a total of 17 soil samples were submitted for a range of analyses, as indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 1 are as follows:

- Neither GRO, DRO, ORO, nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis performed.
- PCBs were detected in two samples (sample P2 and sample P19) at concentrations of 0.2 mg/kg and 0.23 mg/kg, respectively. None of the detected concentrations of PCBs exceeded the MTCA Method A Soil CUL of 1 mg/kg for PCBs.

- The following RCRA metals and maximum concentrations were detected above the compound-specific MDL:
  - Chromium – 25.1 mg/kg;
  - Arsenic – 8.68 mg/kg;
  - Silver – 1.13 mg/kg;
  - Barium – 97.1 mg/kg; and
  - Lead – 20.4 mg/kg.

With the exception of chromium, none of the RCRA metals were detected at a concentration above the MTCA Method A Soil CUL or Method B CUL.

Although no COPCs were detected in soil at concentrations that exceed MTCA Method A Soil CULs, special handling and disposal will be required during development for soils containing low-concentration PCBs. Additional sampling should be performed during development to accurately define the area requiring special handling.

#### **5.2.1.2 Wipe Samples**

A total of 24 wipe samples were collected from the surface of the printing presses within AOPC 1 to screen for the presence of PCBs, as depicted on Figure 5.

The following presents the general findings of the wipe sampling performed within AOPC 1:

- Wipe sampling indicated the presence of PCBs in each of the wipe samples at concentrations ranging from 1.4  $\mu\text{g}/100\text{ cm}^2$  to 12  $\mu\text{g}/100\text{ cm}^2$ .
- The EPA action level for requiring cleanup prior to disposal is 10  $\mu\text{g}/100\text{ cm}^2$ .
- Concentrations of detected PCBs were below the EPA action level of 10  $\mu\text{g}/100\text{ cm}^2$  in all locations with the exception of wipe locations P-21 and P-39 which exhibited a concentrations of 12  $\mu\text{g}/100\text{ cm}^2$  and 23  $\mu\text{g}/100\text{ cm}^2$ .
- Printing presses that exhibit concentrations of PCBs at concentrations above the EPA action level will require remedial action (i.e., industrial cleaning) prior to decommissioning. In addition, it will be necessary to assess the concrete floor and walls to ensure that the concrete surrounding the presses does not also require industrial cleaning prior to demolition. This additional sampling and analysis should be completed prior to decommissioning and demolition.

## **5.2.2 AOPC 2: Interior Ink Tanks**

### **5.2.2.1 Soil Samples**

A total of 4 shallow borings were advanced near the interior ink tanks in AOPC 2 using DPT methods. The boring locations are depicted on Figure 6. A total of 3 soil samples ranging in depths from 1.75 to 4.5 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 2 are as follows:

- Neither GRO, DRO, ORO, nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis performed.
- No COPCs were detected in soil at concentrations exceeding a potential cleanup level.
- The following RCRA metals and maximum concentrations were detected above their compound-specific MDLs:
  - Chromium – 21.2 mg/kg;
  - Arsenic – 5.70 mg/kg;
  - Barium – 58.6 mg/kg; and
  - Lead – 32.2 mg/kg.

With the exception of chromium, none of the RCRA metals were detected at a concentration above the MTCA Method A Soil CUL or Method B CUL.

### **5.2.2.2 Sump Water Samples**

One of the sumps considered to be part of AOPC 10 (10d) is located within the AOPC 2 area. Two of the soil borings documented above for AOPC 2 were also advanced for assessment of soil conditions adjacent to the sump in this area. The soil results presented above are also applicable to the sump in AOPC 2.

In addition, one water sample (S-5) was collected from the sump in this area and was submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 5 and on Figure 6.

The following present the general findings of water conditions within AOPC 2:

- GRO was not detected at a concentration exceeding the compound-specific MDL.

- Chloroform was detected at a concentration of 1 µg/L. There is no MTCA Method A CUL available for chloroform. Chloroform is a common laboratory contaminant and is not likely present in water at the subject property. Future assessment activities should include re-assessing for the presence of chloroform in sump water. No other VOCs were detected at a concentration exceeding the compound-specific MDL.
- DRO and ORO were detected at concentrations of 110,000 micrograms/Liter (µg/L) and 10,000 µg/L, respectively. Each of these concentrations exceed the MTCA Method A GW CUL of 500 µg/L, which is applicable to both DRO and ORO.

The presence of DRO and ORO in sump water is indicative of a DRO and ORO subsurface release at the subject property. Defining the nature and extent of such a release was beyond the scope of services for this project. Additional investigation should be performed during development to determine the source of the impacts as well as the nature and extent of the release. It is likely that remedial actions will be necessary in order to address the source of the sump water impacts.

### **5.2.3 AOPC 3: Ink Room**

#### **5.2.3.1 Soil Samples**

A total of 4 shallow borings were advanced near the interior ink tanks in AOPC 3 using DPT methods. The boring locations are depicted on Figure 7. A total of 4 soil samples, each collected at a depth of 5 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 3 are as follows:

- Neither GRO, DRO, ORO, nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis performed.
- No COPCs were detected in soil at concentrations exceeding a potential cleanup level.
- The following RCRA metals and maximum concentrations were detected above their compound-specific MDLs:
  - Chromium – 22.7 mg/kg;
  - Arsenic – 2.8 mg/kg;
  - Barium – 86.5 mg/kg; and
  - Lead – 5.5 mg/kg.

With the exception of chromium, none of the RCRA metals were detected at a concentration above their respective MTCA Method A Soil CULs or Method B CULs.



Based on the data collected, no remediation or special handling or disposal of soils will be required in AOPC 3.

## **5.2.4 AOPC 4: Compressor Room**

### **5.2.4.1 Soil Samples**

A total of 6 shallow borings were advanced near the compressors in AOPC 4 using DPT methods. The boring locations are depicted on Figure 8. A total of 6 soil samples ranging in depths from near surface to 0.75 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 4 are as follows:

- Neither GRO, DRO, ORO, nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis performed.
- The following RCRA metals and maximum concentrations were detected above their compound-specific MDLs:
  - Chromium – 18.4 mg/kg;
  - Arsenic – 2.98 mg/kg;
  - Silver – 1.69 mg/kg;
  - Barium – 65.7mg/kg; and
  - Lead – 47.0 mg/kg.

None of the RCRA metals were detected at a concentration above the MTCA Method A Soil CUL or Method B CUL.

- PCBs were detected in two samples (C-2 and C-12) at concentrations of 1.3 mg/kg and 1.2 mg/kg, respectively. These concentrations both exceed the MTCA Method A CUL of 1 mg/kg.

Based on the data collected in AOPC 4, a release of PCBs has occurred to soil at concentrations that are above the MTCA Method A Soil CUL and will require remediation during development. Due to restrictions on sampling areas due to dense infrastructure, it was not practicable to define the nature and extent of PCB impacts to soil. Such sampling should be conducted as a component of remedial efforts to be conducted during development.

#### 5.2.4.2 Wipe Samples

A total of six wipe samples (two per compressor) were collected from the surface of the compressors to screen for potential PCBs. The analytical results are summarized in Table 3 and are depicted on Figure 9.

Wipe sampling indicated the presence of PCBs in three of the six locations sampled at concentrations ranging from 0.47  $\mu\text{g}/100\text{ cm}^2$  to 0.54  $\mu\text{g}/100\text{ cm}^2$ . The EPA action level for requiring cleanup prior to disposal is 10  $\mu\text{g}/100\text{ cm}^2$ . Concentrations of detected PCBs were below the EPA action level of 10  $\mu\text{g}/100\text{ cm}^2$  in all locations.

Based on these results, it does not appear that special handling or disposal will be required for the compressor equipment.

#### 5.2.4.3 Product Samples

A total of 3 product samples (one per compressor) were collected from the oil reservoirs on the compressors to screen for potential PCBs. The analytical results are summarized in Table 6.

PCBs were not detected in product at concentrations above the compound-specific method detection limit for the analysis performed.

#### 5.2.4.4 Sump Water Samples

One of the sumps considered to be part of AOPC 10 (10c) is located within the AOPC 4 area. One water sample was collected from the sump in this area. The water sample (S-4) was submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 5 and on Figure 10.

The following present the general findings of water conditions within AOPC 2:

- Neither GRO nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis.
- DRO was detected at a concentration of 340  $\mu\text{g}/\text{L}$ , which is below the MTCA Method A GW CUL of 500  $\mu\text{g}/\text{L}$ .
- ORO was detected at concentrations of 1,900  $\mu\text{g}/\text{L}$ , which is above the MTCA Method A GW CUL of 500  $\mu\text{g}/\text{L}$ .

The presence of ORO in sump water is indicative of an ORO subsurface release at the subject property. Defining the nature and extent of such a release was beyond the scope of services for this project. Additional investigation should be performed during development to determine the source of the impacts as well as the nature and extent of the release. It is likely that remedial actions will be necessary in order to address the source of the sump water impacts.

## **5.2.5 AOPC 5: Northern UST Complex and Fuel Dispenser**

### **5.2.5.1 Soil Samples**

A total of 7 borings were advanced near the USTs in AOPC 5 using a combination of DPT and HSA drilling methods. The boring locations are depicted on Figure 11. A total of 9 soil samples ranging in depths from 8 feet to 15 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

Boring placement in AOPC 5 was limited due to infrastructure and dense utilities throughout the UST complex. Two additional boring locations were attempted in AOPC 5, but exhibited refusal and were unsuccessful. With the exception of one location, U-3, the borings were advanced to a total depth of 20 feet.

Neither GRO, DRO, ORO, BTEX, or VOCs were detected at concentrations exceeding the compound-specific MDL for the associated analyses performed in any of the soil samples.

### **5.2.5.2 Ground Water Sample**

Shallow, perched ground water was encountered in one boring location (U-6), which was located near the loading dock. The depth to ground water was approximately 15 feet and is likely associated with the laterally discontinuous shallow ground water typically observed in the area. One shallow reconnaissance ground water sample was collected from U-6 and was submitted for analysis as indicated in Table 1. The analytical results are summarized in Table 4 and are depicted on Figure 11.

TCE was detected in the ground water sample at 9 µg/L, which exceeds the MTCA Method A Ground Water Cleanup Level of 5 µg/L.

The presence of TCE in the shallow ground water indicates that a release of TCE has occurred. TCE is a known contaminant from the Troy laundry site adjacent to the north of the subject property, however, a water sample collected from a shallow ground water well installed on the northern property boundary did not contain detectable concentrations of TCE (see *Potential Off-Site Issues* below). This suggests that the TCE detected in shallow ground water may be from an on-site source. However, there is insufficient data to determine the source of the TCE impacts. Determining the source of the TCE impacts was beyond the scope of services for this project and is not likely possible in the current facility configuration.

Remedial actions will be necessary to address the TCE impacts to ground water, however, additional data will be required in order to determine an appropriate remedy. This data should be collected during, or after, demolition activities are conducted.

### **5.2.5.3 Ecology File Review**

As part of the due diligence process prior to purchase, a file review of the subject property and nearby properties was performed at the Ecology's Northwest Regional Office (NWRO) in Bellevue,

Washington, which was conducted on August 2, 2012. Based on a review of the files, there appeared to be one on-site concern for the subject property.

EPI reviewed a report prepared by Ecova in 1990 that documented the removal of a UST in the southwest corner of the loading dock area of the facility. That report presented the sidewall conditions of the excavation following tank removal and reported that residual hydrocarbons, as high as 4,300 mg/kg, were left in place in soil. This area received a 'No Further Action' (NFA) determination on February 10, 2012, however it is unclear how the property received an NFA without removal of these soils. Although this area has received an NFA, based on the file review, soils in the loading dock are likely impacted at concentrations above current cleanup levels and will likely require additional remedial action during redevelopment. Due to the current configuration of the USTs present in this area and the dense nature of above ground and subsurface infrastructure in the loading dock, EPI was unable to investigate these conditions.

## **5.2.6 AOPC 6: Waste Oil UST**

### **5.2.6.1 Soil Samples**

Two borings were advanced near the waste oil UST in AOPC 6 using HSA drilling methods. The boring locations are depicted on Figure 12. A total of two soil samples, each collected at a depth of 10 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 6 are as follows:

- Neither GRO, DRO, ORO, VOCs, PAHs, nor PCBs were detected at concentrations exceeding the compound-specific MDL for the associated analyses performed.
- The following RCRA metals and maximum concentrations were detected above their compound-specific MDLs:
  - Chromium – 12.7 mg/kg;
  - Arsenic – 2.48 mg/kg; and
  - Lead – 2.3 mg/kg.

None of the RCRA metals were detected at a concentration above the MTCA Method A or Method B CULs.

Based on the data collected, no remediation or special handling or disposal of soils appears to be required in AOPC 6.

## **5.2.7 AOPC 7: Heating Oil UST**

### **5.2.7.1 Soil Samples**

A total of six borings were advanced near the heating oil UST in AOPC 7 using DPT and hand auger drilling methods. The boring locations are depicted on Figure 13. A total of six soil samples from depths ranging from 8 to 20 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

Neither DRO, ORO, or BTEX compounds were detected at concentrations exceeding the compound-specific MDL for the associated analysis performed in any of the samples submitted from AOPC 7.

Based on the data collected, no remediation or special handling or disposal of soils appears to be required in AOPC 7.

## **5.2.8 AOPC 8: Heating Oil USTs**

### **5.2.8.1 Soil Samples**

A total of three borings were advanced near the former heating oil USTs in AOPC 8 using DPT drilling methods. The boring locations are depicted on Figure 14. A total of three soil samples from depths ranging from 8.5 to 9 feet, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 8 are as follows:

- DRO was detected at concentrations ranging from 290 mg/kg to 940 mg/kg, which are less than the MTCA Method A Soil CUL of 2,000 mg/kg for DRO.
- ORO was detected at concentrations ranging from 1,700 mg/kg to 4,600 mg/kg, which are above the MTCA Method A Soil CUL of 2,000 mg/kg for ORO.
- BTEX compounds were not detected at concentrations exceeding the compound-specific MDL for the associated analysis performed.

Based on the data collected in AOPC 8, a release of DRO has occurred to soil at concentrations that are above the MTCA Method A Soil CULs and will require remediation during development. Due to restrictions on sampling areas due to dense infrastructure, it was not practicable to define the nature and extent of DRO impacts to soil. Such sampling should be conducted as a component of remedial efforts to be conducted simultaneously with development.

## **5.2.9 AOPC 9: Hoists**

### **5.2.9.1 Soil Samples**

A total of six borings were advanced near the hydraulic hoists in AOPC 9 using DPT drilling methods. The boring locations are depicted on Figure 7. A total of six soil samples from depths ranging from 4 to 8 feet bgs, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 9 are as follows:

- DRO was detected at concentrations ranging from 120 mg/kg to 810 mg/kg, which are less than the MTCA Method A Soil CUL of 2,000 mg/kg for DRO.
- ORO was detected in one soil sample at a concentration of 640 mg/kg, which is less than the MTCA Method A Soil CUL of 2,000 mg/kg for ORO.

Although no COPCs were detected in soil at concentrations above the MTCA Method A Soil CULs, special handling and disposal will be required during development for soils containing low-concentration DRO and ORO. Additional sampling should be performed during development to accurately define the area requiring special handling.

## **5.2.10 AOPC 10: SUMPS**

### **5.2.10.1 Soil Samples**

AOPC 10 consists of select shallow ground water de-watering sumps located throughout the facility. A total of three borings were advanced near sumps labeled as 10c, 10d, and 10g using DPT drilling methods. All other sumps were inaccessible for subsurface drilling. These sumps and boring locations are depicted on Figures 6, 7, and 8. A total of three soil samples from depths ranging from 5 to 7 feet bgs, were submitted for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from AOPC 10 are as follows:

- Neither DRO, ORO, VOCs, nor PCBs were detected at a concentration exceeding the compound-specific MDL for the associated analyses performed in any of the samples submitted from AOPC 10.
- The following RCRA metals and maximum concentrations were detected above the compound-specific MDL:
  - Chromium – 21.2 mg/kg;
  - Arsenic – 2.3mg/kg; and

- Lead – 8.69 mg/kg.

With the exception of chromium, none of the RCRA metals were detected at a concentration above the MTCA Method A Soil CUL or Method B CUL.

#### **5.2.10.2 Sump Water**

As indicated above in the summaries for AOPC 2 and AOPC 4, DRO and ORO were detected in the water from the sump located near the interior ink tanks and in the sump located in the compressor room. A summary of these conditions are included above in Sections 5.2.2.2 (AOPC 2) and 5.2.4.4 (AOPC 4).

One additional sump water sample was collected in a sump adjacent to the north of AOPC 7 (10a). This sample location (S-2) is depicted on Figure 13. No COPCs were detected at a concentration exceeding the compound-specific MDL for the associated analyses performed

### **6.0 POTENTIAL OFF-SITE SOURCES**

A total of three monitoring wells were installed along the northern subject property boundary in order to determine the potential for off-site contamination migration onto the subject property from the northern adjacent Troy Laundry facility. One of the three ground water wells were screened across the laterally discontinuous shallow ground water located at a depth of about 15 feet (MW-1). The other two wells (MW-2 and MW-3) were screened across the regional aquifer table present at depths of 88 to 95 feet. Monitoring well locations are depicted on Figure 15.

During advancement of MW-3, the laterally discontinuous shallow ground water was encountered at a depth of 20 feet. A water reconnaissance ground water sample was collected from this ground water zone prior to further advancement. After collecting the shallow ground water sample, the conductor casing was installed to seal off the shallow ground water, as described in the Methodology section of this report. The laterally discontinuous ground water was not encountered during advancement of boring MW-2.

#### **6.1 Soil Samples**

A total of six soil samples from depths ranging from 10 to 100 feet, were submitted during advancement of monitoring well borings for the range of analyses indicated in Table 1. The analytical results are summarized in Table 2.

The analytical results for soil samples collected and analyzed from these borings are as follows:

- Neither DRO, ORO, nor VOCs were detected at a concentrations exceeding the compound-specific MDLs for the associated analyses performed in any of the samples.
- The following RCRA metals and maximum concentrations were detected above their compound-specific MDLs:

- Chromium – 14.4 mg/kg;
- Arsenic – 1.8 mg/kg; and
- Lead – 2.31 mg/kg.

None of the RCRA metals were detected at concentrations above their MTCA Method A Soil CULs or Method B CULs.

## **6.2 Shallow Ground Water Samples**

A total of two ground water samples were submitted from the laterally discontinuous ground water along the northern property line (MW-1 and MW-3) for the range of analyses indicated in Table 1. The analytical results are summarized in Table 4.

The analytical results for shallow ground water is as follows:

- Neither DRO, ORO, nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis performed in any of the samples.
- The following RCRA metals and maximum concentrations were detected above the compound-specific MDL:
  - Arsenic – 1.38 µg/L; and
  - Dissolved Arsenic – 1.10 µg/L.

None of the RCRA metals were detected at a concentration above the MTCA Method A GW CUL or Method B CUL.

## **6.3 Deep Ground Water Samples**

A total of two ground water samples were submitted from the deep regional aquifer along the northern property line (MW-2 and MW-3) for the range of analyses indicated in Table 1. The analytical results are summarized in Table 4.

Each well was installed in opposite corners of the subject property northern border and are located as follows:

- MW-2 – Northwestern corner
- MW-3 – Northeastern corner

The analytical results for deep ground water are summarized individually.



### 6.3.1 Northwestern Corner (MW-2)

The ground water sample collected from the deep aquifer in the northwestern corner of the subject property (MW-2) was impacted with compounds consistent with dry cleaning activities. In addition, there were detections of fuel-related compounds. The following compounds and concentrations were detected in northwestern corner deep ground water at concentrations above their respective MTCA Method A GW CULs:

- Vinyl chloride (VC) – 1.3 µg/L;
- TCE – 5.6 µg/L;
- Tetrachloroethene (PCE) – 10 µg/L; and
- Total Chromium – 57.1 µg/L.

Followup analysis for dissolved chromium was below the MTCA Method A GW CUL indicating that the total result was likely due to turbidity and not an actual release.

VC, TCE and PCE were all similarly detected at the Troy Laundry facility and are likely the result of contamination migrating onto the subject property from the north.

The following compounds and associated concentrations were detected in northwestern deep ground water at concentrations below their respective ground water cleanup levels (if available):

- GRO – 340 µg/L;
- DRO – 400 µg/L;
- Cis-1,2-dichloroethene – 22 µg/L;
- Chloroform – 2.3 µg/L;
- O-xylene – 1.7 µg/L;
- Isopropylbenzene – 3.2 µg/L;
- 1,3,5-Trimethylbenzene – 3.9 µg/L;
- Tert-Butylbenzene – 1.3 µg/L;
- 1,2,4-Trimethylbenzene – 34 µg/L;
- sec-Butylbenzene – 3.9 µg/L;

- p-Isopropyltoluene – 2 µg/L;
- Arsenic – 2.19 µg/L; and
- Lead – 4.84 µg/L.

### 6.3.2 Northeastern Corner (MW-3)

Neither DRO, ORO, nor VOCs were detected at a concentration exceeding the compound-specific MDL for the associated analysis performed in any of the samples.

## 7.0 CONCLUSIONS

The following conclusions are supported by the findings of this Limited Subsurface Investigation:

- A total of four AOPCs will require remedial actions. Those four COPCs have soil and/or water with contaminants of concern at concentrations above potentially applicable cleanup levels and include:
  - AOPC 2 (Interior Tank Area);
  - AOPC 4 (Compressor Room);
  - AOPC 5 (Northern UST Complex and Fuel Dispenser); and
  - AOPC 8 (Heating Oil USTs).
- After completion of remedial actions based on attainment of cleanup levels in AOPC 2, AOPC 4, AOPC 5, and AOPC 8, additional soils will likely remain beyond that limits of the remedial excavation that contain detectable concentrations of contaminants of concern. These soils impacted at concentrations below cleanup levels will still require specialized handling and disposal and cannot be disposed off-Site as “clean” soils are re-used as “clean” fill material.
- Other soils are present at the Site that require special handling and disposal. These soils include those that may be impacted with concentrations of contaminants of concern that are below cleanup levels but cannot be transported off-Site for use as “clean” fill or disposed of as “clean” based on the MTCA regulation. These soils are located in AOPC 1 (Printing Presses) and AOPC 9 (Hoists) where soils are impacted with contaminants at concentrations that are below the MTCA Method A Soil CULs.
- A total of at least 11 USTs will be encountered at the subject property during development and will require decommissioning in accordance with applicable regulations. Nine of the USTs are located in areas that have confirmed impacts requiring remediation (AOPC 2, AOPC 5, and AOPC 8). While impacts were not identified next to the remaining two USTs

located in AOPC 6 and AOPC 7, it is not uncommon to encounter soils that will require special handling and disposal associated with these USTs.

- Environmental conditions at the subject property are not fully characterized. Soil and ground water at the subject property has been investigated to the maximum extent practicable considering access limitations, the current level of development, and the limited room available for the collection of subsurface samples. It is possible that additional impacts may be encountered during redevelopment activities. If apparent impacts are encountered in soil based on odor, discoloration or other indicators, a qualified environmental consultant should be contacted to assess actual conditions and assist in compliance with applicable regulations (if any).
- Ground water encountered during development near AOPC 5 and other areas on the northern portion of the subject property will require special handling. Laterally discontinuous shallow ground water is impacted with TCE in AOPC 5 (Northern UST Complex and Fuel Dispenser) and may require remediation during redevelopment.
- Based on the available data and the available data for the Troy Laundry Site, it is advisable to assume that shallow ground water encountered along the northern property boundary should be contained during development activities and analyzed prior to disposal.
- Deep ground water in the northwestern portion of the subject property is impacted with dry-cleaning related compounds, which likely originate from the Troy Laundry Site. The extent of these impacts was not determined during this investigation and additional sampling may be warranted. Based upon the proximity of the subject property to the Troy Laundry Site and the known conditions at that Site, Onni should evaluate the installation of a vapor barrier during redevelopment of the subject property.
- Several of the printing presses will require remedial action (i.e., industrial cleaning) prior to decommissioning due to the presence of PCB surface impacts. In addition, it will be necessary to assess the concrete floor and walls to ensure that the concrete surrounding the presses does not also require industrial cleaning prior to demolition. This additional sampling and analysis should be completed prior to decommissioning and demolition.
- Ground water conditions beneath the subject property have not been fully investigated due to the limited availability for access of drilling equipment. It is possible that additional ground water impacts exist at the subject property as a result of on-site activities. These conditions should be evaluated during the redevelopment of the subject property.
- The work conducted herein was performed as a screening level assessment and is not considered a full MTCA-compliant Remedial Investigation. Several data gaps exist in the characterization of the subject property prior and during implementation of remedial actions. Further sampling is not currently possible given the dense above and below grade infrastructure of the facility. EPI recommends preparing a work plan for further necessary investigation and remedial action that can be implemented concurrently with development.

## **8.0 DISCLAIMER**

As applicable and available within the project schedule and budget, EPI has completed the agreed scope of services employing professional standards applicable in the industry today. We assume no risk for existing conditions on the subject property.

To the extent that these services have required judgment, there can be no assurance that fully definitive or desired results were obtained, or if any results were obtained, that they were supportive of any given course of action. The services have included the application of judgment to scientific principles; to that extent, certain results of this work have been based on subjective interpretation. We make no warranties, express or implied including, without limitation, warranties as to merchantability or fitness for a particular purpose. The information provided in this letter report is not to be construed as legal advice.

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## Tables

**Table 1**  
**Summary of Requested Analyses**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

AOPC	Location	Drilling Method	Sample	Depth <sup>a</sup> (Feet)	GRO <sup>b</sup>	DRO/ORO <sup>c</sup>	BTEX <sup>d</sup>	VOCs <sup>e</sup>	EDB/EDC MTBA <sup>f</sup>	cPAHs <sup>g</sup>	PCBs <sup>h</sup>	RCRA Metals <sup>i</sup>	
AOPC 1 Printing Press Area	P-1	DPT	Soil	0	X	X		X			X	X	
	P-2	DPT	Soil	0	X	X		X			X	X	
	P-3	DPT	Soil	0	X	X		X			X	X	
	P-4	DPT	Soil	0	X	X		X			X	X	
	P-5	DPT	Soil	0	X	X		X			X	X	
	P-6	DPT	Soil	0	X	X		X			X	X	
	P-7	DPT	Soil	0	X	X		X			X	X	
	P-8	DPT	Soil	1	X	X		X			X	X	
	P-9	DPT	Soil	1.5	X	X		X			X	X	
	P-10	DPT	Soil	1.5	X	X		X			X	X	
	P-11	-	Wipe	-								X	
	P-12	-	Wipe	-								X	
	P-13	-	Wipe	-								X	
	P-14	-	Wipe	-								X	
	P-15	DPT	Soil	1.5			X		X			X	X
	P-16	DPT	Soil	3			X		X			X	X
	P-17	DPT	Soil	1.5			X		X			X	X
	P-18	DPT	Soil	1.5			X		X			X	X
	P-19	DPT	Soil	1.5			X		X			X	X
			Soil	4			X		X			X	X
	P-20	DPT	Soil	1.5			X		X			X	X
	P-21	-	Wipe	-								X	
	P-22	-	Wipe	-								X	
	P-23	-	Wipe	-								X	
	P-24	-	Wipe	-								X	
	P-25	-	Wipe	-								X	
	P-26	-	Wipe	-								X	
	P-27	-	Wipe	-								X	
	P-28	-	Wipe	-								X	
	P-29	-	Wipe	-								X	
	P-30	-	Wipe	-								X	
	P-31	-	Wipe	-								X	
	P-32	-	Wipe	-								X	
	P-33	-	Wipe	-								X	
	P-34	-	Wipe	-								X	
	P-35	-	Wipe	-								X	
	P-36	-	Wipe	-								X	
	P-37	-	Wipe	-								X	
	P-38	-	Wipe	-								X	
	P-39	-	Wipe	-								X	
P-40	-	Wipe	-								X		

**Table 1**  
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AOPC	Location	Drilling Method	Sample	Depth <sup>a</sup> (Feet)	GRO <sup>b</sup>	DRO/ORO <sup>c</sup>	BTEX <sup>d</sup>	VOCs <sup>e</sup>	EDB/EDC MTBA <sup>f</sup>	cPAHs <sup>g</sup>	PCBs <sup>h</sup>	RCRA Metals <sup>i</sup>
AOPC 2 Interior Ink Tanks	T-1	DPT	Soil	4		X		X				X
	T-1A <sup>j</sup>	DPT	Soil	4		X		X			X	X
	T-2	DPT	Soil	1.75		X		X				X
		DPT	Soil	4.5		X		X				X
	T-3	DPT	Soil	2		X		X				X
AOPC 3 Ink Room	I-1	DPT	Soil	5	X	X		X				X
	I-2	DPT	Soil	5	X	X		X				X
	I-3	DPT	Soil	5	X	X		X				X
	I-4	DPT	Soil	5	X	X		X				X
AOPC 4 Compressor Room	C-1	DPT	Soil	0.75	X	X		X			X	X
	C-2	DPT	Soil	0.75	X	X		X			X	X
	C-3	DPT	Soil	0.75	X	X		X			X	X
	C-4	-	Wipe	-							X	
	C-5	-	Wipe	-							X	
	C-6	-	Wipe	-							X	
	C-7	-	Product	-							X	
	C-8	-	Product	-							X	
	C-9	-	Product	-							X	
	C-10	DPT	Soil	0.5		X					X	
	C-11	DPT	Soil	0.5		X					X	
	C-12	DPT	Soil	0.5		X					X	
	C-13	-	Wipe	-							X	
	C-14	-	Wipe	-							X	
	C-15	-	Wipe	-							X	
AOPC 5 Northern UST Complex and Dispenser	U-1	HSA	Soil	15	X	X	X					
	U-2	HSA	Soil	15	X	X	X					
	U-3	HSA	Soil	8	X	X	X					
	U-6	DPT	Soil	10					X			
		DPT	Soil	15	X	X	X		X			
		-	GW	18	X	X	X		X			
	U-7	DPT	Soil	15	X	X	X					
	U-8	DPT	Soil	15	X	X	X					
U-9	DPT	Soil	15	X	X	X						
AOPC 6 Waste Oil UST	W-1	HSA	Soil	10	X	X		X		X	X	X
	W-2	HSA	Soil	10	X	X		X		X	X	X
AOPC 7 Heating Oil UST	O-1	DPT	Soil	8		X	X					
	O-2	DPT	Soil	0		X	X					
	O-3	DPT	Soil	5		X	X					
	AOPC7:SB1	DPT	Soil	20		X	X					
	AOPC7:SB2	DPT	Soil	20		X	X					
	AOPC7:SB3	DPT	Soil	20		X	X					
AOPC 8 Heating Oil USTs	A-1	DPT	Soil	9		X	X					
	A-2	DPT	Soil	9		X	X					
	A-3	DPT	Soil	8.5		X	X					

**Table 1  
Summary of Requested Analyses  
Subsurface Investigation Report  
Seattle Times Building  
1120 John Street, Seattle, Washington**

AOPC	Location	Drilling Method	Sample	Depth <sup>a</sup> (Feet)	GRO <sup>b</sup>	DRO/ORO <sup>c</sup>	BTEX <sup>d</sup>	VOCs <sup>e</sup>	EDB/EDC MTBA <sup>f</sup>	cPAHs <sup>g</sup>	PCBs <sup>h</sup>	RCRA Metals <sup>i</sup>	
AOPC 9 Hoists	H-1	DPT	Soil	7		X					X	X	
	H-2	DPT	Soil	4		X					X	X	
	H-3	DPT	Soil	7		X					X	X	
	H-4	DPT	Soil	7		X					X	X	
	H-5	DPT	Soil	7		X					X	X	
	H-6	DPT	Soil	8		X					X	X	
AOPC 10 Sumps	S-1	DPT	Soil	7		X		X			X	X	
	S-2	-	GW	-	X	X		X					
	S-3	DPT	Soil	7		X		X			X	X	
	S-4	DPT	Soil	5		X		X			X	X	
			GW	-	X	X		X					
S-5	-	GW	-	X	X		X						
Potential Off-Site Sources	MW-1	HSA	Soil	10	X	X		X					
		-	GW	88	X	X		X				X	
	MW-2	HSA	Soil	10	X	X		X				X	
		-	GW	15	X	X		X				X	
	MW-3	HSA	Soil	20				X					
			GW	20				X					
			Soil	30				X					
			Soil	80				X					
			Soil	100				X					
		-	GW	-				X					

Notes:

- DPT Direct-push technology drilling.
- HSA Hollow-stem auger drilling.
- X Indicates sample selected for analysis by this method.
- a A depth of "0" indicates sample will be collected immediately beneath subfloor construction. Value indicates depth to water for ground water (GW) samples.
- b Gasoline-range organics (GRO) by NWTPH-Gx Methods.
- c Diesel- and oil-range organics (DRO and ORO) by NWTPH-Dx Methods.
- d Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B.
- e Volatile organic compounds (VOCs) by EPA Method 8260C.
- f Ethylene dibromide (EDB) and Ethylene dichloride (EDC) and Methyl tertiary butyl ether (MTBE) by EPA Method 8260B.
- g Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA Method 8270.
- h Polychlorinated biphenyls (PCBs) by EPA Method 8082.
- i Resource Conservation and Recovery Act (RCRA) Metals (chromium, arsenic, selenium, silver, cadmium, barium, and lead) by EPA Method 200.8. Mercury by EPA Method 1631E.
- j "A" indicates that the sample will be archived by the lab for potential future analysis.

Compounds:

- GRO Gasoline-range organics
- DRO/ORO Diesel-range organics
- BTEX Benzene, toluene, ethylbenzene, and xylenes
- VOC Volatile organic compound
- EDB Ethylene dibromide
- EDC Ethylene dichloride
- MTBA Methyl tertiary butyl ether
- cPAH Carcinogenic polycyclic aromatic hydrocarbon
- PCB Polychlorinated biphenyl



**Table 2**  
**Soil Analytical Results (in mg/kg)**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

Area of Potential Concern	Sample Location	Date Sampled	Depth <sup>a</sup> (Feet)	Petroleum Hydrocarbons			BTEX <sup>d</sup>	VOCs <sup>e</sup>	cPAHs <sup>f</sup>	Detected PCBs <sup>g</sup> (AROCOR 1254)	Detected RCRA Metals <sup>h</sup>					
				GRO <sup>b</sup>	DRO <sup>c</sup>	ORO <sup>c</sup>					Chromium	Arsenic	Silver	Barium	Lead	
AOPC 1 Printing Press Area	P-1	7/19/12	0	<2	<50	<250	--	ND	--	<0.1	19.7	4.95	1.13	89.3	7.41	
	P-2	7/19/12	0	<2	<50	<250	--	ND	--	0.2	17.8	5.5	<1	70.1	12.9	
	P-3	7/19/12	0	<2	<50	<250	--	ND	--	<0.1	15.9	2.88	<1	61.6	11.3	
	P-4	7/19/12	0	<2	<50	<250	--	ND	--	<0.1	22.9	3.11	<1	97.1	5.54	
	P-5	7/19/12	0	<2	<50	<250	--	ND	--	<0.1	18.9	4.47	<1	51.0	5.38	
	P-6	7/19/12	0	<2	<50	<250	--	ND	--	<0.1	14.4	2.36	<1	36.0	4.32	
	P-7	7/19/12	0	<2	<50	<250	--	ND	--	<0.1	13.2	1.73	<1	37.1	1.70	
	P-8	7/20/12	1	<2	<50	<250	--	ND	--	<0.1	16.2	6.02	<1	69.1	8.41	
	P-9	7/24/12	1.5	<2	<50	<250	--	ND	--	<0.1	14.6	2.02	<1	40.9	11.4	
	P-10	7/24/12	1.5	<2	<50	<250	--	ND	--	<0.1	11.8	2.42	<1	45.2	19.7	
	P-15	9/4/12	1.5	--	<50	<250	--	ND	--	<0.1	13.5	2.60	--	--	7.62	
	P-16	9/4/12	3	--	<50	<250	--	ND	--	<0.1	11.8	1.79	--	--	20.4	
	P-17	9/4/12	1.5	--	<50	<250	--	ND	--	<0.1	19.8	8.68	--	--	7.35	
	P-18	9/4/12	1.5	--	<50	<250	--	ND	--	<0.1	24.6	2.57	--	--	5.20	
	P-19	9/4/12	1.5	--	<50	<250	--	ND	--	0.23	25.1	5.13	--	--	7.46	
9/4/12		4	--	<50	<250	--	ND	--	<0.1	23.4	3.54	--	--	4.80		
P-20	9/4/12	1.5	--	<50	<250	--	ND	--	<0.1	23.8	3.61	--	--	4.99		
AOPC 2 Interior Ink Tanks	T-1	7/19/12	4	--	<50	<250	--	ND	--	--	17.0	5.70	<1	58.6	32.2	
	T-1A	7/20/12	4	--	<50	<250	--	ND	--	<0.1	14.5	1.55	<1	35.7	19.6	
	T-2	7/24/12	1.75	--	<50	<250	--	ND	--	--	21.2	3.24	<1	34.6	2.14	
		7/24/12	4.5	--	<50	<250	--	ND	--	--	17.1	1.16	<1	35.1	1.99	
	T-3	7/24/12	2	--	<50	<250	--	ND	--	--	21.0	1.43	<1	51.7	3.23	
AOPC 3 Ink Room	I-1	7/20/12	5	<2	<50	<250	--	ND	--	--	12.8	1.87	<1	34.6	2.72	
	I-2	7/20/12	5	<2	<50	<250	--	ND	--	--	22.7	2.80	<1	86.5	5.50	
	I-3	7/20/12	5	<2	<50	<250	--	ND	--	--	7.50	<1	<1	23.2	1.29	
	I-4	7/20/12	5	<2	<50	<250	--	ND	--	--	11.7	1.96	<1	41.5	2.80	
AOPC 4 Compressor Room	C-1	7/24/12	0.75	<2	<50	<250	--	ND	--	<0.1	16.9	1.74	<1	43.5	6.49	
	C-2	7/24/12	0.75	<2	<50	<250	--	ND	--	1.3	18.4	2.98	1.69	65.7	47.0	
	C-3	7/24/12	0.75	<2	<50	<250	--	ND	--	<0.1	15.2	1.86	<1	58.0	6.67	
	C-10	9/5/12	0.5	--	<50	<250	--	--	--	<0.1	--	--	--	--	--	
	C-11	9/5/12	0.5	--	<50	<250	--	--	--	<0.1	--	--	--	--	--	
	C-12	9/5/12	0	--	<50	420	--	--	--	1.2	--	--	--	--	--	
AOPC 5 Northern UST Complex and Dispenser	U-1	7/19/12	15	<2	<50	<250	ND	--	--	--	--	--	--	--	--	
	U-2	7/19/12	15	<2	<50	<250	ND	--	--	--	--	--	--	--	--	
	U-3	7/20/12	8	<2	<50	<250	ND	--	--	--	--	--	--	--	--	
	U-6	7/26/12	10	--	--	--	--	ND	--	--	--	--	--	--	--	--
		7/26/12	15	<2	<50	<250	ND	ND	--	--	--	--	--	--	--	--
	U-7	7/26/12	15	<2	<50	<250	ND	--	--	--	--	--	--	--	--	
	U-8	7/26/12	15	<2	<50	<250	ND	--	--	--	--	--	--	--	--	
U-9	7/26/12	15	<2	<50	<250	ND	--	--	--	--	--	--	--	--		
AOPC 6 Waste Oil UST	W-1	9/4/12	10	<2	<50	<250	--	ND	ND	<0.1	12.4	1.67	--	--	2.3	
	W-2	9/6/12	10	<2	<50	<250	--	ND	ND	<0.1	12.7	2.48	--	--	1.83	

**Table 2**  
**Soil Analytical Results (in mg/kg)**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

Area of Potential Concern	Sample Location	Date Sampled	Depth <sup>a</sup> (Feet)	Petroleum Hydrocarbons			BTEX <sup>d</sup>	VOCs <sup>e</sup>	cPAHs <sup>f</sup>	Detected PCBs <sup>g</sup> (AROCOR 1254)	Detected RCRA Metals <sup>h</sup>					
				GRO <sup>b</sup>	DRO <sup>c</sup>	ORO <sup>c</sup>					Chromium	Arsenic	Silver	Barium	Lead	
AOPC 7 Heating Oil UST	O-1	9/6/12	8	--	<50	<250	ND	--	--	--	--	--	--	--	--	
	O-2	9/6/12	9	--	<50	<250	ND	--	--	--	--	--	--	--	--	
	O-3	9/6/12	5	--	<50	<250	ND	--	--	--	--	--	--	--	--	
	AOPC7:SB1	5/17/13	20	--	<50	<250	ND	--	--	--	--	--	--	--	--	
	AOPC7:SB2	5/17/13	20	--	<50	<250	ND	--	--	--	--	--	--	--	--	
	AOPC7:SB3	5/17/13	20	--	<50	<250	ND	--	--	--	--	--	--	--	--	
AOPC 8 Heating Oil USTs	A-1	9/6/12	9	--	<b>560 x</b>	<b>4,600</b>	ND	--	--	--	--	--	--	--	--	
	A-2	9/5/12	9	--	<b>290 x</b>	<b>1,700</b>	ND	--	--	--	--	--	--	--	--	
	A-3	9/5/12	8.5	--	<b>940 x</b>	<b>4,600</b>	ND	--	--	--	--	--	--	--	--	
AOPC 9 Hoists	H-1	9/4/12	7	--	<50	<250	--	--	--	<0.1	<b>20.7</b>	<b>2.16</b>	--	--	<b>4.21</b>	
	H-2	9/4/12	4	--	<50	<250	--	--	--	<0.1	<b>11.9</b>	<b>3.1</b>	--	--	<b>1.87</b>	
	H-3	9/4/12	7	--	<b>810</b>	<b>640</b>	--	--	--	<0.1	<b>21.3</b>	<b>2.44</b>	--	--	<b>4.02</b>	
	H-4	9/4/12	7	--	<b>120</b>	<250	--	--	--	<0.1	<b>15.2</b>	<b>1.54</b>	--	--	<b>2.84</b>	
	H-5	9/6/12	7	--	<50	<250	--	--	--	<0.1	<b>18.5</b>	<b>1.76</b>	--	--	<b>3.89</b>	
	H-6	9/6/12	8	--	<50	<250	--	--	--	<0.1	<b>14.1</b>	<b>1.25</b>	--	--	<b>1.65</b>	
AOPC 10 Sumps	S-1	9/4/12	7	--	<50	<250	--	ND	--	<0.1	<b>20.8</b>	<b>2.03</b>	--	--	<b>4.27</b>	
	S-3	9/6/12	7	--	<50	<250	--	ND	--	<0.1	<b>18.3</b>	<b>2.30</b>	--	--	<b>3.67</b>	
	S-4	9/5/12	5	--	<50	<250	--	ND	--	<0.1	<b>21.2</b>	<b>1.85</b>	--	--	<b>8.69</b>	
Potential Off-Site Sources	MW-1	9/5/12	10	<2	<50	<250	--	ND	--	--	<b>13.1</b>	<b>1.80</b>	--	--	<b>2.31</b>	
	MW-2	9/4/12	10	<2	<50	<250	--	ND	ND	<0.1	<b>14.4</b>	<b>1.68</b>	--	--	<b>2.15</b>	
	MW-3	4/29/13	20	--	--	--	--	ND	--	--	--	--	--	--	--	
		4/29/13	30	--	--	--	--	ND	--	--	--	--	--	--	--	
		4/29/13	80	--	--	--	--	ND	--	--	--	--	--	--	--	
	4/30/13	100	--	--	--	--	ND	--	--	--	--	--	--	--		
<b>MTCA Method A Soil Cleanup Level for Unrestricted Land Uses<sup>i</sup></b>					<b>30/100<sup>j</sup></b>	<b>2,000</b>	<b>2,000</b>	<b>N/A<sup>k</sup></b>	<b>N/A</b>	<b>N/A</b>	<b>1<sup>l</sup></b>	<b>2,000<sup>m</sup></b>	<b>20</b>	<b>400<sup>n</sup></b>	<b>16,000<sup>n</sup></b>	<b>250</b>

Notes:

All results presented in milligrams/kilogram (mg/kg).

**Bold** Bold results indicate that the compound was detected.

**Shaded cells** indicate that result exceeded the cleanup level.

-- Not analyzed.

< Concentration is less than the analytical method detection limit.

ND Concentration is less than the compound-specific method detection limit.

a A depth of "0" indicates sample will be collected immediately beneath subfloor construction.

b Gasoline-range organics (GRO) by NWTPH-Gx Methods.

c Diesel- and oil-range organics (DRO and ORO) by NWTPH-Dx Methods.

d Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B.

e Volatile organic compounds (VOCs) by EPA Method 8260C.

f Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA Method 8270D SIM.

g Polychlorinated biphenyls (PCBs) by EPA Method 8082.

h Resource Conservation and Recovery Act (RCRA) Metals chromium, arsenic, silver, barium, and lead by EPA Method 200.8. Mercury by EPA Method 1631E. There were no detections of cadmium, selenium, and mercury in any samples.

i Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 (WAC 173-340-900).

j Cleanup level is 100 mg/kg for gasoline mixtures without benzene and the total of ethylbenzene, toluene, and xylene are less than 1% of the gasoline mixture, 30 mg/kg for all other gasoline mixtures.

k Not applicable; cleanup level varies for each compound within the compound group.

l Cleanup level based on total value for all PCBs.

m Cleanup level is 19 for chromium VI, 2,000 for chromium III.

n No MTCA Method A Soil Cleanup Level for Unrestricted Land Uses available. MTCA Method B Soil Cleanup Level based on direct contact presented.

Qualifier:

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

Compounds:

GRO Gasoline-range organics

DRO Diesel-range organics

ORO Oil-range organics

BTEX Benzene, toluene, ethylbenzene, and xylenes

VOC Volatile organic compound

cPAH Carcinogenic polycyclic aromatic hydrocarbon

PCB Polychlorinated biphenyl

**Table 3**  
**Wide Analysis Results (in ug/100 cm<sup>2</sup>)**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

Area of Potential Concern	Sample Location	Date Sampled	Detected Polychlorinated Biphenyls <sup>a</sup> (AROCLOR 1254)
AOPC 1 Printing Press Area	P-11	7/24/12	2.7 jl
	P-12	7/24/12	4.6 jl
	P-13	7/24/12	2.2 jl
	P-14	7/24/12	5.5 jl
	P-21	9/7/12	<b>12</b>
	P-22	9/7/12	1.4
	P-23	9/7/12	7.1
	P-24	9/7/12	7.6
	P-25	9/7/12	5.8
	P-26	9/7/12	3.1
	P-27	9/7/12	1.5
	P-28	9/7/12	5.0
	P-29	9/7/12	2.5
	P-30	9/7/12	1.9
	P-31	9/7/12	3.0
	P-32	9/7/12	5.7
	P-33	9/7/12	1.9
	P-34	9/7/12	9.7
	P-35	9/7/12	4.8
	P-36	9/7/12	6.7
P-37	9/7/12	8.6	
P-38	9/7/12	9.3	
P-39	9/7/12	<b>23</b>	
P-40	9/7/12	8.9	
AOPC 4 Compressor Room	C-4	7/24/12	<1.0
	C-5	7/24/12	<1.0
	C-6	7/24/12	<1.0
	C-13	9/7/12	0.47
	C-14	9/7/12	0.50
	C-15	9/7/12	0.54
<b>EPA Action Level</b>			<b>10</b>

Notes:

All results presented in micrograms/square hundredths centimeters (µg/100 cm<sup>2</sup>).

**Bold** Bold results indicate that the compound was detected at a concentration greater than the method detection limit.

Shaded cells indicate that result exceeded the action level.

jl The laboratory control sample analytical result is out of control limits. The reported concentration should be considered an estimate.

a Polychlorinated biphenyls (PCBs) by EPA Method 8082.

**Table 4**  
**Ground Water Analytical Data (in µg/L)**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

Area of Potential Concern	Sample Location	Date Sampled	Depth to Water	Petroleum Hydrocarbons			Detected Volatile Organic Carbons <sup>c</sup>													Metals <sup>d</sup>						
				Gasoline-Range Organics (GRO) <sup>a</sup>	Diesel-Range Organics (DRO) <sup>b</sup>	Oil-Range Organics (ORO) <sup>b</sup>	Vinyl Chloride	cis-1,2-Dichloroethene	Chloroform	Trichloroethene	Toluene	Tetrachloroethene	o-Xylene	Isopropylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	p-isopropyltoluene	Chromium	Dissolved Chromium	Arsenic	Dissolved Arsenic	Lead	Dissolved Lead	
AOPC 5 Northern UST Complex and Dispenser	U-6	7/26/12	16	<100	<50	<250	<0.2	<1	2.4	9.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	--	--	--	--
Potential Off-Site Sources	MW-1	9/6/12	15	<100	<50	<250	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.38	1.10	<1	<1
	MW-2	9/6/12		340	400 x	<250	1.3	22	2.3	5.6	<1	10	1.7	3.2	3.9	1.3	34	3.9	2.0	57.1	2.8 lc	2.19	<1	4.84	<1	
	MW-3	4/30/13	95	--	--	--	<0.2	<1	4.7 lc	<1	12	<1	<1	<1	<1	<1	<1	<1	<1	--	--	--	--	--	--	
	MW-3	4/30/13	20	--	--	--	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	--	--	--	--	
<b>MTCA Method A Cleanup Levels for Ground Water<sup>e</sup></b>				<b>1,000<sup>f</sup></b>	<b>500</b>	<b>500</b>	<b>0.2</b>	<b>NVE</b>	<b>NVE</b>	<b>5</b>	<b>1,000</b>	<b>5</b>	<b>1,000</b>	<b>NVE</b>	<b>NVE</b>	<b>NVE</b>	<b>NVE</b>	<b>NVE</b>	<b>NVE</b>	<b>NVE</b>	<b>50</b>	<b>5</b>	<b>15</b>			

Notes:

All results presented in micrograms/liter (µg/L).

- Shaded cells indicate that result exceeded the cleanup level.
- Not analyzed.
- < Concentration is less than the analytical method detection limit.
- a Gasoline-range organics (GRO) by NWTPH-Gx Methods.
- b Diesel- and oil-range organics (DRO and ORO) by NWTPH-Dx Methods.
- c Volatile organic compounds (VOCs) by EPA Method 8260C.
- d Analyzed by EPA Method 200.8. Mercury by EPA Method 1631E. There were no detections of cadmium and mercury in any samples.
- e Model Toxics Control Act (MTCA) Method A Cleanup Levels for Ground Water, Table 720-1 (WAC 173-340-900).
- f MTCA Method A Cleanup Level for Ground Water for GRO with no detectable benzene in ground water.

Qualifier:

- lc The presence of the compound indicated is likely due to laboratory contamination.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

**Table 5**  
**Shallow Sump Ground Water Analytical Results (in µg/L)**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

Area of Potential Concern	Sample Location	Date Sampled	Petroleum Hydrocarbons			Detected Volatile Organic Compounds <sup>c</sup>
			Gasoline-Range Organics (GRO) <sup>a</sup>	Diesel-Range Organics (DRO) <sup>b</sup>	Oil-Range Organics (ORO) <sup>b</sup>	Chloroform
<b>AOPC 10 Sumps</b>	S-2	9/6/12	<100	<50	<250	<1
	S-4	9/7/12	<100	310 x	<b>1,900</b>	<1
	S-5	9/6/12	<100	<b>110,000 x</b>	<b>10,000 x</b>	1.0
<b>MTCA Method A Cleanup Levels for Ground Water<sup>d</sup></b>			<b>1,000<sup>e</sup></b>	<b>500</b>	<b>500</b>	<b>NVE</b>

Notes:

All results presented in micrograms/liter (µg/L).

- Shaded cells indicate that result exceeded the cleanup level.
- Not analyzed.
- < Concentration is less than the analytical method detection limit.
- a Gasoline-range organics (GRO) by NWTPH-Gx Methods.
- b Diesel- and oil-range organics (DRO and ORO) by NWTPH-Dx Methods.
- c Volatile organic compounds (VOCs) by EPA Method 8260C.
- d Model Toxics Control Act (MTCA) Method A Cleanup Levels for Ground Water, Table 720-1 (WAC 173-340-900).
- e MTCA Method A Cleanup Level for Ground Water for GRO with no detectable benzene in ground water.

Qualifier:

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

**Table 6**  
**Product Analysis (in mg/kg)**  
**Subsurface Investigation Report**  
**Seattle Times Building**  
**1120 John Street, Seattle, Washington**

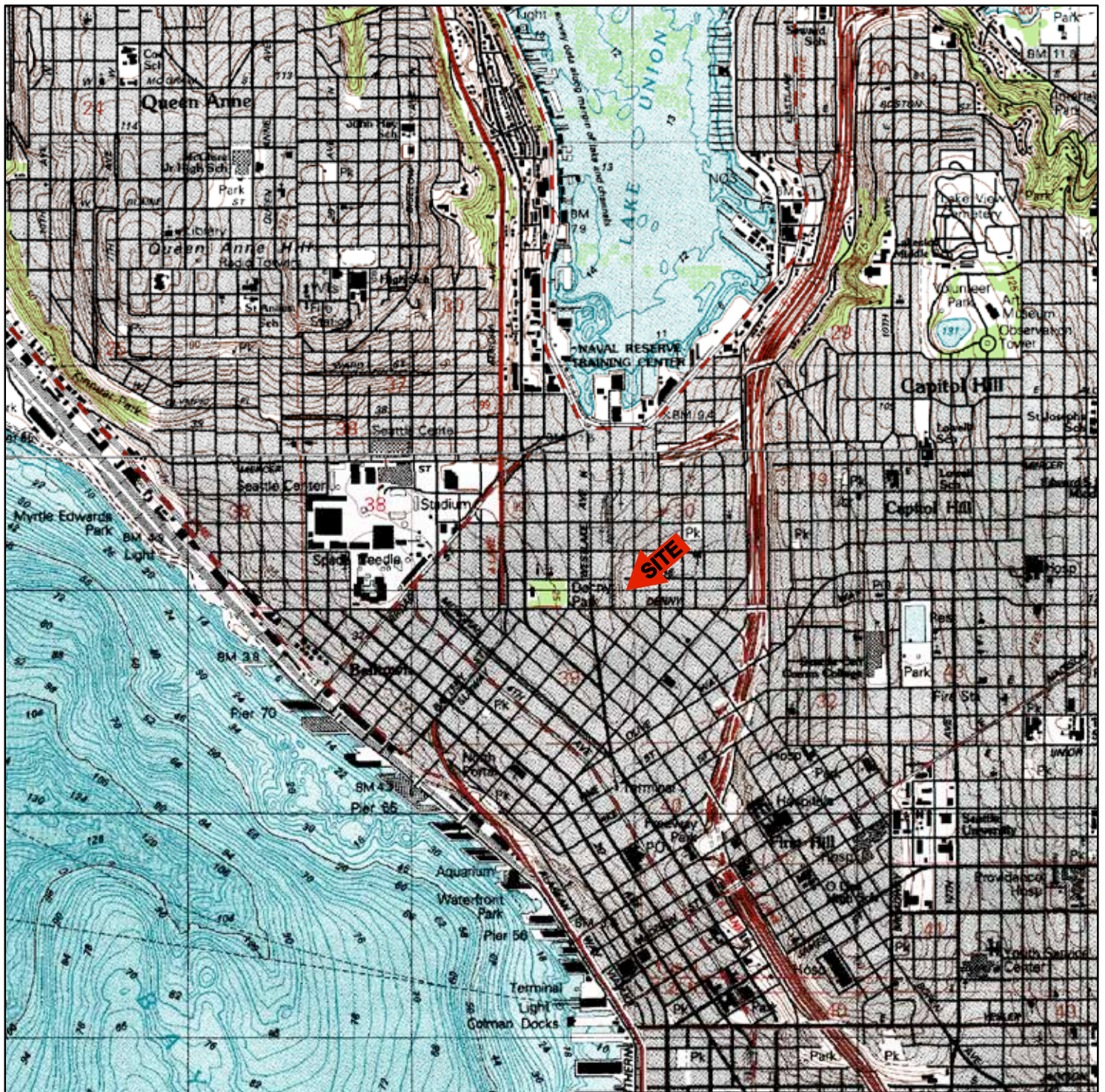
Area of Potential Concern	Sample Location	Date Sampled	Polychlorinated Biphenyls <sup>a</sup>
AOPC 4 Compressor Room	C-7	7/24/12	<2
	C-8	7/24/12	<2
	C-9	7/24/12	<2

Notes:

All results presented in milligrams/kilogram (mg/kg).

a Polychlorinated biphenyls (PCBs) by EPA Method 8082.

## Figures




**NOTES:**

SOURCE: USGS 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC)

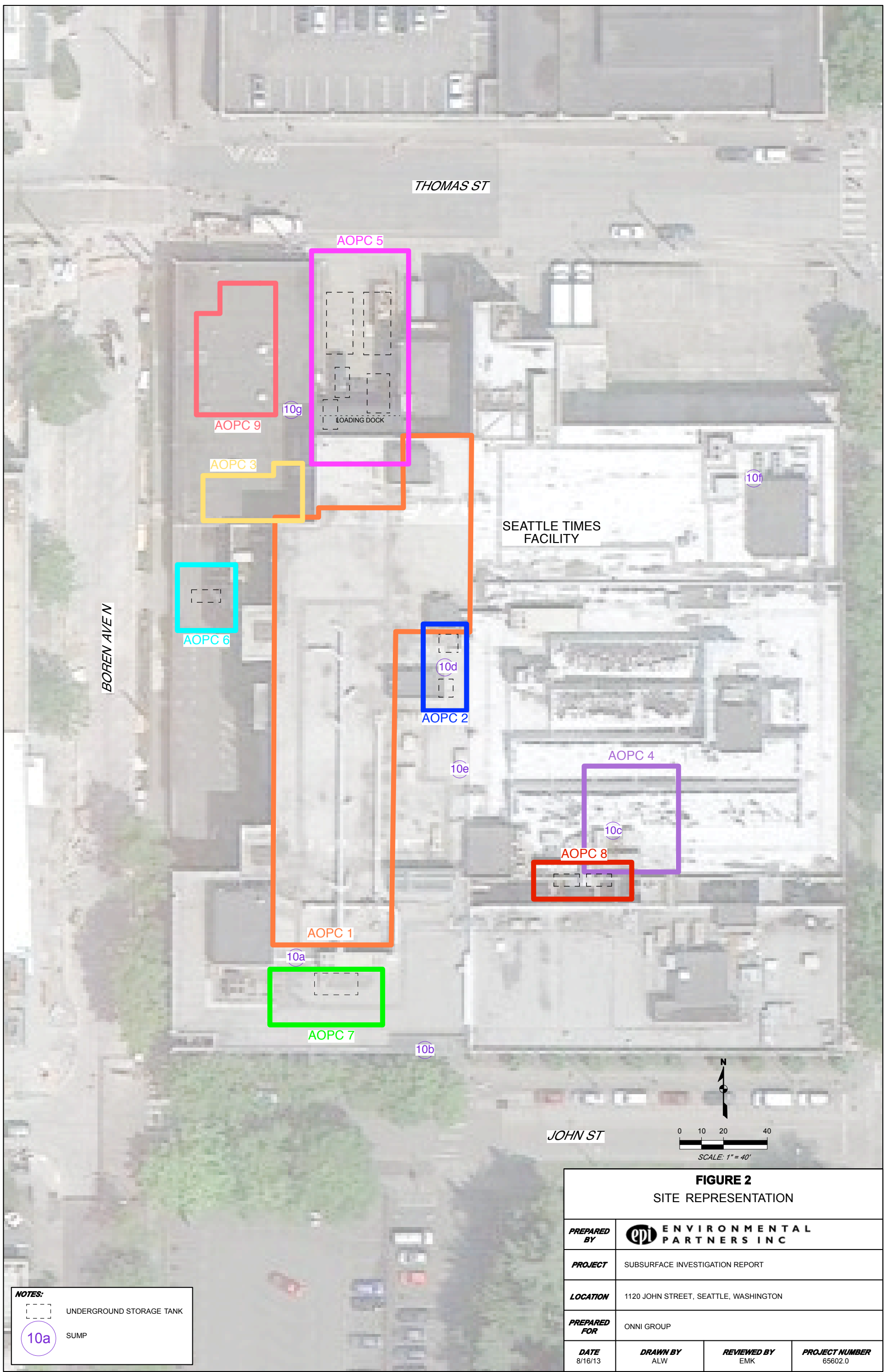
SEATTLE NORTH, WA 1983

SEATTLE SOUTH WA 1983



SCALE = 1:25,000


<b>FIGURE 1</b>			
<b>GENERAL VICINITY MAP</b>			
<b>PREPARED BY</b>	 <b>ENVIRONMENTAL PARTNERS INC</b>		
<b>REPORT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0

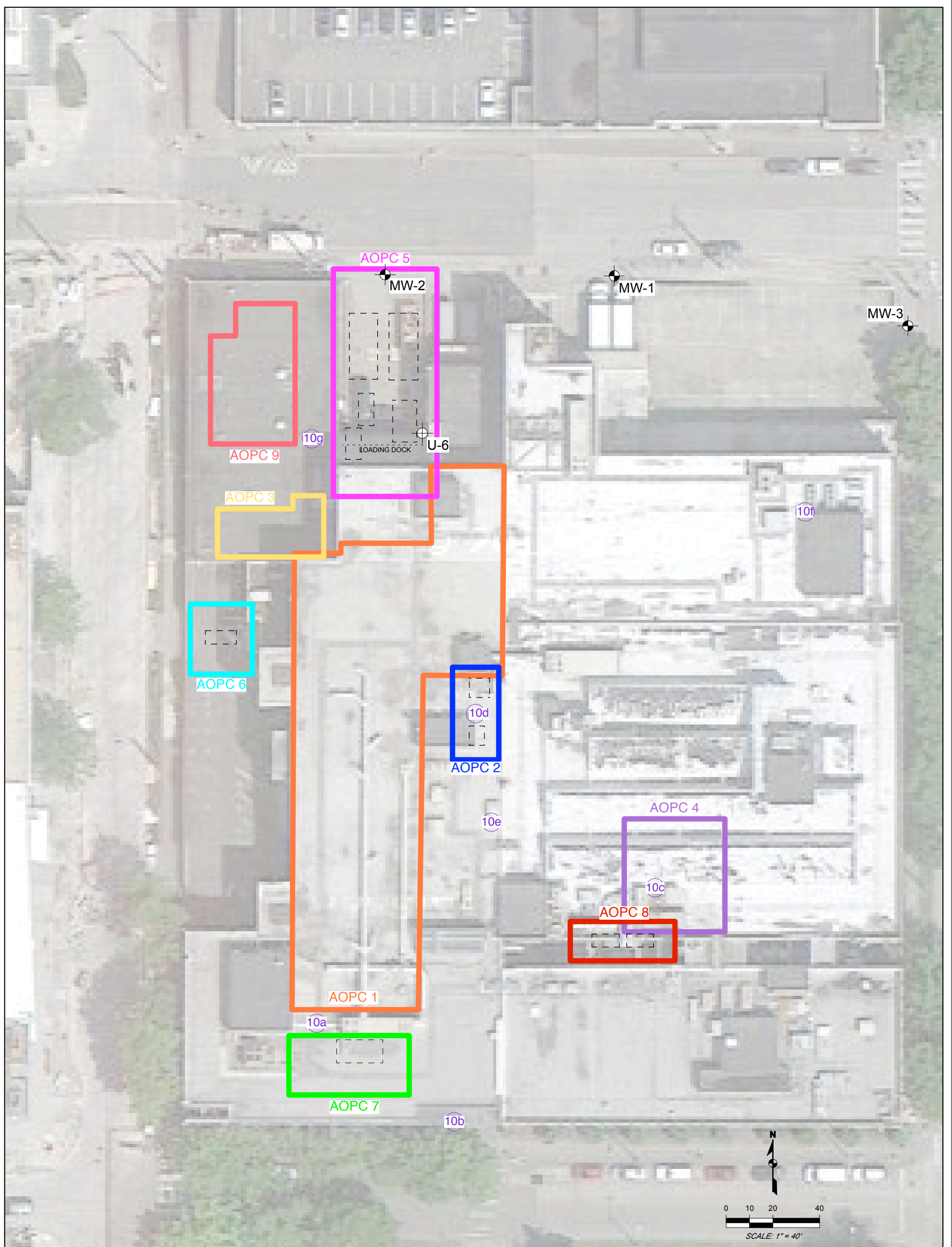




**NOTES:**

	UNDERGROUND STORAGE TANK
	SUMP

<b>FIGURE 2</b>			
SITE REPRESENTATION			
<b>PREPARED BY</b>	 ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0

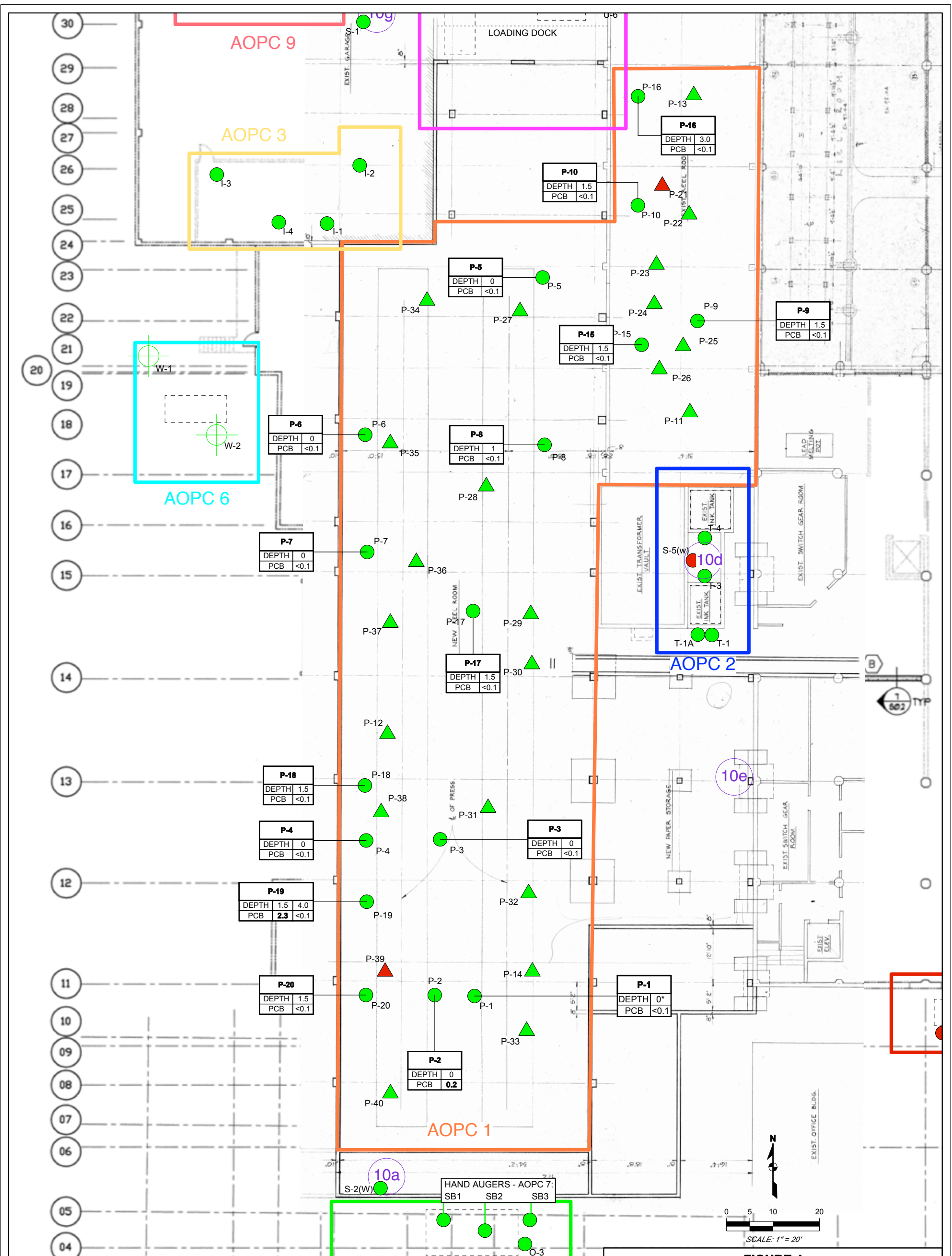


**NOTES:**

	RECONNAISSANCE GROUND WATER SAMPLING LOCATION
	MONITORING WELL LOCATION
	UNDERGROUND STORAGE TANK
	SUMP

**FIGURE 3**  
GROUND WATER MONITORING WELL LOCATIONS

<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0



**NOTES:**

- SHALLOW DIRECT PUSH BORING
- ▲ WIPE SAMPLE
- ⊕ HSA BORING
- UNDERGROUND STORAGE TANK
- 10a SUMP

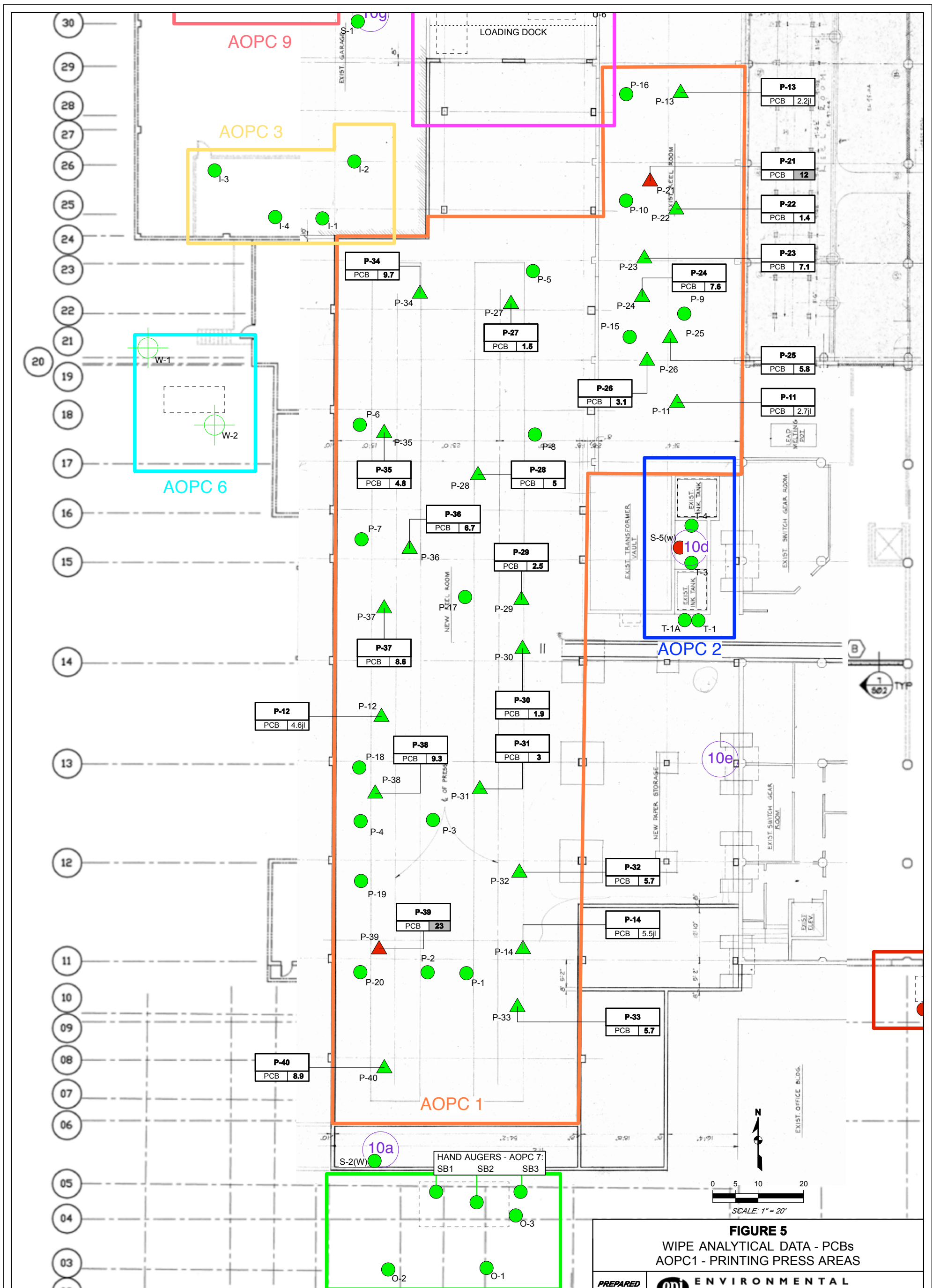
RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

SAMPLE NAME	<b>P-3</b>	
DEPTH	0	*
PCB	<0.1	* CONCENTRATION IN mg/kg. "<" VALUE INDICATES NOT DETECTED ABOVE THE METHOD DETECTION LIMIT. <b>BOLD</b> INDICATES DETECTION.

\*DEPTH IN FEET. 0 DEPTH INDICATES SAMPLE COLLECTED IMMEDIATELY BENEATH CONCRETE AND SUB-BASE.

<b>FIGURE 4</b>			
SOIL ANALYTICAL DATA - PCBs			
AOPC1 - PRINTING PRESS AREAS			
<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0



**FIGURE 5**  
WIPE ANALYTICAL DATA - PCBs  
AOPC1 - PRINTING PRESS AREAS

<b>PREPARED BY</b>	EPI ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0

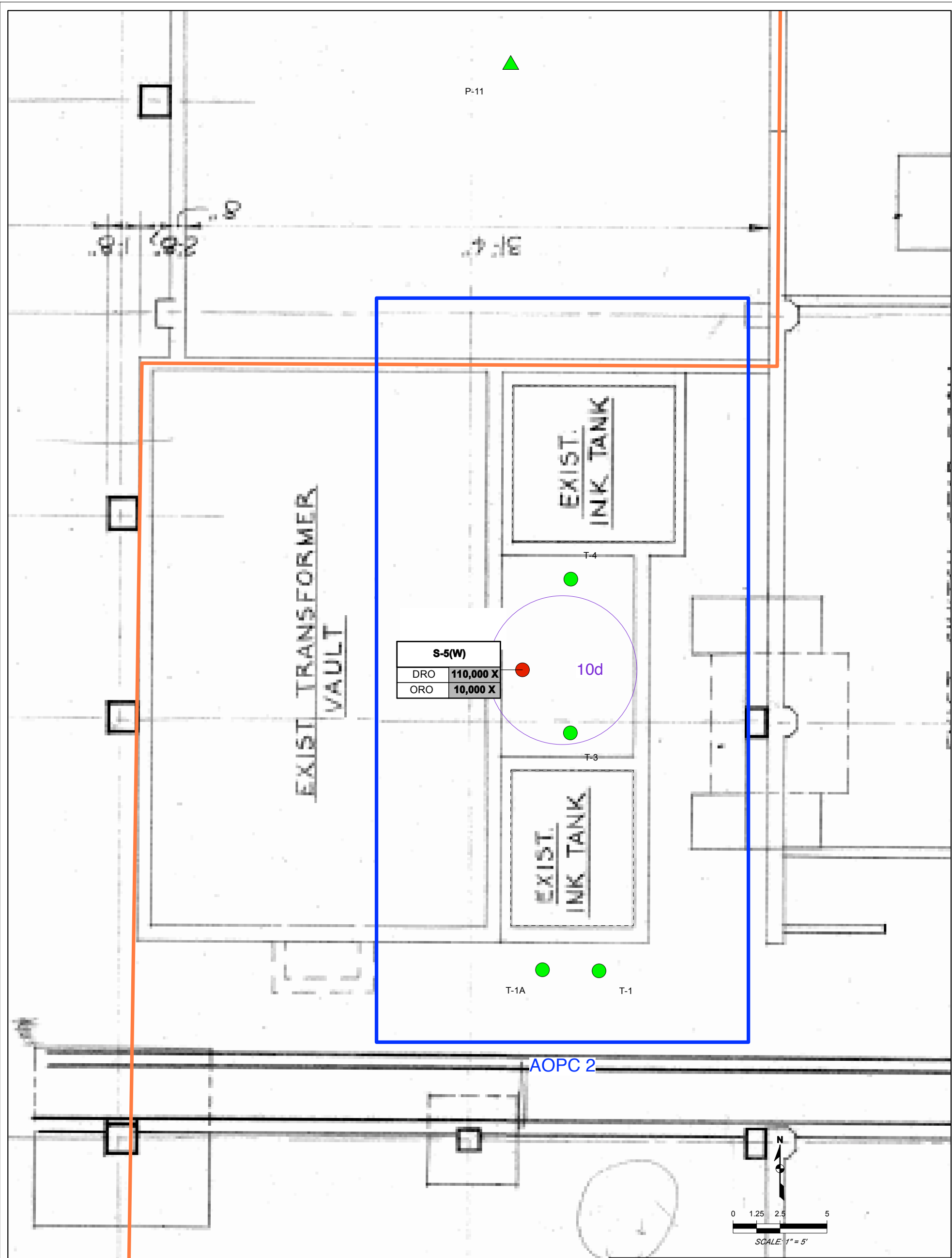
**NOTES:**

- ▲ WIPE SAMPLE
- 10a SUMP
- RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED EPA ACTION LEVELS.
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED EPA ACTION LEVELS.

SAMPLE NAME: P-3  
POLYCHLORINATED BIPHENYLS: PCB 55

CONCENTRATION IN  $\mu\text{g}/100\text{ cm}^2$   
**BOLD** INDICATES DETECTION.  
**SHADED** INDICATES EXCEEDS THE EPA ACTION LEVEL OF  $10\ \mu\text{g}/100\text{ cm}^2$

jl - THE ANALYTE RESULT IN THE LABORATORY CONTROL SAMPLE IS OUT OF CONTROL LIMITS. THE REPORTED CONCENTRATION SHOULD BE CONSIDERED AN ESTIMATE.



S-5(W)	
DRO	<b>110,000 X</b>
ORO	<b>10,000 X</b>

**NOTES:**

- SHALLOW DIRECT PUSH BORING
- ▲ WIPE SAMPLE
- UNDERGROUND STORAGE TANK
- 10a SUMP
- RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

SAMPLE NAME	S-5(W)	CONCENTRATION IN µg/L.
DIESEL-RANGE ORGANICS	DRO	<b>110,000 X</b>
OIL-RANGE ORGANICS	ORO	<b>10,000 X</b>

**BOLD** INDICATES DETECTION  
**SHADED** INDICATES EXCEEDS A POTENTIAL CUL.

**FIGURE 6**  
 SAMPLING LOCATIONS AND SUMP WATER ANALYTICAL DATA - DRO AND ORO  
 AOPC 2 - INTERIOR INK TANKS

<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0

37

34

33

32

31

30

29

28

27

26

25

24

23

H-5	
DEPTH	7
DRO	<50
ORO	<250

H-6	
DEPTH	8
DRO	<50
ORO	<250

H-1	
DEPTH	7
DRO	<50
ORO	<250

H-4	
DEPTH	7
DRO	<b>120</b>
ORO	<250

H-2	
DEPTH	4
DRO	<50
ORO	<250

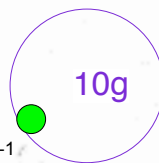
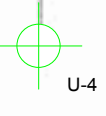
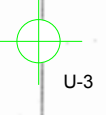
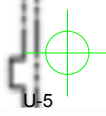
H-3	
DEPTH	7
DRO	<b>810</b>
ORO	<b>640</b>

I-2	
DEPTH	5
DRO	<50
ORO	<250

I-3	
DEPTH	5
DRO	<50
ORO	<250

I-1	
DEPTH	5
DRO	<50
ORO	<250

I-1	
DEPTH	5
DRO	<50
ORO	<250



AOPC 9

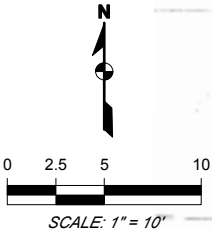
AOPC 3

EXIST. GARAGE

**NOTES:**

- SHALLOW DIRECT PUSH BORING
- ⊕ HSA BORING
- 10a SUMP
- RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

SAMPLE NAME	I-3	CONCENTRATION IN mg/kg.
DEPTH	5	<b>BOLD</b> INDICATES DETECTED ABOVE THE METHOD DETECTION LIMIT (MDL).
DRO	<b>810</b>	CONCENTRATION IN mg/kg.
ORO	<250	"<" VALUE INDICATES NOT DETECTED ABOVE THE MDL.

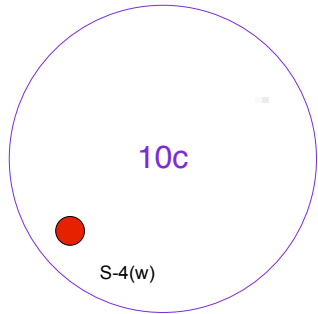
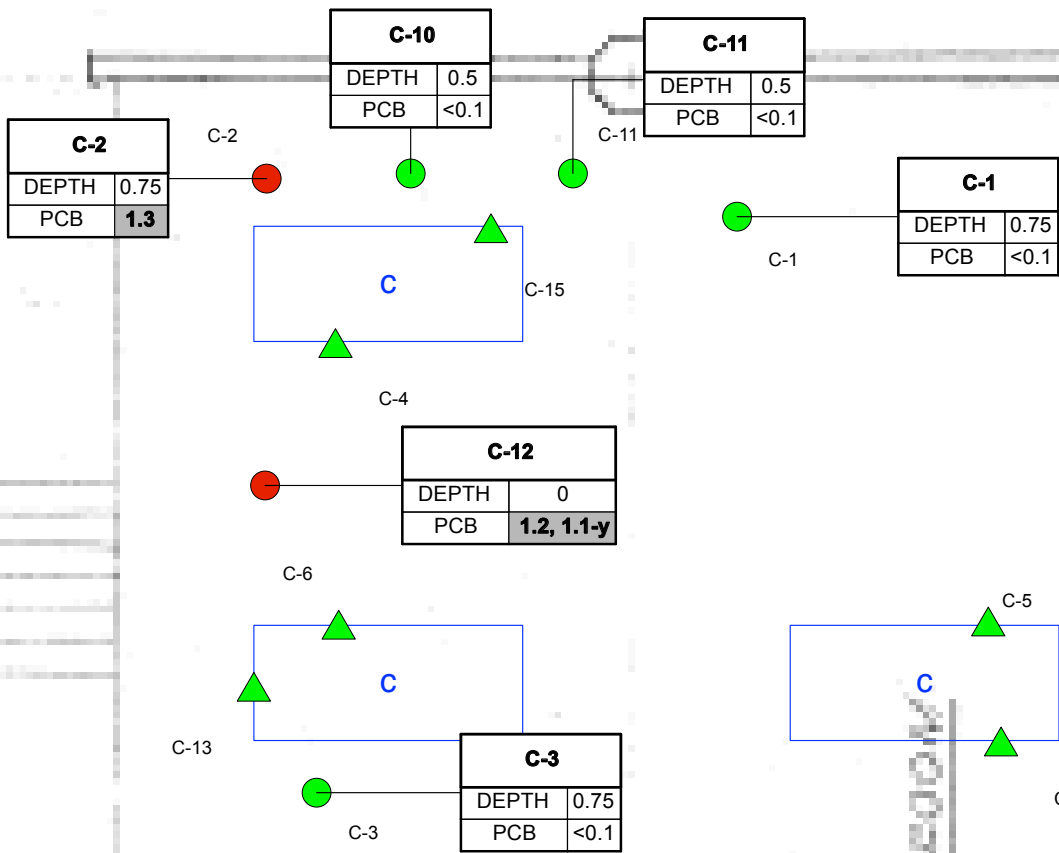


**FIGURE 7**  
SOIL ANALYTICAL DATA - DRO AND ORO  
AOPC 3 - IN TANK ROOM AND AOPC 9 - HOISTS

PREPARED BY	EPI ENVIRONMENTAL PARTNERS INC		
PROJECT	SUBSURFACE INVESTIGATION REPORT		
LOCATION	1120 JOHN STREET, SEATTLE, WASHINGTON		
PREPARED FOR	ONNI GROUP		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
8/16/13	ALW	EMK	65602.0

AOPC 4

AOPC 8



**NOTES:**

- SHALLOW DIRECT PUSH BORING
- ▲ WIPE SAMPLE
- 10a SUMP
- C COMPRESSOR UNIT
- RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

SAMPLE NAME	C-3
POLYCHLORINATED BIPHENYLS	DEPTH 7 PCB <0.1

\*DEPTH IN FEET. 0 DEPTH INDICATES SAMPLE COLLECTED IMMEDIATELY BENEATH CONCRETE AND SUB-BASE.

\*CONCENTRATION IN mg/kg. "<" VALUE INDICATES NOT DETECTED ABOVE THE METHOD DETECTION LIMIT.

**BOLD** INDICATES DETECTION. **SHADED** INDICATES EXCEEDS A POTENTIAL CUL.

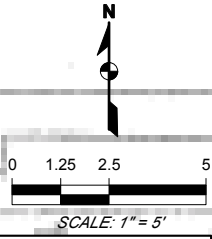
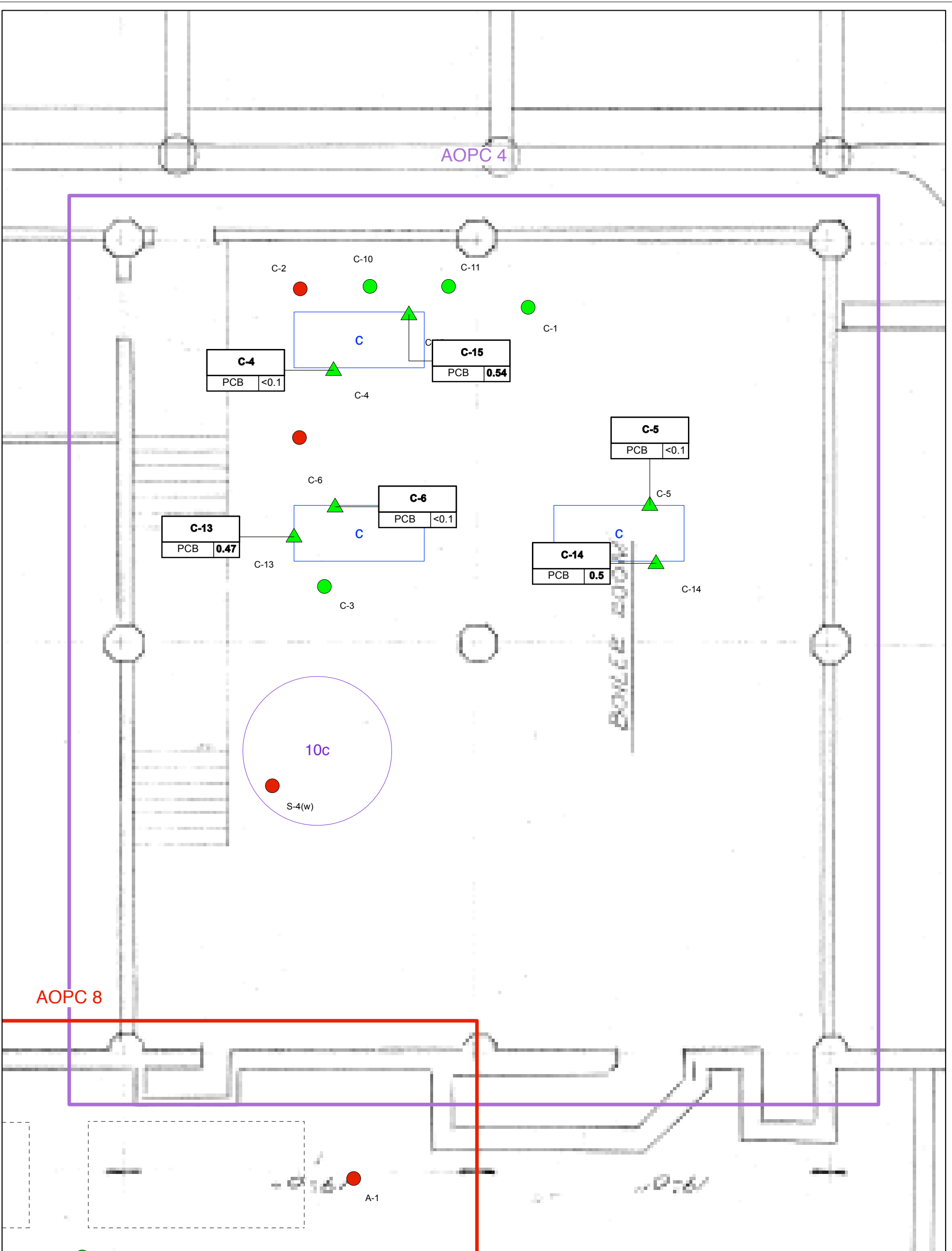


FIGURE 8 SOIL ANALYTICAL DATA - PCBs AOPC 4 - COMPRESSOR ROOM			
PREPARED BY	EPI ENVIRONMENTAL PARTNERS INC		
PROJECT	SUBSURFACE INVESTIGATION REPORT		
LOCATION	1120 JOHN STREET, SEATTLE, WASHINGTON		
PREPARED FOR	ONNI GROUP		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
8/16/13	ALW	EMK	65602.0

AOPC 4



AOPC 8

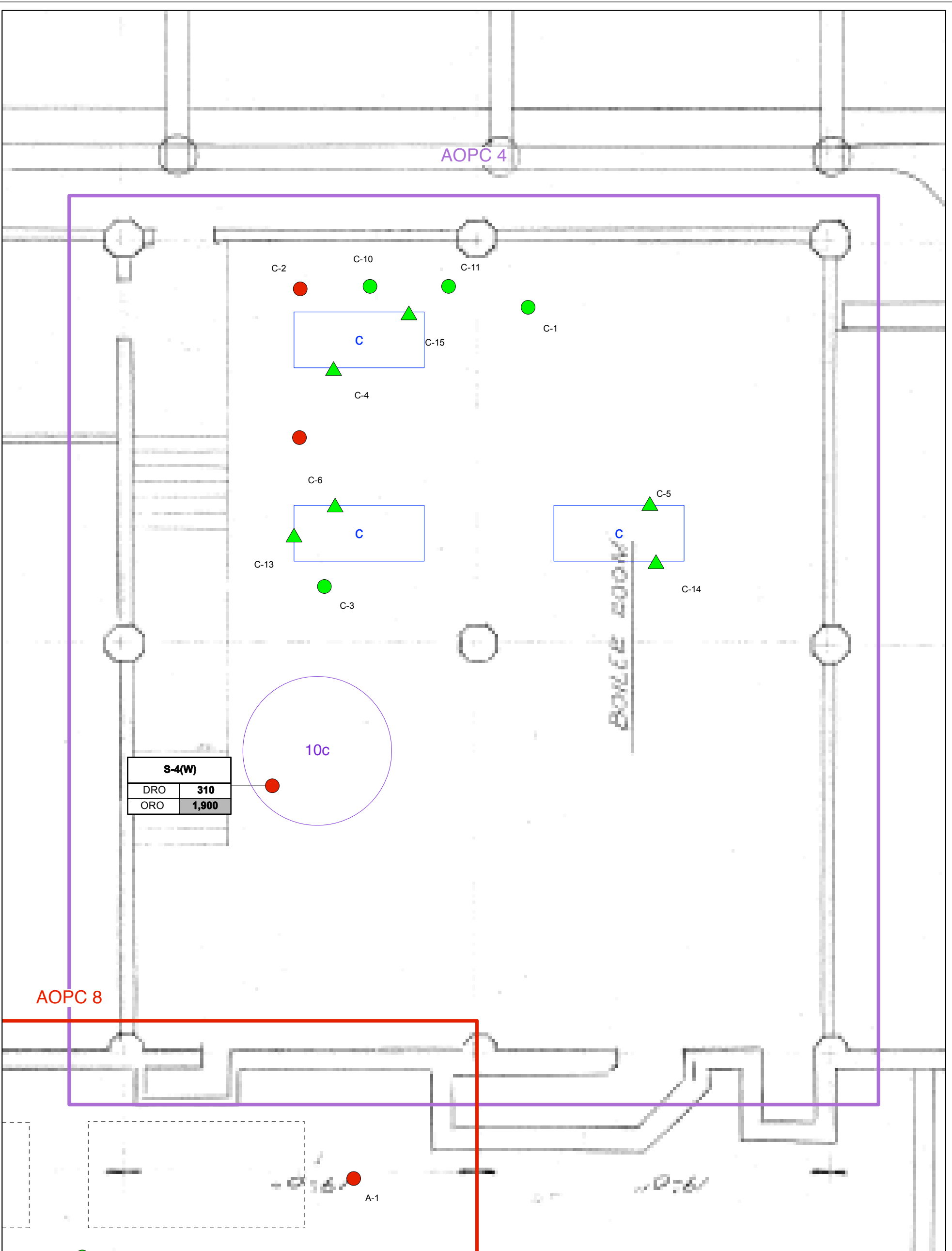
- NOTES:**
- SHALLOW DIRECT PUSH BORING
  - ▲ WIPE SAMPLE
  - 10a SUMP
  - C COMPRESSOR UNIT
  - RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED EPA ACTION LEVEL.
  - GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED EPA ACTION LEVEL.

SAMPLE NAME	<b>C-3</b>	CONCENTRATION IN $\mu\text{g}/100 \text{ cm}^2$
POLYCHLORINATED BIPHENYLS	PCB <0.1	"<" VALUE INDICATES NOT DETECTED ABOVE THE METHOD DETECTION LIMIT.
		<b>BOLD</b> INDICATES DETECTION.

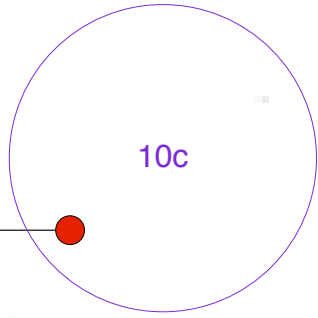
<b>FIGURE 9</b>			
WIPE ANALYTICAL DATA - PCBs			
AOPC 4 - COMPRESSOR ROOM			
<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0



AOPC 4



S-4(W)	
DRO	<b>310</b>
ORO	<b>1,900</b>



AOPC 8

- NOTES:**
- SHALLOW DIRECT PUSH BORING
  - ▲ WIPE SAMPLE
  - 10a SUMP
  - C COMPRESSOR UNIT
  - RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED EPA ACTION LEVEL.
  - GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED EPA ACTION LEVEL.

SAMPLE NAME	<b>S-4(W)</b>		CONCENTRATION IN µg/kg.
DIESEL-RANGE ORGANICS	DRO	<b>310</b>	<b>BOLD</b> INDICATES DETECTION
OIL-RANGE ORGANICS	ORO	<b>1,900</b>	<b>SHADED</b> INDICATES EXCEEDS A POTENTIAL CUL.

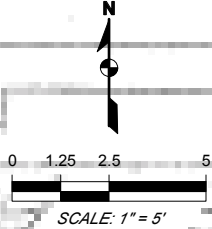
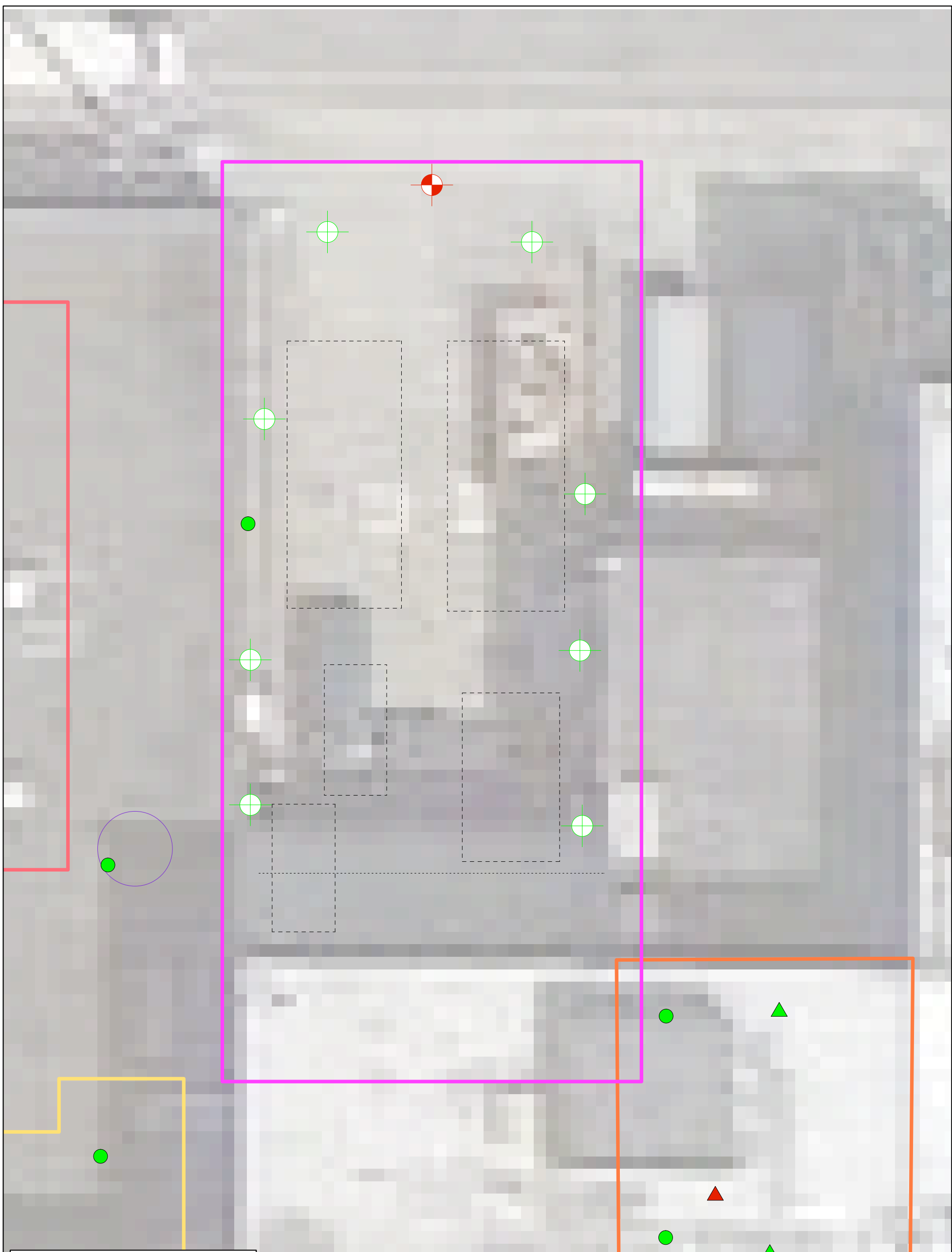


FIGURE 10 SUMP WATER ANALYTICAL DATA - DRO AND ORO AOPC 4 - COMPRESSOR ROOM			
PREPARED BY	ENVIRONMENTAL PARTNERS INC		
PROJECT	SUBSURFACE INVESTIGATION REPORT		
LOCATION	1120 JOHN STREET, SEATTLE, WASHINGTON		
PREPARED FOR	ONNI GROUP		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
8/16/13	ALW	EMK	65602.0



**NOTES:**

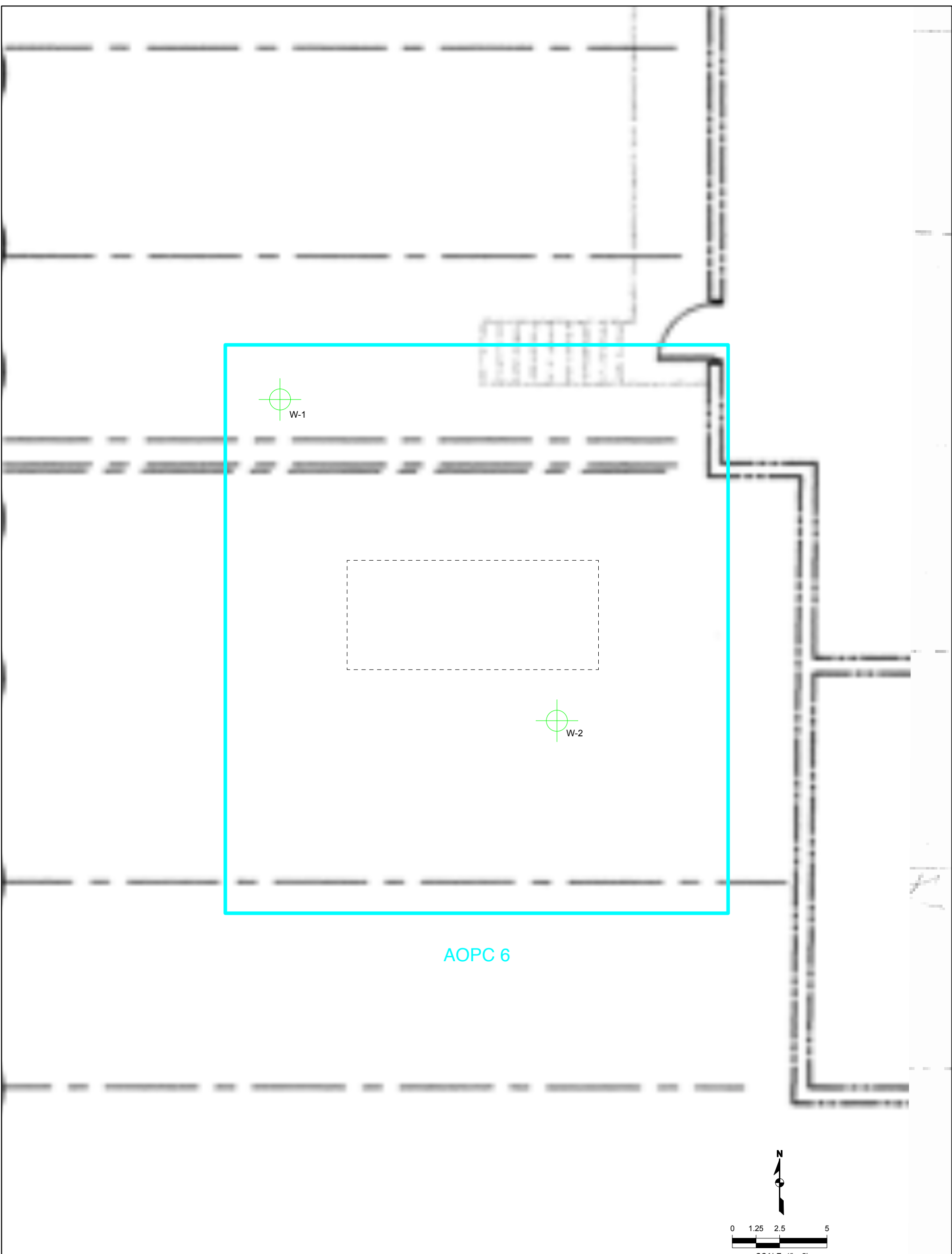
- SHALLOW DIRECT PUSH BORING
- WIPE SAMPLE
- HSA BORING
- MONITORING WELL
- UNDERGROUND STORAGE TANK
- SUMP

RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

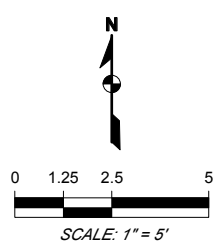
GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

**FIGURE 11**  
**SAMPLING LOCATIONS**  
**AOPC 5 - NORTHERN UST COMPLEX AND DISPENSER**




<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0




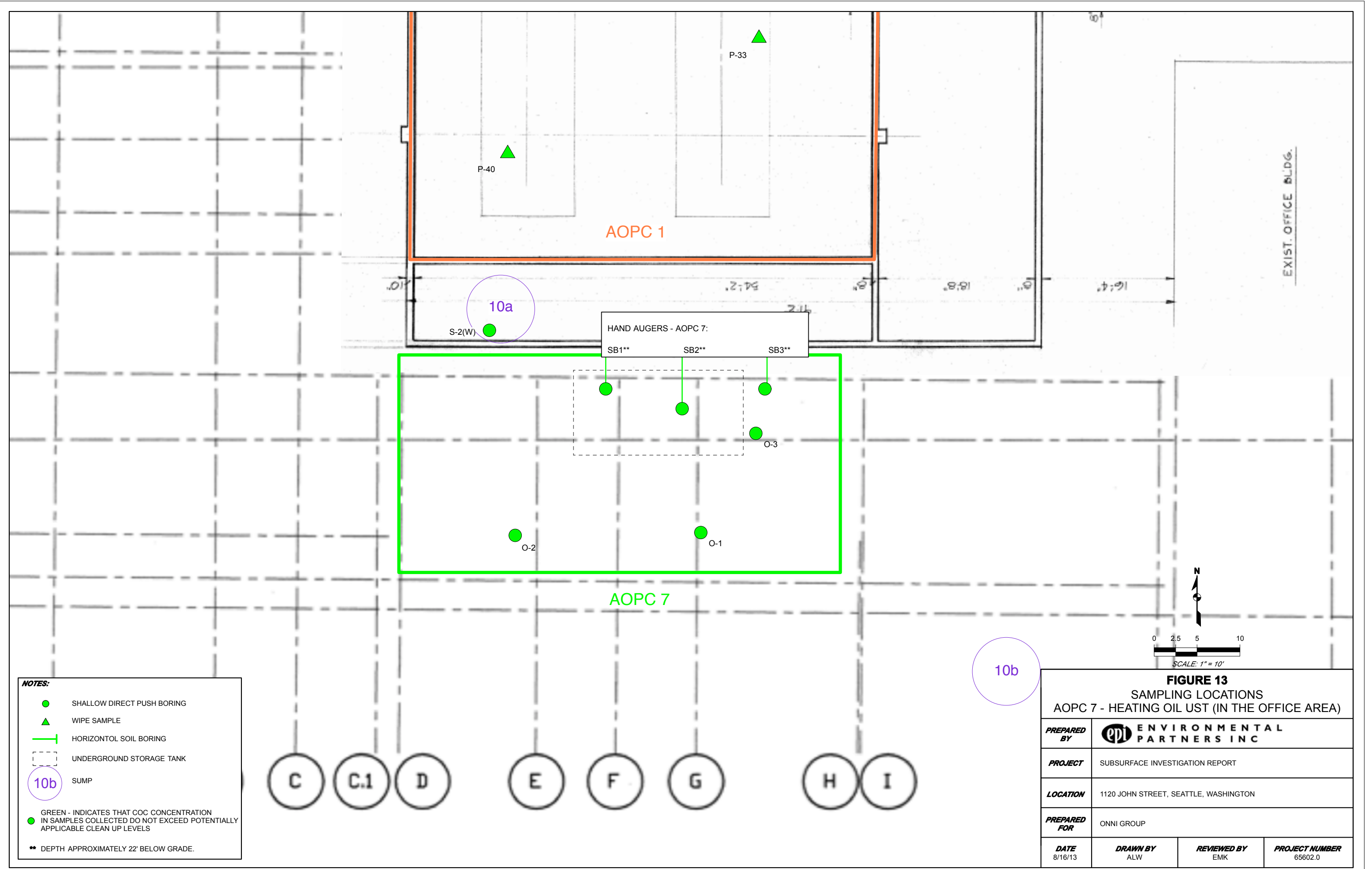
AOPC 6



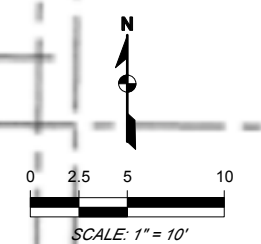
**NOTES:**

	HSA BORING
	UNDERGROUND STORAGE TANK
	GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

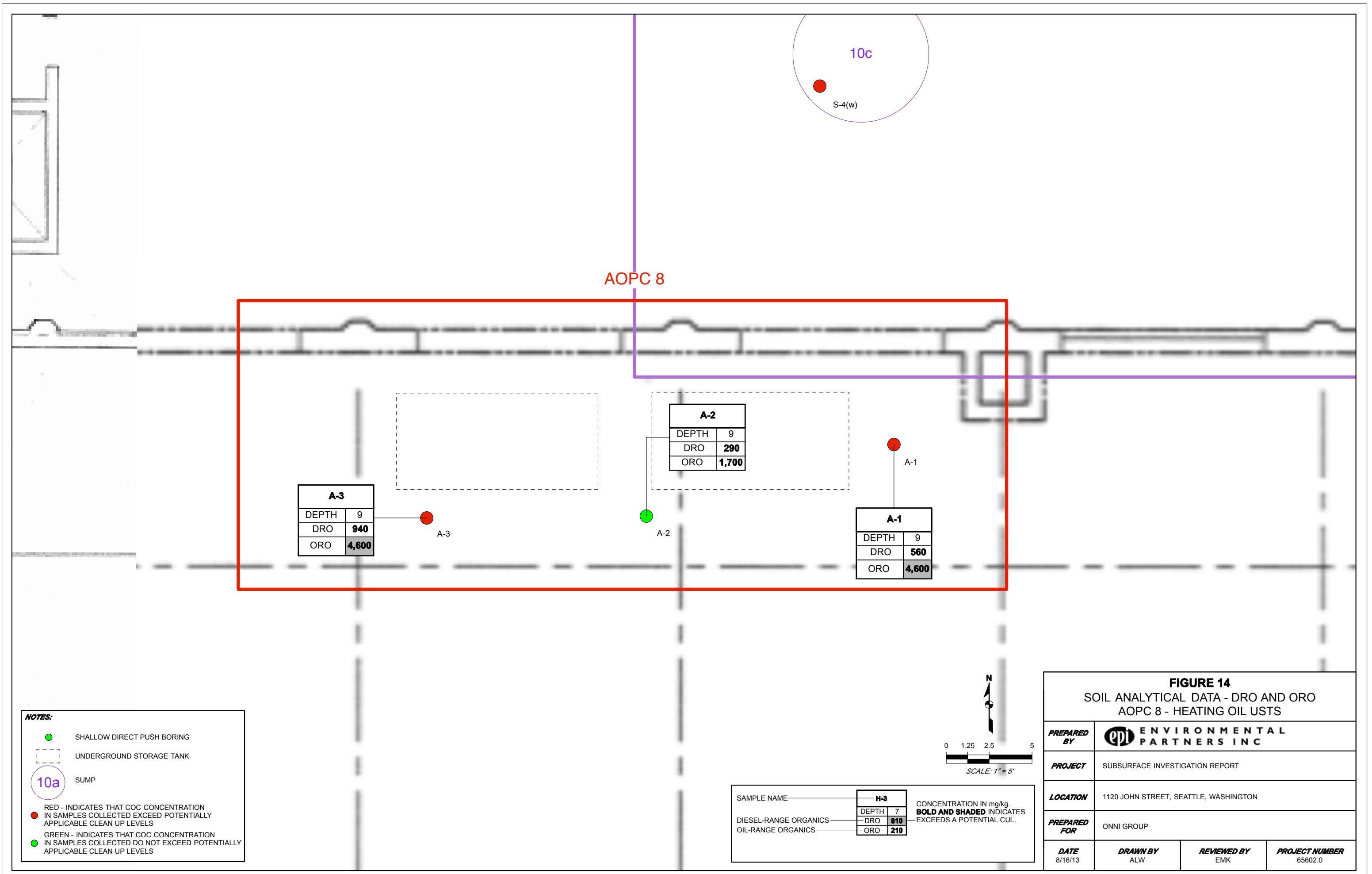
<b>FIGURE 12</b> SAMPLING LOCATIONS AOPC 6 - WASTE OIL UST			
<b>PREPARED BY</b>	 ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0



- NOTES:**
- SHALLOW DIRECT PUSH BORING
  - ▲ WIPE SAMPLE
  - HORIZONTAL SOIL BORING
  - UNDERGROUND STORAGE TANK
  - 10b SUMP
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS
- \*\* DEPTH APPROXIMATELY 22' BELOW GRADE.



<b>FIGURE 13</b>			
SAMPLING LOCATIONS AOPC 7 - HEATING OIL UST (IN THE OFFICE AREA)			
<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b> 8/16/13	<b>DRAWN BY</b> ALW	<b>REVIEWED BY</b> EMK	<b>PROJECT NUMBER</b> 65602.0



A-3	
DEPTH	9
DRO	<b>940</b>
ORO	<b>4,600</b>

A-2	
DEPTH	9
DRO	<b>290</b>
ORO	<b>1,700</b>

A-1	
DEPTH	9
DRO	<b>560</b>
ORO	<b>4,600</b>

SAMPLE NAME	<b>H-3</b>	CONCENTRATION IN mg/kg. <b>BOLD AND SHADED</b> INDICATES EXCEEDS A POTENTIAL CUL.
DIESEL-RANGE ORGANICS	DEPTH 7	
OIL-RANGE ORGANICS	DRO <b>810</b> ORO <b>210</b>	

**NOTES:**

- SHALLOW DIRECT PUSH BORING
- ⊞ UNDERGROUND STORAGE TANK
- 10a SUMP
- RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

FIGURE 14 SOIL ANALYTICAL DATA - DRO AND ORO AOPC 8 - HEATING OIL USTs			
PREPARED BY	epi ENVIRONMENTAL PARTNERS INC		
PROJECT	SUBSURFACE INVESTIGATION REPORT		
LOCATION	1120 JOHN STREET, SEATTLE, WASHINGTON		
PREPARED FOR	ONNI GROUP		
DATE	DRAWN BY	REVIEWED BY	PROJECT NUMBER
8/16/13	ALW	EMK	65602.0

THOMAS STREET

FAIRVIEW AVE N

MW-2	
DEPTH	88'
VINYL CHLORIDE	1.2
CIS-1,2-DICHLOROETHENE	<b>22</b>
CHLOROFORM	<b>2.3</b>
TRICHLOROETHENE	<b>5.6</b>
TETRACOLORETHENE	<b>10</b>
O-XYLENE	<b>1.7</b>
ISOPROPYLBENZENE	<b>3.2</b>
1,3,5-TRIMETHYLBENZENE	<b>3.9</b>
TERT-BUTYLBENZENE	<b>1.3</b>
1,2,4-TRIMETHYLBENZENE	<b>34</b>
SEC-BUTYLBENZENE	<b>3.9</b>
P-ISOPROPYLTOLUENE	<b>2.0</b>

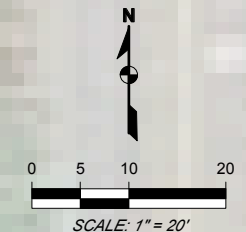
MW-1	
DEPTH	15'
VINYL CHLORIDE	<1
CIS-1,2-DICHLOROETHENE	<1
CHLOROFORM	<1
TRICHLOROETHENE	<1
TETRACOLORETHENE	<1
O-XYLENE	<1
ISOPROPYLBENZENE	<1
1,3,5-TRIMETHYLBENZENE	<1
TERT-BUTYLBENZENE	<1
1,2,4-TRIMETHYLBENZENE	<1
SEC-BUTYLBENZENE	<1
P-ISOPROPYLTOLUENE	<1

MW-3		
VINYL CHLORIDE	DEPTH 20'	DEPTH 95'
CIS-1,2-DICHLOROETHENE	<1	<1
CHLOROFORM	<1	4.7 lc
TRICHLOROETHENE	<1	<1
TOLUENE	<1	12
TETRACOLORETHENE	<1	<1
O-XYLENE	<1	<1
ISOPROPYLBENZENE	<1	<1
1,3,5-TRIMETHYLBENZENE	<1	<1
TERT-BUTYLBENZENE	<1	<1
1,2,4-TRIMETHYLBENZENE	<1	<1
SEC-BUTYLBENZENE	<1	<1
P-ISOPROPYLTOLUENE	<1	<1

U-6	
DEPTH	16'
VINYL CHLORIDE	<1
CIS-1,2-DICHLOROETHENE	<1
CHLOROFORM	<b>2.4</b>
TRICHLOROETHENE	<b>9.0</b>
TETRACOLORETHENE	<1
O-XYLENE	<1
ISOPROPYLBENZENE	<1
1,3,5-TRIMETHYLBENZENE	<1
TERT-BUTYLBENZENE	<1
1,2,4-TRIMETHYLBENZENE	<1
SEC-BUTYLBENZENE	<1
P-ISOPROPYLTOLUENE	<1

- NOTES:**
- SHALLOW DIRECT PUSH BORING
  - WIPE SAMPLE
  - HSA BORING
  - MONITORING WELL
  - UNDERGROUND STORAGE TANK
  - SUMP
- RED - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS
- GREEN - INDICATES THAT COC CONCENTRATION IN SAMPLES COLLECTED DO NOT EXCEED POTENTIALLY APPLICABLE CLEAN UP LEVELS

SAMPLE NAME	<b>P-3</b>	CONCENTRATION IN µg/L.
VOLATILE ORGANIC COMPOUNDS IN GROUND WATER	DEPTH 0	"<" VALUE INDICATES NO DETECTED ABOVE THE METHOD DETECTION LIMIT.
	-VOC <0.1	<b>BOLD</b> INDICATES DETECTION <b>SHADED</b> INDICATES EXCEEDS A POTENTIAL CUL.



**FIGURE 15**  
GROUND WATER ANALYTICAL DATA - VOCs

<b>PREPARED BY</b>	ENVIRONMENTAL PARTNERS INC		
<b>PROJECT</b>	SUBSURFACE INVESTIGATION REPORT		
<b>LOCATION</b>	1120 JOHN STREET, SEATTLE, WASHINGTON		
<b>PREPARED FOR</b>	ONNI GROUP		
<b>DATE</b>	<b>DRAWN BY</b>	<b>REVIEWED BY</b>	<b>PROJECT NUMBER</b>
8/16/13	ALW	EMK	65602.0

10a

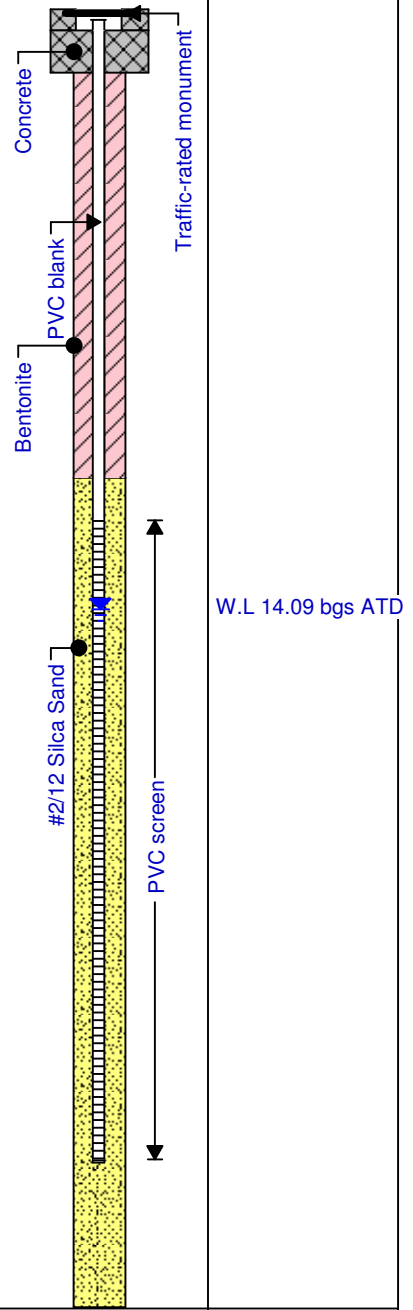
**Attachment A**  
**Boring Logs**

**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** September 5, 2012  
**Logged by:** M. Busby, L.H.G.  
**Total Depth (ft):** 30.5

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 8"  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** Unknown ATD

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 12-27'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** #2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
0			Ground Surface							
0-1			<b>Concrete</b>							
1-11		SP	<b>Pea Gravel</b> Brown; moist; loose; mostly coarse sand; no odor							
5-6						1 2 1		1.8		
10-11						4 12 12	MW1-10	0.8		
11-13		ML	<b>Silt with sand</b> Brown; moist; very stiff; mostly silt with minor sand							
13-18		ML	<b>Gravelly Silt with Sand</b> Brown; moist to wet; hard; mostly silt with some gravel and minor sand			20 50-6		0.7		
18-23		ML	<b>Silt</b> Dark gray; wet; mostly silt with trace sand and trace gravel			12 23 30		0.8		
23-28		ML	<b>Sandy Silt</b> Dark gray; wet; mostly silt with some sand and trace gravel			50-5		0.4		
28-30		ML	<b>Silt</b> Brown; moist; hard; mostly silt with trace fine sand and trace gravel			50-6	MW1-30	0.4		
31-32			End of Boring							





**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** September 4 & 5, 2012  
**Logged by:** M. Busby, L.H.G.  
**Total Depth (ft):** 100.5

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 8.25"  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** Unknown ATD

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** #2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
0			Ground Surface							
0 - 5			<b>Concrete</b>						Concrete	
0 - 5		ML	<b>Silt</b> Brown; dry; hard mostly silt with trace sand			12 21 50-6		25	Traffic-rated monument	
5 - 10		ML	<b>Silt with Sand</b> Brown; dry; hard; mostly silt with minor ssand and trace gravel			12 18 35	MW2-10	102		
10 - 15		ML	<b>Silt</b> Brown; dry; hard; mostly silt with trace sand and trace gravel			12 18 25	MW-2-15	91		
15 - 20						50-6	MW-2-20	3.6	Bentonite	PVC blank
20 - 25						50-6"		1.2		

**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** September 4 & 5, 2012  
**Logged by:** M. Busby, L.H.G.  
**Total Depth (ft):** 100.5

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 8.25"  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** Unknown ATD

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** #2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
30	[Vertical line pattern]	MH	<b>Elastic Silt</b> Dark brown; dry; hard; medium plasticity; mostly silt with trace sand	[Black bar]	[Grey bar]	50-6"			[Pink hatched area]	
						20	1.8			
						50-6"				
35	[Vertical line pattern]	ML	<b>Gravelly Silt with Sand</b> Light brown and orange; dry; hard; mostly silt with some gravel and minor sand	[Black bar]	[Grey bar]	10			[Pink hatched area]	
						17	2.4			
						20				
40	[Vertical line pattern]	ML	<b>Gravelly Silt with Sand</b> Light brown and orange; dry; hard; mostly silt with some gravel and minor sand	[Black bar]	[Grey bar]	50-6"			[Pink hatched area]	
							2.1			
45	[Vertical line pattern]	ML	<b>Gravelly Silt with Sand</b> Light brown and orange; dry; hard; mostly silt with some gravel and minor sand	[Black bar]	[Grey bar]	25			[Pink hatched area]	
							0.1			
50	[Vertical line pattern]	ML	<b>Gravelly Silt with Sand</b> Light brown and orange; dry; hard; mostly silt with some gravel and minor sand	[Black bar]	[Grey bar]	30			[Pink hatched area]	

**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** September 4 & 5, 2012  
**Logged by:** M. Busby, L.H.G.  
**Total Depth (ft):** 100.5

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 8.25"  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** Unknown ATD

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** #2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
55		ML	<b>Silt</b> Light brown; dry; hard; mostly silt with minor sand			50-6"		3.5		
						50-5"		3.4		
60						50-6"		1.6		
65		ML	<b>Gravelly Silt</b> Medium brown; dry; hard; mostly silt with some gravel			50-5"		3.5		
70		ML	<b>Silt</b> Brown; dry; hard; mostly silt with minor gravel and trace sand			50-5"		3.3		
75						50-5"		20		

**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** September 4 & 5, 2012  
**Logged by:** M. Busby, L.H.G.  
**Total Depth (ft):** 100.5

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 8.25"  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** Unknown ATD

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** #2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
80	[Cross-hatched pattern]	ML	<b>Gravelly Silt</b> Brown and light gray; dry; mostly silt with minor gravel			50-6"		0.6	<p>#2/12 Silica Sand</p> <p>PVC screen</p>	W.L 88' bgs ATD
85		SM	<b>Silty Sand</b> Brown; and light gray; moist to wet; mostly fine to medium sand with some silt			50-6"	MW2-85	101		
90						50-6"		57		
95						20 50-6"		31		
100	[Diagonal hatched pattern]	GM	<b>Silty Gravel with Sand</b> Brown; wet; mostly fine gravel with some silt and minor sand			50-6"		3.5		

**Client:** Onni Group

**Contractor:** Cascade Drilling

**Casing Material:** Sch 40 PVC

**Site Address:** 1120 John Street

**Equipment:** CME-75 HSA

**Casing Size:** 2"

**City & State:** Seattle WA

**Borehole Diameter:** 15"(0-30) 8"(30-100)

**Screen Interval:** 85'- 100'

**Date of Drilling:** April 29 & 30, 2013

**Sampler Specs:** 2.5"

**Screen Size (in.):** 0.010"

**Logged by:** E. Caddey, L.G.

**Hammer Size:** 140lbs

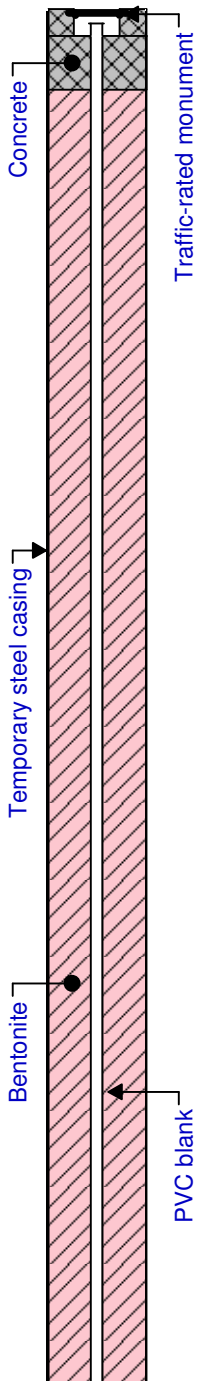
**Screen Type:** Sch 40 PVC machine

**Total Depth (ft):** 100

**Elevation (ft amsl):** 0

**Filter Pack:** 2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
0			Ground Surface							
			<b>Concrete</b>							
		SP	<b>Poorly-graded Sand</b> Gray; damp; mostly fine to medium sand; apparent fill material							
5		SW-SM	<b>Well-Graded Sand with Silt and Gravel</b> Gray-green; damp; loose; mostly fine to coarse sand with few silt and few gravel  Becomes medium dense			4 4 5		0.1		
10		SW-SM	<b>Poorly-graded Sand with Silt and Gravel</b> Gray; damp; medium dense; mostly fine to medium sand with few silt and few gravel;  Becomes dense			4 5 6		0.1		
15		SP-SM	<b>Poorly-graded Sand with Silt and Gravel</b> Gray; damp; medium dense; mostly fine to medium sand with few silt and few gravel;  Becomes dense			50-6"		0.1		
20		CL	<b>Sandy Lean Clay with Gravel</b> Gray; damp; hard; low plasticity; no dilatancy; mostly clay with some sand and few gravel			19 21 23		0.4		
25		SW-SM								



**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** April 29 & 30, 2013  
**Logged by:** E. Caddey, L.G.  
**Total Depth (ft):** 100

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 15"(0-30) 8"(30-100)  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** 0

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** 2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments	
30			<b>Well-graded Sand with Silt and Gravel</b> Gray-blue; damp; very dense; mostly fine to coarse sand with few silt and few gravel			50-6"					
						19	50-6"				0.0
35						50-5"		0.1			
40						50-5"		0.2			
45		SW-SC	<b>Well-graded Sand with Clay and Gravel</b> Gray-blue; damp; very dense; mostly fine to coarse sand with few clay and few gravel			17					
50						50-5"		0.0			

**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** April 29 & 30, 2013  
**Logged by:** E. Caddey, L.G.  
**Total Depth (ft):** 100

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 15"(0-30) 8"(30-100)  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** 0

**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** 2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
55	[Cross-hatched pattern]	SW-SM	<b>Well-graded Sand with Clay and Gravel</b> Gray-blue; damp; very dense; mostly fine to coarse sand with few clay and few gravel			25 50-5"		0.0	[Pink hatched pattern] Bentonite [Black dot] PVC blank	
			<b>Well-graded Sand with Silt and Gravel</b> Gray-green; damp; very dense; fine to coarse sand with few silt and few gravel			50-6"		0.1		
60		SW-SM				50-6"		0.1		
65						25 50-6"		0.2		
70		SW	<b>Well-graded Sand with Gravel</b> Brown; damp; very dense; fine to coarse sand with few gravel			50-6"		0.0		
75										

**Client:** Onni Group  
**Site Address:** 1120 John Street  
**City & State:** Seattle WA  
**Date of Drilling:** April 29 & 30, 2013  
**Logged by:** E. Caddey, L.G.  
**Total Depth (ft):** 100

**Contractor:** Cascade Drilling  
**Equipment:** CME-75 HSA  
**Borehole Diameter:** 15"(0-30) 8"(30-100)  
**Sampler Specs:** 2.5"  
**Hammer Size:** 140lbs  
**Elevation (ft amsl):** 0


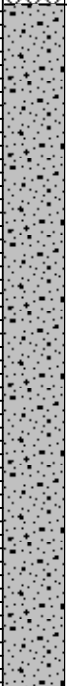





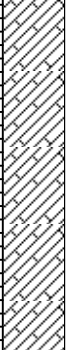


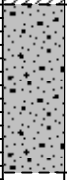


**Casing Material:** Sch 40 PVC  
**Casing Size:** 2"  
**Screen Interval:** 85'- 100'  
**Screen Size (in.):** 0.010"  
**Screen Type:** Sch 40 PVC machine  
**Filter Pack:** 2/12

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Well Completion Details	Comments
80	[Cross-hatched pattern]		<b>Well-graded Sand with Gravel</b> Brown; damp; very dense; fine to coarse sand with few gravel			25 50-6"		0.1		
85		SW-SM	<b>Well-graded Sand with Silt and gravel</b> Brown-gray; damp; very dense; mostly fine to coarse sand with few silt and few gravel			50-6"		0.2		
90		SW	<b>Well-graded Sand</b> Brown; damp; very dense; mostly fine to coarse sand with few silt			26 50-6"		0.5		
95	[Dotted pattern]		<b>Poorly-graded Sand with Gravel</b> Gray-brown; moist to wet; very dense; mostly medium sand with few gravel			28 23 50-6"		0.2		
100		SP				20 20 25		0.3		
								0.4		




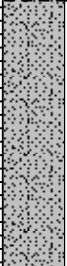




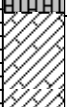
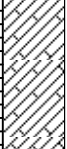




**Client:** Onni Group  
**Site Address:** 1120 John Street, Seattle WA  
**Date of Drilling:** July 19, 2012  
**Logged by:** E. Caddey, L.G.

**Drilling Contractor:** Cascade Drilling  
**Drill Method:** CME-75 HSA  
**Borehole Size:** 10"  
**Decommissioning Method:** Hydrated bentonite chips

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Sheen	Comments
0			Ground Surface							
0			<b>Concrete</b>							No petro odor or staining observed
0										
0		SP	<b>Poorly-graded Sand with Gravel</b> Brown; damp; mostly medium sand with few gravel					0.2		
2										
4			Becomes very dense							
6						10 20 30		0.0		
10						10 50-6	U-1:10	26	no	
12		SM	<b>Silty Sand with Gravel</b> Gray; moist to wet; very dense; mostly fine to coarse sand with some silt and minor gravel							
12		SW-SC	<b>Well-graded Sand with Clay</b> Gray; damp; very dense; mostly fine to coarse sand with some clay							
14										
16						36 50-6	U-1:15	0.8		
18										
18		SP	<b>Poorly-graded Sand with Gravel</b> Brown; damp; very dense; mostly fine sand with few gravel							
20						50-6		0.2	no	




**Client:** Onni Group  
**Site Address:** 1120 John Street, Seattle WA  
**Date of Drilling:** July 19, 2012  
**Logged by:** E. Caddey, L.G.

**Drilling Contractor:** Cascade Drilling  
**Drill Method:** CME-75 HSA  
**Borehole Size:** 10"  
**Decommissioning Method:** Hydrated bentonite chips

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Sheen	Comments
0			Ground Surface							
0			<b>Concrete</b>							No petro odor or staining observed
0										
0		SP	<b>Poorly-graded Sand</b> Brown; damp; mostly medium sand with trace gravel					0.2		
2										
4			Becomes very dense							
6						12 16 16		1.6		
10						18 50-6	U-2:10	2.3	no	
12		SM	<b>Silty Sand with Gravel</b> Gray; moist to wet; very dense; mostly fine to coarse sand with some silt and minor gravel							
12		SW-SC								
14			<b>Well-graded Sand with Clay</b> Gray; damp; very dense; mostly fine to coarse sand with minor clay and few gravel							
16						38 50-6	U-2:15	2.3		
20						70-6		2.1	no	

**Client:** Onni Group  
**Site Address:** 1120 John Street, Seattle WA  
**Date of Drilling:** July 26, 2012  
**Logged by:** E. Caddey, L.G.

**Drilling Contractor:** Cascade Drilling  
**Drill Method:** Limited access HSA  
**Borehole Size:** 8.25"  
**Decommissioning Method:** Hydrated bentonite chips

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Sheen	Comments
0			Ground Surface							
0			<b>Concrete</b>							No petro odor or staining observed
0										
0		SP	<b>Poorly-graded Sand with Gravel</b> Brown; damp; mostly medium sand with few gravel							
2										
4										
6			Becomes very dense			25 50-6		0.0		
8										
10						25 50-6	U-6:10	0.2	no	
12										
14			8" of perched water							
16		SW-SC	<b>Well-graded Sand with Clay</b> Gray; damp; very dense; mostly fine to coarse sand with some clay			50-6	U-6:6W U-6:15	0.3		
18										
20						50-6	U-6:20	0.0	no	

**Client:** Onni Group

**Drilling Contractor:** Cascade Drilling

**Site Address:** 1120 John Street


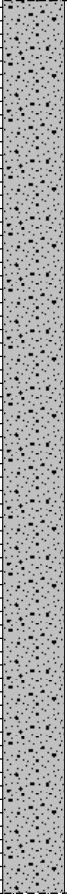




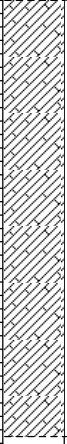




**Drill Method:** Limited access HSA

**Date of Drilling:** July 26, 2012

**Borehole Size:** 8.25"

**Logged by:** E. Caddey, L.G.

**Decommissioning Method:** Hydrated bentonite chips

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Sheen	Comments
0			Ground Surface							
0			<b>Concrete</b>							No petro odor or staining observed
0		SP	<b>Poorly-graded Sand with Gravel</b> Brown; damp; mostly medium sand with few gravel			15 15 24		0.0		
2										
4										
6										
8										
10						44 50-6	U-7:10	0.0	no	
12										
14										
14		SW-SC	<b>Well-graded Sand with Clay</b> Gray; damp; very dense; mostly fine to coarse sand with some clay			50-6	U-7:15	0.0		
16										
18										
20						50-6	U-7:20	0.0	no	

**Client:** Onni Group

**Drilling Contractor:** Cascade Drilling

**Site Address:** 1120 John Street


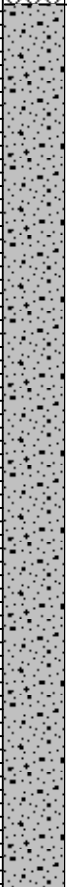

**Drill Method:** Limited Access HSA

**Date of Drilling:** July 26, 2012

**Borehole Size:** 8.25"

**Logged by:** E. Caddey, L.G.

**Decommissioning Method:** Hydrated bentonite chips

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Sheen	Comments
0			Ground Surface							
0			<b>Concrete</b>							No petro odor or staining observed
0										
0		SP	<b>Poorly-graded Sand with Gravel</b> Brown; damp; mostly medium sand with few gravel							
2										
6						50-6		0.0		
10						9 25 50-6	U-8:10	0.0		
14										
14		SW-SC	<b>Well-graded Sand with Clay</b> Gray; damp; very dense; mostly fine to coarse sand with minor clay and few gravel							
16						50-6	U-8:15	0.6		
20						50-6	U-8:20	0.3		

**Client:** Onni Group

**Drilling Contractor:** Cascade Drilling

**Site Address:** 1120 John Street


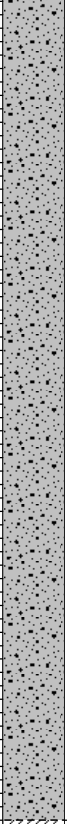




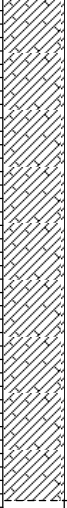




**Drill Method:** CME-75 HSA

**Date of Drilling:** July 26, 2012

**Borehole Size:** 8.25"

**Logged by:** E. Caddey, L.G.

**Decommissioning Method:** Hydrated bentonite chips

Depth (ft)	Lithology	USCS	Description	Interval	Recovery	Blow Counts	Sample	PID	Sheen	Comments
0			Ground Surface							
0			<b>Concrete</b>							No petro odor or staining observed
0		SP	<b>Poorly-graded Sand with Gravel</b> Brown; damp; mostly medium sand with few gravel							
2						25 50-6		0.1		
4										
6										
8										
10						17 50-6		0.0		
12										
14		SW-SC	<b>Well-graded Sand with Clay</b> Gray; damp; very dense; mostly fine to coarse sand with some clay							
16						50-6		0.1		
18										
20						50-6		0.2		

**Direct-Push Technology Boring Log  
Subsurface Investigation Report  
Seattle Times Building  
1120 John Street, Seattle, Washington**

<b>Boring #</b>	<b>Date</b>	<b>Total Depth (feet)</b>	<b>USCS Soil Type</b>
U-3	7/20/12	12	0-7 SP; 7-12 SW-SC
U-4	7/20/12	7	SW-SC
U-5	7/19/12	6	SP
I-1	7/20/12	3	SW-SC
I-2	7/20/12	3	SW-SC
I-3	7/20/12	3	SW-SC
I-4	7/20/12	3	SW-SC
P-8	7/20/12	3	0-2 SP; 2-3 SW-SC
J-1A	7/20/12	7	0-6 SP; 6-7 SW-SC
T-2	7/24/12	6	0-4.5 SP; 4.5-6 SW-SC/ML
T-3	7/24/12	5.5	0-2 SP; 2-5.5 SW-SC
P-9	7/24/12	4	SP
P-10	7/24/12	4	SP
C-1	7/24/12	1	SW-SC
C-2	7/24/12	1	SW-SC
C-3	7/24/12	1	SW-SC
T-1	7/19/12	4	SW-SC
P-7	7/19/12	4	SW-SC
P-6	7/19/12	4.25	SW-SC
P-5	7/19/12	4	SC
P-4	7/19/12	4	CL
P-3	7/19/12	4	CL
P-2	7/19/12	4	CL
P-1	7/19/12	4	CL
P-15	9/4/12	4	SC
P-16	9/4/12	4	SW-SC
P-17	9/14/12	4	SW-SC
P-18	9/4/12	4	SW-SC
P-19	9/4/12?	4	SW-SC
P-20	9/4/12?	4	SW-SC
H-1	9/4/12	7	0-2 SM; 2-7 SW-SC
H-2	9/4/12	7	SM
H-3	9/4/12	7	0-3.5 SM; 3.5-7 SW-SC
H-4	9/4/12	7	<1.5 SM; 1.5+ SW-SC
H-5	9/6/12	8	SW-SC
O-1	9/6/12	8	SP / SW

**Direct-Push Technology Boring Log  
Subsurface Investigation Report  
Seattle Times Building  
1120 John Street, Seattle, Washington**

Boring #	Date	Total Depth (feet)	USCS Soil Type
O-2	9/6/12	9	SP / SW
O-3	9/6/12	5	SP / SW-SC
S-1	9/4/12	7	SW-SC
S-2	9/4/12	4	SW
S-3	9/4/12	2	SM
S-3A	9/4/12	7	SW-SC
S-4	9/4/12	5	SW-SC
A-1	9/6/12	9	SP
A-2	9/5/12	9	SP
A-3	9/5/12	9	SP
C-10	9/5/12	1	SW-SC
C-11	9/5/12	1	SW-SC

Notes:

<b>UNIFIED SOIL CLASSIFICATION SYSTEM</b>							
<b>FIELD IDENTIFICATION PROCEDURES</b> (Excluding particles over 3 inches and basing fractions on estimated weight)					<b>Symbol</b>		
					Text	Graph	
<b>Coarse-Grained Soils</b> More than 50% retained on No. 200 Sieve	<b>Gravel</b> More than 50% retained on No. 4 Sieve	<b>Clean Gravel</b> Less than 5% Fines	Well-Graded Gravel, Gravel-Sand Mixtures with little or no fines			<b>GW</b>	
			Poorly Graded Gravel, Gravel-Sand Mixtures with little or no fines			<b>GP</b>	
		<b>Gravel with Fines</b> More than 12% Fines	Silty Gravel, Gravel-Sand-Silt Mixtures (non-plastic or silty fines as determined below)			<b>GM</b>	
			Clayey Gravel, Gravel-Sand-Clay Mixtures (plastic or clayey fines as determined below)			<b>GC</b>	
	<b>Sand</b> More than 50% passing No. 4 Sieve	<b>Clean Sand</b> Less than 5% Fines	Well-Graded Sand, Gravelly Sands with little or no fines			<b>SW</b>	
			Poorly Graded Sand, Gravelly Sands with little or no fines			<b>SP</b>	
		<b>Sand with Fines</b> More than 12% Fines	Silty Sand, Gravel-Sand-Silt Mixtures (non-plastic or silty fines as determined below)			<b>SM</b>	
			Clayey Sand, Gravel-Sand-Clay Mixtures (plastic or clayey fines as determined below)			<b>SC</b>	
<b>Fine-Grained Soils</b> More than 50% passing No. 200 Sieve	<b>Silts and Clays</b>	<b>Dry Strength</b> <b>Dilatancy</b> <b>Toughness</b>					
		Liquid Limit less than 50 (OL if >30% organics by volume)	None to Low	Slow to Rapid	None	<b>ML</b>	
			Medium to High	None to Slow	Medium	<b>CL</b>	
			Low to Medium	Slow	Low	<b>OL</b>	
		Liquid Limit greater than 50 (OH if >30% organics by volume)	Low to Medium	None to Slow	Low to Medium	<b>MH</b>	
			High to Very High	None	High	<b>CH</b>	
			Medium to High	None to Very Slow	Low to Medium	<b>OH</b>	
		<b>Highly Organic Soils (&gt;50% Organics)</b>					<b>PT</b>



**Attachment B**  
**Analytical Reports**

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

May 8, 2013

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: 65601.1, F&BI 305018

Dear Mr. Koltes:

Included are the results from the testing of material submitted on May 1, 2013 from the 65601.1, F&BI 305018 project. There are 14 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0508R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 1, 2013 by Friedman & Bruya, Inc. from the Environmental Partners 65601.1, F&BI 305018 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
305018-01	MW-3:20
305018-02	MW-3:30
305018-03	MW-3:50
305018-04	MW-3:70
305018-05	MW-3:80
305018-06	MW-3:85
305018-07	MW-3:90
305018-08	MW-3:100
305018-09	MW-3:20:GW
305018-10	MW-3:GW

Bromomethane in the 8260C laboratory control sample and laboratory control sample duplicate failed the acceptance criteria. The data were flagged accordingly.

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-3:20:GW	Client:	Environmental Partners
Date Received:	05/01/13	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	305018-09
Date Analyzed:	05/01/13	Data File:	050138.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	100	50	150

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:	MW-3:GW	Client:	Environmental Partners
Date Received:	05/01/13	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	305018-10
Date Analyzed:	05/01/13	Data File:	050139.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

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	4.7	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	12	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:	Environmental Partners
Date Received:	Not Applicable	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	03-0772 mb
Date Analyzed:	05/01/13	Data File:	050113.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	104	50	150
4-Bromofluorobenzene	102	50	150

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 ca	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	Bromofor m	<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:	MW-3:20	Client:	Environmental Partners
Date Received:	05/01/13	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	305018-01
Date Analyzed:	05/01/13	Data File:	050127.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	100	50	150

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 j1	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:	MW-3:30	Client:	Environmental Partners
Date Received:	05/01/13	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	305018-02
Date Analyzed:	05/01/13	Data File:	050128.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	102	50	150

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 j1	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:	MW-3:80	Client:	Environmental Partners
Date Received:	05/01/13	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	305018-05
Date Analyzed:	05/01/13	Data File:	050129.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	101	50	150

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 jl	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:	MW-3:100	Client:	Environmental Partners
Date Received:	05/01/13	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	305018-08
Date Analyzed:	05/01/13	Data File:	050130.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	99	50	150

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 j1	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:	Environmental Partners
Date Received:	Not Applicable	Project:	65601.1, F&BI 305018
Date Extracted:	05/01/13	Lab ID:	03-0771 mb
Date Analyzed:	05/01/13	Data File:	050107.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	103	50	150

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 ca jl	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: 05/08/13

Date Received: 05/01/13

Project: 65601.1, F&BI 305018

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

Laboratory Code: 304562-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	50	<1	108	55-144
Chloromethane	ug/L (ppb)	50	<10	108	67-131
Vinyl chloride	ug/L (ppb)	50	<0.2	110	61-139
Bromomethane	ug/L (ppb)	50	<1	146 vo	66-129
Chloroethane	ug/L (ppb)	50	<1	123	68-126
Trichlorofluoromethane	ug/L (ppb)	50	<1	110	71-128
Acetone	ug/L (ppb)	250	<10	97	48-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	111	71-123
Methylene chloride	ug/L (ppb)	50	<5	101	61-126
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	96	68-125
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	104	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	103	79-113
2,2-Dichloropropane	ug/L (ppb)	50	<1	110	58-132
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	73-119
Chloroform	ug/L (ppb)	50	<1	104	80-112
2-Butanone (MEK)	ug/L (ppb)	250	<10	96	69-123
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	102	78-113
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	108	79-116
1,1-Dichloropropene	ug/L (ppb)	50	<1	107	67-121
Carbon tetrachloride	ug/L (ppb)	50	<1	113	72-123
Benzene	ug/L (ppb)	50	<0.35	103	79-109
Trichloroethene	ug/L (ppb)	50	<1	104	75-109
1,2-Dichloropropane	ug/L (ppb)	50	<1	103	80-111
Bromodichloromethane	ug/L (ppb)	50	<1	110	78-117
Dibromomethane	ug/L (ppb)	50	<1	104	80-112
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	102	79-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	110	76-120
Toluene	ug/L (ppb)	50	<1	101	73-117
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	112	75-122
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	96	81-111
2-Hexanone	ug/L (ppb)	250	<10	96	75-126
1,3-Dichloropropane	ug/L (ppb)	50	<1	97	81-111
Tetrachloroethene	ug/L (ppb)	50	<1	97	72-113
Dibromochloromethane	ug/L (ppb)	50	<1	111	69-129
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	101	83-114
Chlorobenzene	ug/L (ppb)	50	<1	100	75-115
Ethylbenzene	ug/L (ppb)	50	<1	102	71-120
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	112	78-122
m,p-Xylene	ug/L (ppb)	100	<2	101	63-128
o-Xylene	ug/L (ppb)	50	<1	102	64-129
Styrene	ug/L (ppb)	50	<1	105	70-122
Isopropylbenzene	ug/L (ppb)	50	<1	104	76-118
Bromoform	ug/L (ppb)	50	<1	114	49-138
n-Propylbenzene	ug/L (ppb)	50	<1	101	74-117
Bromobenzene	ug/L (ppb)	50	<1	99	70-121
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	102	81-112
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	98	79-120
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	96	72-119
2-Chlorotoluene	ug/L (ppb)	50	<1	99	77-114
4-Chlorotoluene	ug/L (ppb)	50	<1	101	81-109
tert-Butylbenzene	ug/L (ppb)	50	<1	101	81-116
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	103	74-118
sec-Butylbenzene	ug/L (ppb)	50	<1	101	77-118
p-Isopropyltoluene	ug/L (ppb)	50	<1	103	64-132
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	101	81-111
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	97	78-110
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	99	81-111
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	108	69-129
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	97	74-115
Hexachlorobutadiene	ug/L (ppb)	50	<1	95	67-120
Naphthalene	ug/L (ppb)	50	<1	101	63-136
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	96	79-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/08/13

Date Received: 05/01/13

Project: 65601.1, F&BI 305018

**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	105	107	54-149	2
Chloromethane	ug/L (ppb)	50	107	107	67-133	0
Vinyl chloride	ug/L (ppb)	50	108	110	73-132	2
Bromomethane	ug/L (ppb)	50	160 vo	144 vo	69-123	11
Chloroethane	ug/L (ppb)	50	121	123	68-126	2
Trichlorofluoromethane	ug/L (ppb)	50	108	108	70-132	0
Acetone	ug/L (ppb)	250	121	115	44-145	5
1,1-Dichloroethene	ug/L (ppb)	50	110	110	75-119	0
Methylene chloride	ug/L (ppb)	50	100	97	63-132	3
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	100	98	70-122	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	105	105	76-118	0
1,1-Dichloroethane	ug/L (ppb)	50	104	102	80-116	2
2,2-Dichloropropane	ug/L (ppb)	50	114	113	62-141	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	105	102	81-111	3
Chloroform	ug/L (ppb)	50	106	104	81-109	2
2-Butanone (MEK)	ug/L (ppb)	250	110	106	53-140	4
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	106	104	79-109	2
1,1,1-Trichloroethane	ug/L (ppb)	50	105	105	80-116	0
1,1-Dichloropropene	ug/L (ppb)	50	107	104	78-112	3
Carbon tetrachloride	ug/L (ppb)	50	110	113	72-128	3
Benzene	ug/L (ppb)	50	103	103	81-108	0
Trichloroethene	ug/L (ppb)	50	107	107	77-108	0
1,2-Dichloropropane	ug/L (ppb)	50	104	104	82-109	0
Bromodichloromethane	ug/L (ppb)	50	110	109	76-120	1
Dibromomethane	ug/L (ppb)	50	108	106	80-110	2
4-Methyl-2-pentanone	ug/L (ppb)	250	113	110	59-142	3
cis-1,3-Dichloropropene	ug/L (ppb)	50	113	110	76-128	3
Toluene	ug/L (ppb)	50	101	99	83-108	2
trans-1,3-Dichloropropene	ug/L (ppb)	50	114	111	76-128	3
1,1,2-Trichloroethane	ug/L (ppb)	50	101	97	82-110	4
2-Hexanone	ug/L (ppb)	250	108	103	53-145	5
1,3-Dichloropropane	ug/L (ppb)	50	102	99	83-110	3
Tetrachloroethene	ug/L (ppb)	50	96	95	78-109	1
Dibromochloromethane	ug/L (ppb)	50	114	113	63-140	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	106	104	85-113	2
Chlorobenzene	ug/L (ppb)	50	100	98	84-108	2
Ethylbenzene	ug/L (ppb)	50	101	100	84-110	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	110	109	76-125	1
m,p-Xylene	ug/L (ppb)	100	102	100	84-112	2
o-Xylene	ug/L (ppb)	50	101	99	82-113	2
Styrene	ug/L (ppb)	50	104	102	84-116	2
Isopropylbenzene	ug/L (ppb)	50	104	102	81-122	2
Bromoform	ug/L (ppb)	50	122	121	40-161	1
n-Propylbenzene	ug/L (ppb)	50	102	101	81-115	1
Bromobenzene	ug/L (ppb)	50	100	98	80-113	2
1,3,5-Trimethylbenzene	ug/L (ppb)	50	102	101	83-117	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	104	100	79-118	4
1,2,3-Trichloropropane	ug/L (ppb)	50	105	103	74-116	2
2-Chlorotoluene	ug/L (ppb)	50	100	99	79-112	1
4-Chlorotoluene	ug/L (ppb)	50	100	99	81-113	1
tert-Butylbenzene	ug/L (ppb)	50	101	101	81-119	0
1,2,4-Trimethylbenzene	ug/L (ppb)	50	102	102	83-116	0
sec-Butylbenzene	ug/L (ppb)	50	101	102	83-116	1
p-Isopropyltoluene	ug/L (ppb)	50	104	102	82-119	2
1,3-Dichlorobenzene	ug/L (ppb)	50	102	100	83-111	2
1,4-Dichlorobenzene	ug/L (ppb)	50	98	97	82-109	1
1,2-Dichlorobenzene	ug/L (ppb)	50	100	98	83-111	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	118	116	62-133	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	98	94	77-117	4
Hexachlorobutadiene	ug/L (ppb)	50	92	90	74-118	2
Naphthalene	ug/L (ppb)	50	107	103	75-131	4
1,2,3-Trichlorobenzene	ug/L (ppb)	50	96	94	82-115	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/08/13

Date Received: 05/01/13

Project: 65601.1, F&BI 305018

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

Laboratory Code: 305018-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	19	10-56
Chloromethane	mg/kg (ppm)	2.5	<0.5	49	10-90
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	50	10-91
Bromomethane	mg/kg (ppm)	2.5	<0.5	33	10-110
Chloroethane	mg/kg (ppm)	2.5	<0.5	58	10-101
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	52	10-95
Acetone	mg/kg (ppm)	12.5	<0.5	67	11-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	65	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	14-128
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	74	17-134
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	74	23-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	18-117
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	78	25-120
Chloroform	mg/kg (ppm)	2.5	<0.05	80	29-117
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	67	20-133
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	77	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	76	27-112
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	26-107
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	79	22-115
Benzene	mg/kg (ppm)	2.5	<0.03	77	26-114
Trichloroethene	mg/kg (ppm)	2.5	<0.03	80	30-112
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	31-119
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	83	31-131
Dibromomethane	mg/kg (ppm)	2.5	<0.05	80	27-124
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	75	16-147
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	85	28-137
Toluene	mg/kg (ppm)	2.5	<0.05	79	34-112
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	83	30-136
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	74	32-126
2-Hexanone	mg/kg (ppm)	12.5	<0.5	69	17-147
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	75	29-125
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	72	27-110
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	86	32-143
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	76	32-126
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	79	37-113
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	38-111
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	88	35-126
m,p-Xylene	mg/kg (ppm)	5	<0.1	78	38-112
o-Xylene	mg/kg (ppm)	2.5	<0.05	79	38-113
Styrene	mg/kg (ppm)	2.5	<0.05	82	38-118
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	82	37-114
Bromoform	mg/kg (ppm)	2.5	<0.05	85	18-155
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	78	36-114
Bromobenzene	mg/kg (ppm)	2.5	<0.05	75	40-115
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	79	35-116
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	73	33-128
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	74	33-123
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	39-110
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	39-111
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	79	36-116
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	79	35-116
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	80	33-118
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	81	32-119
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	79	38-111
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	39-109
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	79	40-111
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	81	34-134
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	79	31-117
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	75	25-122
Naphthalene	mg/kg (ppm)	2.5	<0.05	78	39-120
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	77	35-117

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/08/13

Date Received: 05/01/13

Project: 65601.1, F&BI 305018

**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	48	46	10-76	4
Chloromethane	mg/kg (ppm)	2.5	74	76	34-98	3
Vinyl chloride	mg/kg (ppm)	2.5	83	84	42-107	1
Bromomethane	mg/kg (ppm)	2.5	29 vo	37 vo	46-113	24 vo
Chloroethane	mg/kg (ppm)	2.5	74	79	47-115	7
Trichlorofluoromethane	mg/kg (ppm)	2.5	89	89	53-112	0
Acetone	mg/kg (ppm)	12.5	111	98	39-147	12
1,1-Dichloroethene	mg/kg (ppm)	2.5	97	98	65-110	1
Methylene chloride	mg/kg (ppm)	2.5	101	103	62-119	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	102	101	72-122	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	102	71-113	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	101	103	76-109	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	105	110	64-151	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	106	105	77-110	1
Chloroform	mg/kg (ppm)	2.5	107	107	78-108	0
2-Butanone (MEK)	mg/kg (ppm)	12.5	106	99	60-121	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	105	104	80-109	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	107	108	72-116	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	105	107	77-108	2
Carbon tetrachloride	mg/kg (ppm)	2.5	113	111	67-123	2
Benzene	mg/kg (ppm)	2.5	103	104	75-107	1
Trichloroethene	mg/kg (ppm)	2.5	106	108 vo	72-107	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	104	106	78-111	2
Bromodichloromethane	mg/kg (ppm)	2.5	111	111	75-126	0
Dibromomethane	mg/kg (ppm)	2.5	108	106	80-111	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	112	105	80-128	6
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	115	115	71-138	0
Toluene	mg/kg (ppm)	2.5	103	102	79-112	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	118	114	77-135	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	101	100	84-115	1
2-Hexanone	mg/kg (ppm)	12.5	104	97	71-129	7
1,3-Dichloropropane	mg/kg (ppm)	2.5	103	100	82-113	3
Tetrachloroethene	mg/kg (ppm)	2.5	98	97	77-110	1
Dibromochloromethane	mg/kg (ppm)	2.5	117	113	64-152	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	107	104	83-116	3
Chlorobenzene	mg/kg (ppm)	2.5	103	102	82-113	1
Ethylbenzene	mg/kg (ppm)	2.5	103	103	81-114	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	116	114	76-125	2
m,p-Xylene	mg/kg (ppm)	5	103	103	82-115	0
o-Xylene	mg/kg (ppm)	2.5	103	104	81-116	1
Styrene	mg/kg (ppm)	2.5	106	107	81-118	1
Isopropylbenzene	mg/kg (ppm)	2.5	107	107	81-117	0
Bromoform	mg/kg (ppm)	2.5	125	115	50-174	8
n-Propylbenzene	mg/kg (ppm)	2.5	103	104	82-116	1
Bromobenzene	mg/kg (ppm)	2.5	101	101	82-118	0
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	103	106	83-120	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	101	99	83-125	2
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	103	97	79-116	6
2-Chlorotoluene	mg/kg (ppm)	2.5	99	102	80-114	3
4-Chlorotoluene	mg/kg (ppm)	2.5	101	104	82-114	3
tert-Butylbenzene	mg/kg (ppm)	2.5	103	105	82-116	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	104	107	82-116	3
sec-Butylbenzene	mg/kg (ppm)	2.5	103	105	81-123	2
p-Isopropyltoluene	mg/kg (ppm)	2.5	106	107	82-124	1
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	104	105	80-118	1
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	98	101	79-117	3
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	99	101	80-118	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	112	104	71-131	7
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	94	96	75-122	2
Hexachlorobutadiene	mg/kg (ppm)	2.5	96	97	74-130	1
Naphthalene	mg/kg (ppm)	2.5	98	98	83-128	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	96	97	80-126	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.



305018

# SAMPLE CHAIN OF CUSTODY

ME 05-01-13

V2/V2

Send Report To Eric Koltas

Company Environmental Partners, Inc.

Address 295 NE Gilman Blvd.

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) [Signature]

PROJECT ID/ADDRESS \_\_\_\_\_ JOB # 65601.1

SITE NAME Seattle Times REMARKS \_\_\_\_\_

PAGE # 1 OF 1

TURNAROUND TIME

Standard

RUSH

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

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED						Notes
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	
MW-3:20	01	4/29/13	09:55	Soil	4					X		
MW-3:30	02		10:55							X		
MW-3:50	03		14:30									Hold
MW-3:70	04		15:28									Hold
MW-3:80	05	✓	15:48							X		
MW-3:85	06	4/30/13	08:40									Hold
MW-3:90	07		08:49									Hold
MW-3:100	08		09:15	✓	✓					X		
MW-3:20:GW	09	4/29/13	10:40	water	4					X		
MW-3:6W	10	4/30/13	17:40	"	4					X		

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
<u>[Signature]</u>	Eric Caddy	EPT	5/1/13	08:00
<u>[Signature]</u>	Michael E. [Signature]	FFB	↓	↓
Relinquished by:		Samples received at 3 °C		
Received by:				

FRIEDMAN & BRUYA, INC.

---

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Kurt Johnson, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

May 23, 2013

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Seattle Times 65602.0, F&BI 305352

Dear Mr. Koltes:

Included are the results from the testing of material submitted on May 17, 2013 from the Seattle Times 65602.0, F&BI 305352 project. There are 6 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Eric Caddey, Cynthia Moon  
EPI0523R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 17, 2013 by Friedman & Bruya, Inc. from the Environmental Partners Seattle Times 65602.0, F&BI 305352 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
305352 -01	AOPC7:SB1
305352 -02	AOPC7:SB2
305352 -03	AOPC7:SB3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/13  
Date Received: 05/17/13  
Project: Seattle Times 65602.0, F&BI 305352  
Date Extracted: 05/20/13  
Date Analyzed: 05/20/13

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR BENZENE, TOLUENE, ETHYLBENZENE,  
XYLENES AND TPH AS GASOLINE  
USING METHODS 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)
AOPC7:SB1 305352-01	<0.02	<0.02	<0.02	<0.06	<2	90
AOPC7:SB2 305352-02	<0.02	<0.02	<0.02	<0.06	<2	90
AOPC7:SB3 305352-03	<0.02	<0.02	<0.02	<0.06	<2	90
Method Blank 03-0928 MB	<0.02	<0.02	<0.02	<0.06	<2	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/13  
Date Received: 05/17/13  
Project: Seattle Times 65602.0, F&BI 305352  
Date Extracted: 05/20/13  
Date Analyzed: 05/20/13

**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 53-144)
AOPC7:SB1 305352-01	<50	<250	74
AOPC7:SB2 305352-02	<50	<250	64
AOPC7:SB3 305352-03	<50	<250	71
Method Blank 03-938 MB	<50	<250	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/13

Date Received: 05/17/13

Project: Seattle Times 65602.0, F&BI 305352

**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: 305352-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (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	87	69-120
Toluene	mg/kg (ppm)	0.5	88	70-117
Ethylbenzene	mg/kg (ppm)	0.5	91	65-123
Xylenes	mg/kg (ppm)	1.5	90	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/23/13

Date Received: 05/17/13

Project: Seattle Times 65602.0, F&BI 305352

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

Laboratory Code: 305359-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	79	82	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92	58-147

**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.



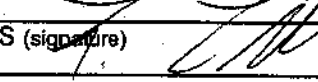
305852

# SAMPLE CHAIN OF CUSTODY

ME 05-17-13

CI/USI

Send Report To Eric Caddey/Eric Koltes  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd.  
 City, State, ZIP Issaquah, WA 98027  
 Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) 

PROJECT ID/ADDRESS Seattle Times JOB # 65602.0

SITE NAME \_\_\_\_\_ REMARKS email results to Eric Koltes

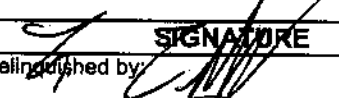
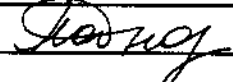
PAGE # 1 OF 1

**TURNAROUND TIME**  
 Standard  
 RUSH  
 Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED						Notes	
						8015 - GRO	8015 - DRG EXTENDED	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524		
AOPC7:SB1	01A-D	5/17/13	11:50	SOIL	4		X	X					
AOPC7:SB2	02	↓	12:12	↓	4		X	X					
AOPC7:SB3	03	↓	13:10	↓	4		X	X					

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
	Eric Caddey	EPI	5/17/13	15:10
	A. Podnozhava	FBI	5/17/13	15:10
Relinquished by:				
Received by:				
Relinquished by:				
Received by:		Samples received at		

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

September 17, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: 1120 John Street

Dear Mr. Koltes:

Included are the results from the testing of material submitted on September 5, 2012 from the 1120 John Street, F&BI 209029 project. There are 26 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0917R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 5, 2012 by Friedman & Bruya, Inc. from the Environmental Partners 1120 John Street, F&BI 209029 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
209029-01	MW2-10
209029-02	MW2-15
209029-03	MW2-20
209029-04	W1-10
209029-05	W1-15
209029-06	MW2-85

An 8270D internal standard failed the acceptance criteria for sample W1-10 due to matrix interferences. The data were flagged accordingly.

Several 8260C compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

An 8260C direct sparge internal standard failed the acceptance criteria for sample W1-10 due to matrix interferences. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/05/12  
Project: 1120 John Street, F&BI 209029  
Date Extracted: 09/05/12  
Date Analyzed: 09/05/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis  
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
MW2-10 209029-01	<2	90
W1-10 209029-04	<2	92
Method Blank 02-1584 MB	<2	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/05/12  
Project: 1120 John Street, F&BI 209029  
Date Extracted: 09/05/12  
Date Analyzed: 09/06/12

**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 53-144)
MW2-10 209029-01	<50	<250	104
W1-10 209029-04	<50	<250	110
Method Blank 02-1585 MB	<50	<250	113

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW2-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	209029-01
Date Analyzed:	09/06/12	Data File:	209029-01.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	115	60	125
Indium	99	60	125
Holmium	103	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	14.4
Arsenic	1.68
Cadmium	<1
Lead	2.15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	W1-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	209029-04
Date Analyzed:	09/06/12	Data File:	209029-04.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	119	60	125
Indium	100	60	125
Holmium	104	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	12.4
Arsenic	1.67
Cadmium	<1
Lead	2.30

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	I2-585 mb
Date Analyzed:	09/06/12	Data File:	I2-585 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	101	60	125
Indium	100	60	125
Holmium	101	60	125

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



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/05/12  
Project: 1120 John Street, F&BI 209029  
Date Extracted: 09/06/12  
Date Analyzed: 09/07/12 and 09/17/12

**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>
MW2-10 209029-01	<0.1
W1-10 209029-04	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID:	W1-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/11/12	Lab ID:	209029-04
Date Analyzed:	09/11/12	Data File:	091108.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	146 J	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/11/12	Lab ID:	02-1614 mb
Date Analyzed:	09/11/12	Data File:	091107.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	109	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW2-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	209029-01
Date Analyzed:	09/07/12	Data File:	090724.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

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:	W1-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	209029-04
Date Analyzed:	09/07/12	Data File:	090725.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	100	50	150

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:	Environmental Partners
Date Received:	NA	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	02-1577 mb
Date Analyzed:	09/06/12	Data File:	090611.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	97	50	150

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 PCBs By EPA Method 8082

Client Sample ID:	W1-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/10/12	Lab ID:	209029-04
Date Analyzed:	09/12/12	Data File:	091208.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	116	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/10/12	Lab ID:	02-1607 mb
Date Analyzed:	09/12/12	Data File:	091210.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	113	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	W1-10	Client:	Environmental Partners
Date Received:	09/05/12	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	209029-04 1/5
Date Analyzed:	09/06/12	Data File:	090628.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	50	150
Benzo(a)anthracene-d12	117	35	159

Compounds:	Concentration mg/kg (ppm)
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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	1120 John Street, F&BI 209029
Date Extracted:	09/06/12	Lab ID:	02-1574 mb2 1/5
Date Analyzed:	09/06/12	Data File:	090619.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	50	150
Benzo(a)anthracene-d12	116	35	159

Compounds:	Concentration mg/kg (ppm)
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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 209012-02 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	95	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

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

Laboratory Code: 209029-01 (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	112	112	64-133	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	132	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

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

Laboratory Code: 209038-01 (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	7.44	105	96	63-120	9
Arsenic	mg/kg (ppm)	10	1.38	124	107	56-125	15
Cadmium	mg/kg (ppm)	10	<1	122 vo	109	85-117	11
Lead	mg/kg (ppm)	50	2.31	120	105	64-139	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	100	81-117
Arsenic	mg/kg (ppm)	10	100	79-112
Cadmium	mg/kg (ppm)	10	101	88-114
Lead	mg/kg (ppm)	50	98	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

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

Laboratory Code: 209038-01 (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	109	105	54-156	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	106	73-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

**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)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	112	98	70-130	13

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

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

Laboratory Code: 209028-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	4 vo	10-60
Chloromethane	mg/kg (ppm)	2.5	<0.5	22	10-89
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	19	10-91
Bromomethane	mg/kg (ppm)	2.5	<0.5	34	10-102
Chloroethane	mg/kg (ppm)	2.5	<0.5	30	10-97
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	14	10-94
Acetone	mg/kg (ppm)	12.5	<0.5	47	37-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	24	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	39	34-108
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	50	42-103
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	34	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	37	37-97
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	32	29-105
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	42	41-101
Chloroform	mg/kg (ppm)	2.5	<0.05	42 vo	43-100
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	43 vo	48-104
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	47	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	35	35-102
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	28 vo	34-100
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	32	30-107
Benzene	mg/kg (ppm)	2.5	<0.03	38 vo	39-98
Trichloroethene	mg/kg (ppm)	2.5	<0.03	38	38-101
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	42 vo	45-101
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	46	45-115
Dibromomethane	mg/kg (ppm)	2.5	<0.05	49	46-101
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	53	52-105
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	47	42-120
Toluene	mg/kg (ppm)	2.5	<0.05	39 vo	45-99
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	41 vo	46-118
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	46 vo	51-104
2-Hexanone	mg/kg (ppm)	12.5	<0.5	45 vo	49-108
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	42 vo	49-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	31 vo	38-102
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	47	42-132
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	47 vo	49-105
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	41 vo	47-100
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	37 vo	47-101
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	47	46-112
m,p-Xylene	mg/kg (ppm)	5	<0.1	38 vo	48-102
o-Xylene	mg/kg (ppm)	2.5	<0.05	40 vo	49-101
Styrene	mg/kg (ppm)	2.5	<0.05	38 vo	49-106
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	38 vo	47-104
Bromoform	mg/kg (ppm)	2.5	<0.05	39	25-171
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	34 vo	47-105
Bromobenzene	mg/kg (ppm)	2.5	<0.05	40 vo	48-105
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	36 vo	47-105
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	45 vo	51-108
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	42 vo	50-104
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	35 vo	47-102
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	35 vo	47-102
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	37 vo	48-105
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	36 vo	48-105
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	35 vo	47-106
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	35 vo	47-107
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	34 vo	47-103
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	35 vo	46-102
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	36 vo	48-104
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	44	39-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	23 vo	44-106
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	25 vo	44-106
Naphthalene	mg/kg (ppm)	2.5	<0.05	34 vo	48-108
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	28 vo	46-107



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

**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	46	49	11-84	6
Chloromethane	mg/kg (ppm)	2.5	69	67	41-99	3
Vinyl chloride	mg/kg (ppm)	2.5	84	84	51-102	0
Bromomethane	mg/kg (ppm)	2.5	89	90	51-111	1
Chloroethane	mg/kg (ppm)	2.5	93	96	53-113	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	94	96	61-113	2
Acetone	mg/kg (ppm)	12.5	83	86	69-132	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	92	93	67-116	1
Methylene chloride	mg/kg (ppm)	2.5	89	89	62-130	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	97	98	78-116	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	99	70-116	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	97	79-109	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	115	113	70-123	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	99	76-113	1
Chloroform	mg/kg (ppm)	2.5	96	97	77-113	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	85	86	76-114	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	97	98	79-114	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	103	103	73-119	0
1,1-Dichloropropene	mg/kg (ppm)	2.5	96	96	77-110	0
Carbon tetrachloride	mg/kg (ppm)	2.5	107	108	67-126	1
Benzene	mg/kg (ppm)	2.5	95	95	70-115	0
Trichloroethene	mg/kg (ppm)	2.5	93	97	70-113	4
1,2-Dichloropropane	mg/kg (ppm)	2.5	97	97	79-110	0
Bromodichloromethane	mg/kg (ppm)	2.5	107	109	76-119	2
Dibromomethane	mg/kg (ppm)	2.5	100	102	78-115	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	94	95	80-120	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	115	117	80-117	2
Toluene	mg/kg (ppm)	2.5	96	95	79-112	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	111	110	81-118	1
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	99	98	83-111	1
2-Hexanone	mg/kg (ppm)	12.5	91	91	80-121	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	96	94	81-114	2
Tetrachloroethene	mg/kg (ppm)	2.5	97	95	73-117	2
Dibromochloromethane	mg/kg (ppm)	2.5	116	117	59-143	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	103	103	82-113	0
Chlorobenzene	mg/kg (ppm)	2.5	97	98	81-110	1
Ethylbenzene	mg/kg (ppm)	2.5	97	97	79-116	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	107	76-121	0
m,p-Xylene	mg/kg (ppm)	5	100	100	80-115	0
o-Xylene	mg/kg (ppm)	2.5	102	101	81-113	1
Styrene	mg/kg (ppm)	2.5	103	103	79-118	0
Isopropylbenzene	mg/kg (ppm)	2.5	102	102	81-114	0
Bromoform	mg/kg (ppm)	2.5	122	119	36-166	2
n-Propylbenzene	mg/kg (ppm)	2.5	99	99	82-114	0
Bromobenzene	mg/kg (ppm)	2.5	98	98	83-113	0
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	103	103	82-115	0
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	104	81-116	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	93	93	53-136	0
2-Chlorotoluene	mg/kg (ppm)	2.5	96	96	81-113	0
4-Chlorotoluene	mg/kg (ppm)	2.5	98	98	83-111	0
tert-Butylbenzene	mg/kg (ppm)	2.5	101	101	81-113	0
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	100	82-115	1
sec-Butylbenzene	mg/kg (ppm)	2.5	103	103	81-115	0
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	103	82-115	0
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	97	97	81-113	0
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	95	96	82-109	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	98	99	82-111	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	107	107	72-123	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	93	91	81-110	2
Hexachlorobutadiene	mg/kg (ppm)	2.5	99	100	78-116	1
Naphthalene	mg/kg (ppm)	2.5	104	105	85-114	1
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	104	104	86-112	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

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

Laboratory Code: 209033-01 (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	109	112	70-130	3
Aroclor 1260	mg/kg (ppm)	0.8	103	104	70-130	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/05/12

Project: 1120 John Street, F&BI 209029

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

Laboratory Code: 209017-07 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	98	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	99	45-122
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	110	31-144
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	95	45-130
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	104	39-128
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	102	28-146
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	96	46-129

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	86	87	51-115	1
Chrysene	mg/kg (ppm)	0.17	88	90	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	92	96	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	91	97	54-131	6
Benzo(a)pyrene	mg/kg (ppm)	0.17	83	87	51-118	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	93	84	49-148	10
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	85	79	50-141	7

**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.

209029

# SAMPLE CHAIN OF CUSTODY

ME 09/05/12

VS2/BI3

Send Report To Eric Koltes  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd.  
 City, State, ZIP Issaquah, WA 98027  
 Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) [Signature]  
 PROJECT ID/ADDRESS 1120 John Street JOB # \_\_\_\_\_  
 SITE NAME M.I. Coeks REMARKS Seattle Times

PAGE # 1 OF \_\_\_\_\_

**TURNAROUND TIME**  
 Standard  
 RUSH  
 Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	EDC/EDL MTSE	CPAH's	MTCA 5 metals	PCBs	
MW2-10	02A-B	9/4/12	1442	Soil	4	X	X			X				X		5 containers
MW2-15	02A-B	9/4/12	1452	Soil	4											Hold 5 cont
MW2-20	02A-B	9/4/12	1455	Soil	4											Hold 5 cont
W1-10	04A-B	9/4/12	1611	Soil	8	X	X			X		X	X	X	*	10 cont
W1-15	05A-B	9/4/12	1619	Soil	8											Hold 10 cont
MW2-85	06A-F	9/5/12	0934	Soil	5											Hold 6 cont

Samples received at 6:00

\* - per MB  
9/5/12  
MC

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>	Monty Bushe	EPT	9/5/12	1023
Received by: <u>[Signature]</u>	JAMES BRUYA	E&B	9/5/12	1023
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

September 18, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: 63801.1, F&BI 209033

Dear Mr. Koltes:

Included are the results from the testing of material submitted on September 5, 2012 from the 63801.1, F&BI 209033 project. There are 48 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0918R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 5, 2012 by Friedman & Bruya, Inc. from the Environmental Partners 63801.1, F&BI 209033 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
209033-01	P-15:1.5
209033-02	P-15:4
209033-03	P-16:3
209033-04	S-1:7
209033-05	H-1:7
209033-06	H-2:4
209033-07	H-3:7
209033-08	H-4:7
209033-09	P-17:1.5
209033-10	P-17:4
209033-11	P-18:1.5
209033-12	P-18:4
209033-13	P-19:1.5
209033-14	P-19:4
209033-15	P-20:1.5
209033-16	P-20:4

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
 Date Received: 09/05/12  
 Project: 63801.1, F&BI 209033  
 Date Extracted: 09/10/12  
 Date Analyzed: 09/10/12

**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> (% Recovery) (Limit 53-144)
P-15:1.5 209033-01	<50	<250	122
P-16:3 209033-03	<50	<250	131
S-1:7 209033-04	<50	<250	123
H-1:7 209033-05	<50	<250	121
H-2:4 209033-06	<50	<250	129
H-3:7 209033-07	810	640	124
H-4:7 209033-08	120	<250	122
P-17:1.5 209033-09	<50	<250	126
P-18:1.5 209033-11	<50	<250	125
P-19:1.5 209033-13	<50	<250	125



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
Date Received: 09/05/12  
Project: 63801.1, F&BI 209033  
Date Extracted: 09/10/12  
Date Analyzed: 09/10/12

**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 53-144)
P-19:4 209033-14	<50	<250	129
P-20:1.5 209033-15	<50	<250	126
Method Blank 02-1606 MB	<50	<250	121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-15:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-01
Date Analyzed:	09/10/12	Data File:	209033-01.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	115	60	125
Indium	96	60	125
Holmium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	13.5
Arsenic	2.60
Cadmium	<1
Lead	7.62

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-16:3	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-03
Date Analyzed:	09/10/12	Data File:	209033-03.016
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	122	60	125
Indium	101	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	11.8
Arsenic	1.79
Cadmium	<1
Lead	20.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-1:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-04
Date Analyzed:	09/11/12	Data File:	209033-04 rr.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	109	60	125
Indium	91	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	20.8
Arsenic	2.03
Cadmium	<1
Lead	4.27

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	H-1:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-05
Date Analyzed:	09/11/12	Data File:	209033-05 rr.043
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	110	60	125
Indium	91	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	20.7
Arsenic	2.16
Cadmium	<1
Lead	4.21

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	H-2:4	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-06
Date Analyzed:	09/10/12	Data File:	209033-06.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	121	60	125
Indium	100	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	11.9
Arsenic	3.10
Cadmium	<1
Lead	1.87

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	H-3:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-07
Date Analyzed:	09/11/12	Data File:	209033-07 rr.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	111	60	125
Indium	92	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	21.3
Arsenic	2.44
Cadmium	<1
Lead	4.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	H-4:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-08
Date Analyzed:	09/10/12	Data File:	209033-08.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	122	60	125
Indium	100	60	125
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	15.2
Arsenic	1.54
Cadmium	<1
Lead	2.84



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-17:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-09
Date Analyzed:	09/11/12	Data File:	209033-09 rr.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	110	60	125
Indium	95	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	19.8
Arsenic	8.68
Cadmium	<1
Lead	7.35

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-18:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-11
Date Analyzed:	09/11/12	Data File:	209033-11 rr.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	113	60	125
Indium	93	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	24.6
Arsenic	2.57
Cadmium	<1
Lead	5.20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-19:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-13
Date Analyzed:	09/11/12	Data File:	209033-13 rr.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	110	60	125
Indium	89	60	125
Holmium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	25.1
Arsenic	5.13
Cadmium	<1
Lead	7.46

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-19:4	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-14
Date Analyzed:	09/11/12	Data File:	209033-14 rr.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	113	60	125
Indium	92	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	23.4
Arsenic	3.54
Cadmium	<1
Lead	4.80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-20:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-15
Date Analyzed:	09/11/12	Data File:	209033-15 rr.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	112	60	125
Indium	90	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	23.8
Arsenic	3.61
Cadmium	<1
Lead	4.99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	I2-593 mb
Date Analyzed:	09/10/12	Data File:	I2-593 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	98	60	125
Holmium	99	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	I2-593 mb
Date Analyzed:	09/11/12	Data File:	I2-593 mb.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	92	60	125
Indium	93	60	125
Holmium	94	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
Date Received: 09/05/12  
Project: 63801.1, F&BI 209033  
Date Extracted: 09/07/12  
Date Analyzed: 09/12/12

**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>
P-15:1.5 209033-01	<0.1
P-16:3 209033-03	<0.1
S-1:7 209033-04	<0.1
H-1:7 209033-05	<0.1
H-2:4 209033-06	<0.1
H-3:7 209033-07	<0.1
H-4:7 209033-08	<0.1
P-17:1.5 209033-09	<0.1
P-18:1.5 209033-11	<0.1
P-19:1.5 209033-13	<0.1



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
Date Received: 09/05/12  
Project: 63801.1, F&BI 209033  
Date Extracted: 09/07/12  
Date Analyzed: 09/12/12

**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>
P-19:4 209033-14	<0.1
P-20:1.5 209033-15	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P-15:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-01
Date Analyzed:	09/07/12	Data File:	090726.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

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:	P-16:3	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-03
Date Analyzed:	09/07/12	Data File:	090727.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	98	50	150

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:	S-1:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-04
Date Analyzed:	09/07/12	Data File:	090728.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

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:	P-17:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-09
Date Analyzed:	09/07/12	Data File:	090729.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

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:	P-18:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-11
Date Analyzed:	09/07/12	Data File:	090730.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

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:	P-19:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-13
Date Analyzed:	09/07/12	Data File:	090731.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

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:	P-19:4	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-14
Date Analyzed:	09/07/12	Data File:	090732.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

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:	P-20:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	209033-15
Date Analyzed:	09/08/12	Data File:	090733.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

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:	Environmental Partners
Date Received:	Not Applicable	Project:	63801.1, F&BI 209033
Date Extracted:	09/07/12	Lab ID:	02-1592 mb
Date Analyzed:	09/07/12	Data File:	090722.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

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 PCBs By EPA Method 8082

Client Sample ID:	P-15:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-01
Date Analyzed:	09/13/12	Data File:	091260.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	114	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-16:3	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-03
Date Analyzed:	09/13/12	Data File:	091264.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	112	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	S-1:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-04
Date Analyzed:	09/13/12	Data File:	091266.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	107	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	H-1:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-05
Date Analyzed:	09/13/12	Data File:	091268.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	109	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	H-2:4	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-06
Date Analyzed:	09/13/12	Data File:	091270.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	119	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	H-3:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-07
Date Analyzed:	09/13/12	Data File:	091272.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	106	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	H-4:7	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-08
Date Analyzed:	09/13/12	Data File:	091274.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	96	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-17:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-09
Date Analyzed:	09/13/12	Data File:	091276.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	76	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-18:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-11
Date Analyzed:	09/13/12	Data File:	091278.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	111	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-19:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-13
Date Analyzed:	09/13/12	Data File:	091280.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	0.23
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-19:4	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-14
Date Analyzed:	09/13/12	Data File:	091282.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	101	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-20:1.5	Client:	Environmental Partners
Date Received:	09/05/12	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	209033-15
Date Analyzed:	09/13/12	Data File:	091284.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	63801.1, F&BI 209033
Date Extracted:	09/10/12	Lab ID:	02-1607 mb
Date Analyzed:	09/12/12	Data File:	091210.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	113	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/05/12

Project: 63801.1, F&BI 209033

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

Laboratory Code: 209033-03 (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	70	79	79	64-133	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	82	58-147



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/05/12

Project: 63801.1, F&BI 209033

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

Laboratory Code: 209072-01 (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	13.1	92 b	86 b	63-120	7 b
Arsenic	mg/kg (ppm)	10	1.80	106	98	56-125	8
Cadmium	mg/kg (ppm)	10	<1	106	98	85-117	8
Lead	mg/kg (ppm)	50	2.31	104	97	64-139	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	112	81-117
Arsenic	mg/kg (ppm)	10	108	79-112
Cadmium	mg/kg (ppm)	10	105	88-114
Lead	mg/kg (ppm)	50	105	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/05/12

Project: 63801.1, F&BI 209033

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

Laboratory Code: 209072-01 (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	89	95	54-156	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	85	73-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/05/12

Project: 63801.1, F&BI 209033

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

Laboratory Code: 209033-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	14	10-60
Chloromethane	mg/kg (ppm)	2.5	<0.5	42	10-89
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	46	10-91
Bromomethane	mg/kg (ppm)	2.5	<0.5	57	10-102
Chloroethane	mg/kg (ppm)	2.5	<0.5	57	10-97
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	45	10-94
Acetone	mg/kg (ppm)	12.5	<0.5	69	37-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	34-108
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	79	42-103
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	73	37-97
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	73	29-105
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	41-101
Chloroform	mg/kg (ppm)	2.5	<0.05	76	43-100
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	68	48-104
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	77	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	76	35-102
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	70	34-100
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	74	30-107
Benzene	mg/kg (ppm)	2.5	<0.03	74	39-98
Trichloroethene	mg/kg (ppm)	2.5	<0.03	79	38-101
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	45-101
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	86	45-115
Dibromomethane	mg/kg (ppm)	2.5	<0.05	82	46-101
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	76	52-105
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	91	42-120
Toluene	mg/kg (ppm)	2.5	<0.05	76	45-99
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	87	46-118
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	51-104
2-Hexanone	mg/kg (ppm)	12.5	<0.5	76	49-108
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	49-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	74	38-102
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	93	42-132
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	83	49-105
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	78	47-100
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	47-101
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	84	46-112
m,p-Xylene	mg/kg (ppm)	5	<0.1	80	48-102
o-Xylene	mg/kg (ppm)	2.5	<0.05	82	49-101
Styrene	mg/kg (ppm)	2.5	<0.05	83	49-106
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	81	47-104
Bromoform	mg/kg (ppm)	2.5	<0.05	97	25-171
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	80	47-105
Bromobenzene	mg/kg (ppm)	2.5	<0.05	79	48-105
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	47-105
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	78	51-108
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	77	50-104
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	47-102
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	80	47-102
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	80	48-105
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	48-105
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	82	47-106
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	82	47-107
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	47-103
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	46-102
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	79	48-104
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	84	39-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	74	44-106
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	80	44-106
Naphthalene	mg/kg (ppm)	2.5	<0.05	83	48-108
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	83	46-107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/05/12

Project: 63801.1, F&BI 209033

**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	44	42	11-84	5
Chloromethane	mg/kg (ppm)	2.5	68	66	41-99	3
Vinyl chloride	mg/kg (ppm)	2.5	84	81	51-102	4
Bromomethane	mg/kg (ppm)	2.5	86	89	51-111	3
Chloroethane	mg/kg (ppm)	2.5	90	96	53-113	6
Trichlorofluoromethane	mg/kg (ppm)	2.5	91	94	61-113	3
Acetone	mg/kg (ppm)	12.5	87	87	69-132	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	90	93	67-116	3
Methylene chloride	mg/kg (ppm)	2.5	88	90	62-130	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	98	99	78-116	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	96	99	70-116	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	97	79-109	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	108	109	70-123	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	100	76-113	2
Chloroform	mg/kg (ppm)	2.5	97	98	77-113	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	86	84	76-114	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	98	99	79-114	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	102	105	73-119	3
1,1-Dichloropropene	mg/kg (ppm)	2.5	96	95	77-110	1
Carbon tetrachloride	mg/kg (ppm)	2.5	104	108	67-126	4
Benzene	mg/kg (ppm)	2.5	94	94	70-115	0
Trichloroethene	mg/kg (ppm)	2.5	95	97	70-113	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	96	97	79-110	1
Bromodichloromethane	mg/kg (ppm)	2.5	106	109	76-119	3
Dibromomethane	mg/kg (ppm)	2.5	102	104	78-115	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	94	96	80-120	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	113	116	80-117	3
Toluene	mg/kg (ppm)	2.5	93	95	79-112	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	108	81-118	2
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	96	98	83-111	2
2-Hexanone	mg/kg (ppm)	12.5	89	91	80-121	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	93	94	81-114	1
Tetrachloroethene	mg/kg (ppm)	2.5	95	96	73-117	1
Dibromochloromethane	mg/kg (ppm)	2.5	115	117	59-143	2
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	104	82-113	2
Chlorobenzene	mg/kg (ppm)	2.5	97	99	81-110	2
Ethylbenzene	mg/kg (ppm)	2.5	95	97	79-116	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	109	76-121	2
m,p-Xylene	mg/kg (ppm)	5	99	101	80-115	2
o-Xylene	mg/kg (ppm)	2.5	101	102	81-113	1
Styrene	mg/kg (ppm)	2.5	102	104	79-118	2
Isopropylbenzene	mg/kg (ppm)	2.5	101	103	81-114	2
Bromoform	mg/kg (ppm)	2.5	116	118	36-166	2
n-Propylbenzene	mg/kg (ppm)	2.5	98	100	82-114	2
Bromobenzene	mg/kg (ppm)	2.5	98	101	83-113	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	102	105	82-115	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	102	103	81-116	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	91	93	53-136	2
2-Chlorotoluene	mg/kg (ppm)	2.5	94	97	81-113	3
4-Chlorotoluene	mg/kg (ppm)	2.5	97	100	83-111	3
tert-Butylbenzene	mg/kg (ppm)	2.5	101	103	81-113	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	102	82-115	1
sec-Butylbenzene	mg/kg (ppm)	2.5	101	104	81-115	3
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	105	82-115	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	98	100	81-113	2
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	96	98	82-109	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	100	101	82-111	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	103	106	72-123	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	90	93	81-110	3
Hexachlorobutadiene	mg/kg (ppm)	2.5	95	98	78-116	3
Naphthalene	mg/kg (ppm)	2.5	106	108	85-114	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	102	105	86-112	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/05/12

Project: 63801.1, F&BI 209033

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

Laboratory Code: 209033-01 (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	109	112	70-130	3
Aroclor 1260	mg/kg (ppm)	0.8	103	104	70-130	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.

209 033

# SAMPLE CHAIN OF CUSTODY

ME 09/05/12

VS3/BI3

PAGE # 1 OF 2

Send Report To Eric Koltas

Company Environmental Partners, Inc.

Address 295 NE Gilman Blvd.

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) \_\_\_\_\_

PROJECT ID/ADDRESS Mill Creek JOB # 63801.1

SITE NAME \_\_\_\_\_ REMARKS \_\_\_\_\_

**TURNAROUND TIME**

Standard

RUSH

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

**SAMPLE DISPOSAL**

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	PCBs	Metals - MTCA 5			
P-15:1.5	01A-E	9/4/12	11:02	Sol	5		X			X		X	X			
P-15:4	02A-E		11:26		5		X			X		X	X		Archive	
P-16:3	03A-E		11:55		5		X			X		X	X			
S-1:7	04A-E		12:50		5		X			X		X	X			
H-1:7	05		13:25		1		X					X	X			
H-2:4	06		13:40		1		X					X	X			
H-3:7	07		14:00		1		X					X	X			
H-4:7	08		15:10		1		X					X	X			
P-17:1.5	09A-E		16:10		5		X			X		X	X			
P-17:4	10A-E		16:17		5		X			X		X	X		Archive	
P-18:1.5	11A-E		16:25		5		X			X		X	X			
P-18:4	12A-E		16:30		5		X			X		X	X		Archive	
P-19:1.5	13A-E	✓	16:38	✓	5		X			X		X	X			

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
<i>[Signature]</i>	Eric Carday	EPT	9/5/12	10:00
<i>[Signature]</i>	Jane Bruya	EPB	9/5/12	10:20
Relinquished by:				
Received by:				

Samples received at 6 °C

209033

**SAMPLE CHAIN OF CUSTODY**

HE 09/05/12

VS3/BF3

Send Report To Eric Kolter

Company Environmental Partners, Inc.

Address 295 NE Gilman Blvd.

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLES (signature) <u>[Signature]</u>	
PROJECT ID/ADDRESS <u>Mill Creek</u>	JOB # <u>67801-1</u>
SITE NAME	REMARKS

PAGE # <u>2</u> OF <u>2</u>
<b>TURNAROUND TIME</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH Rush charges authorized by: _____
<b>SAMPLE DISPOSAL</b> <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes			
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	PCBs	MUTAN	MTCAAS					
P-19:4	14AB	9/4/12	16:45	soil	5		X			X		X	X						
P-20:1.5	15A-B	✓	16:50		5		X			X		X	X						
P-20:4	16A-B	✓	16:55		5		X			X		X	X						Archives

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
<u>[Signature]</u>	Eric Caddy	EPI	9/5/12	10:00
<u>[Signature]</u>	James Bruya	EPH	9/5/12	10:20
Relinquished by:				
Received by:				

Samples received at 6 °C



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

September 17, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek / Seattle Times

Dear Mr. Koltes:

Included are the results from the testing of material submitted on September 7, 2012 from the Mill Creek / Seattle Times, F&BI 209072 project. There are 47 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0917R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 7, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek / Seattle Times, F&BI 209072 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
209072-01	MW1-10
209072-02	MW1-30
209072-03	W2-10
209072-04	W2-15
209072-05	MW1-0912
209072-06	MW2-0912

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/07/12  
Project: Mill Creek / Seattle Times, F&BI 209072  
Date Extracted: 09/07/12  
Date Analyzed: 09/07/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
MW1-10 209072-01	<2	91
W2-10 209072-03	<2	89
Method Blank 02-1603 MB	<2	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/07/12  
Project: Mill Creek / Seattle Times, F&BI 209072  
Date Extracted: 09/07/12  
Date Analyzed: 09/08/12

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 51-134)
MW1-0912 209072-05	<100	93
MW2-0912 209072-06	340	102
Method Blank 02-1605 MB	<100	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/07/12  
Project: Mill Creek / Seattle Times, F&BI 209072  
Date Extracted: 09/10/12  
Date Analyzed: 09/10/12

**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> 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> (% Recovery) (Limit 51-134)
MW1-0912 209072-05	<50	<250	93
MW2-0912 209072-06	400 x	<250	90
Method Blank 02-1608 MB	<50	<250	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/07/12  
Project: Mill Creek / Seattle Times, F&BI 209072  
Date Extracted: 09/07/12  
Date Analyzed: 09/09/12

**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 53-144)
MW1-10 209072-01	<50	<250	133
W2-10 209072-03	<50	<250	143
Method Blank 02-1604 MB	<50	<250	135

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW1-0912	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	209072-05
Date Analyzed:	09/11/12	Data File:	209072-05.084
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	77	60	125
Indium	77	60	125
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Arsenic	1.38
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW2-0912	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	209072-06
Date Analyzed:	09/11/12	Data File:	209072-06.085
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	111	60	125
Indium	81	60	125
Holmium	83	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	57.1
Arsenic	2.19
Cadmium	<1
Lead	4.84



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	I2-599 mb
Date Analyzed:	09/11/12	Data File:	I2-599 mb.067
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	102	60	125
Indium	103	60	125
Holmium	102	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW1-0912	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	209072-05
Date Analyzed:	09/10/12	Data File:	209072-05.060
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	98	60	125
Indium	101	60	125
Holmium	96	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Arsenic	1.10
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW2-0912	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	209072-06
Date Analyzed:	09/10/12	Data File:	209072-06.063
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	96	60	125
Indium	92	60	125
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	2.80 lc
Arsenic	<1
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	I2-594 mb
Date Analyzed:	09/10/12	Data File:	I2-594 mb.057
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	102	60	125
Indium	106	60	125
Holmium	100	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW1-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/07/12	Lab ID:	209072-01
Date Analyzed:	09/10/12	Data File:	209072-01.010
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	122	60	125
Indium	100	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	13.1
Arsenic	1.80
Cadmium	<1
Lead	2.31

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	W2-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/07/12	Lab ID:	209072-03
Date Analyzed:	09/10/12	Data File:	209072-03 rr.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	114	60	125
Indium	101	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	12.7
Arsenic	2.48
Cadmium	<1
Lead	1.83

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/07/12	Lab ID:	I2-593 mb
Date Analyzed:	09/10/12	Data File:	I2-593 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	98	60	125
Holmium	99	60	125

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

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/07/12  
Project: Mill Creek / Seattle Times, F&BI 209072  
Date Extracted: 09/07/12  
Date Analyzed: 09/12/12

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

<u>Sample ID</u> Laboratory ID	<u>Total Mercury</u>
MW1-0912 209072-05	<0.1
MW2-0912 209072-06	<0.1
Method Blank	<0.1



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12  
Date Received: 09/07/12  
Project: Mill Creek / Seattle Times, F&BI 209072  
Date Extracted: 09/07/12  
Date Analyzed: 09/12/12

**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>
MW1-0912 209072-05	<0.1
MW2-0912 209072-06	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

Date Extracted: 09/07/12

Date Analyzed: 09/12/12

**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>
MW1-10 209072-01	<0.1
W2-10 209072-03	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID:	W2-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	209072-03
Date Analyzed:	09/11/12	Data File:	091110.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	86	50	150
Toluene-d8	95	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	02-1614 mb
Date Analyzed:	09/11/12	Data File:	091107.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	109	50	150

Compounds:	Concentration mg/kg (ppm)
1,2-Dibromoethane (EDB)	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW1-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/07/12	Lab ID:	209072-01
Date Analyzed:	09/08/12	Data File:	090741.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	99	50	150

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:	W2-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/07/12	Lab ID:	209072-03
Date Analyzed:	09/08/12	Data File:	090742.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	98	50	150

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:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/07/12	Lab ID:	02-1592 mb
Date Analyzed:	09/07/12	Data File:	090722.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

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:	MW1-0912	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	209072-05
Date Analyzed:	09/11/12	Data File:	091049.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW2-0912	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	209072-06
Date Analyzed:	09/11/12	Data File:	091050.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	10
Vinyl chloride	1.3	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	1.7
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	3.2
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	22	Bromobenzene	<1
Chloroform	2.3	1,3,5-Trimethylbenzene	3.9
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	1.3
Benzene	<0.35	1,2,4-Trimethylbenzene	34
Trichloroethene	5.6	sec-Butylbenzene	3.9
1,2-Dichloropropane	<1	p-Isopropyltoluene	2.0
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:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	02-1613 mb
Date Analyzed:	09/10/12	Data File:	091020.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	W2-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	209072-03 rr1/5
Date Analyzed:	09/13/12	Data File:	091311.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	100	50	150
Benzo(a)anthracene-d12	129	35	159

Compounds:	Concentration mg/kg (ppm)
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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/11/12	Lab ID:	02-1626 mb2
Date Analyzed:	09/12/12	Data File:	091206.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	50	150
Benzo(a)anthracene-d12	116	35	159

Compounds:	Concentration mg/kg (ppm)
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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	W2-10	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	209072-03
Date Analyzed:	09/12/12	Data File:	091226.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek / Seattle Times, F&BI 209072
Date Extracted:	09/10/12	Lab ID:	02-1607 mb
Date Analyzed:	09/12/12	Data File:	091210.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	113	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 209066-01 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 209082-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	95	69-134



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

**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	79	79	58-134	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209072-01 (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	128	131	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	127	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209088-01 (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	87	84	71-130	4
Arsenic	ug/L (ppb)	10	16.8	102 b	91 b	51-167	11 b
Cadmium	ug/L (ppb)	5	<1	93	89	86-115	4
Lead	ug/L (ppb)	10	12.0	93 b	86 b	85-115	8 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	102	80-119
Arsenic	ug/L (ppb)	10	100	81-118
Cadmium	ug/L (ppb)	5	101	86-118
Lead	ug/L (ppb)	10	103	84-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209072-05 (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	90	89	71-130	1
Arsenic	ug/L (ppb)	10	1.10	95	98	51-167	3
Cadmium	ug/L (ppb)	5	<1	93	92	86-115	1
Lead	ug/L (ppb)	10	<1	91	91	85-115	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	104	80-119
Arsenic	ug/L (ppb)	10	101	81-118
Cadmium	ug/L (ppb)	5	104	86-118
Lead	ug/L (ppb)	10	102	84-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209072-01 (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	13.1	92 b	86 b	63-120	7 b
Arsenic	mg/kg (ppm)	10	1.80	106	98	56-125	8
Cadmium	mg/kg (ppm)	10	<1	106	98	85-117	8
Lead	mg/kg (ppm)	50	2.31	104	97	64-139	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	112	81-117
Arsenic	mg/kg (ppm)	10	108	79-112
Cadmium	mg/kg (ppm)	10	105	88-114
Lead	mg/kg (ppm)	50	105	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209072-05 (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	91	91	78-124	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	ug/L (ppb)	0.5	93	78-123

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209072-05 (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	89	94	78-124	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	ug/L (ppb)	0.5	92	78-123

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209072-01 (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	89	95	54-156	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	85	73-131



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ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

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**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)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	112	98	70-130	13

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

Laboratory Code: 209033-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	14	10-60
Chloromethane	mg/kg (ppm)	2.5	<0.5	42	10-89
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	46	10-91
Bromomethane	mg/kg (ppm)	2.5	<0.5	57	10-102
Chloroethane	mg/kg (ppm)	2.5	<0.5	57	10-97
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	45	10-94
Acetone	mg/kg (ppm)	12.5	<0.5	69	37-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	34-108
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	79	42-103
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	73	37-97
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	73	29-105
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	41-101
Chloroform	mg/kg (ppm)	2.5	<0.05	76	43-100
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	68	48-104
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	77	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	76	35-102
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	70	34-100
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	74	30-107
Benzene	mg/kg (ppm)	2.5	<0.03	74	39-98
Trichloroethene	mg/kg (ppm)	2.5	<0.03	79	38-101
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	45-101
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	86	45-115
Dibromomethane	mg/kg (ppm)	2.5	<0.05	82	46-101
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	76	52-105
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	91	42-120
Toluene	mg/kg (ppm)	2.5	<0.05	76	45-99
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	87	46-118
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	51-104
2-Hexanone	mg/kg (ppm)	12.5	<0.5	76	49-108
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	49-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	74	38-102
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	93	42-132
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	83	49-105
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	78	47-100
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	47-101
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	84	46-112
m,p-Xylene	mg/kg (ppm)	5	<0.1	80	48-102
o-Xylene	mg/kg (ppm)	2.5	<0.05	82	49-101
Styrene	mg/kg (ppm)	2.5	<0.05	83	49-106
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	81	47-104
Bromoform	mg/kg (ppm)	2.5	<0.05	97	25-171
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	80	47-105
Bromobenzene	mg/kg (ppm)	2.5	<0.05	79	48-105
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	47-105
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	78	51-108
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	77	50-104
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	47-102
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	80	47-102
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	80	48-105
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	48-105
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	82	47-106
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	82	47-107
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	47-103
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	46-102
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	79	48-104
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	84	39-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	74	44-106
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	80	44-106
Naphthalene	mg/kg (ppm)	2.5	<0.05	83	48-108
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	83	46-107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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**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	44	42	11-84	5
Chloromethane	mg/kg (ppm)	2.5	68	66	41-99	3
Vinyl chloride	mg/kg (ppm)	2.5	84	81	51-102	4
Bromomethane	mg/kg (ppm)	2.5	86	89	51-111	3
Chloroethane	mg/kg (ppm)	2.5	90	96	53-113	6
Trichlorofluoromethane	mg/kg (ppm)	2.5	91	94	61-113	3
Acetone	mg/kg (ppm)	12.5	87	87	69-132	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	90	93	67-116	3
Methylene chloride	mg/kg (ppm)	2.5	88	90	62-130	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	98	99	78-116	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	96	99	70-116	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	97	79-109	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	108	109	70-123	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	100	76-113	2
Chloroform	mg/kg (ppm)	2.5	97	98	77-113	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	86	84	76-114	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	98	99	79-114	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	102	105	73-119	3
1,1-Dichloropropene	mg/kg (ppm)	2.5	96	95	77-110	1
Carbon tetrachloride	mg/kg (ppm)	2.5	104	108	67-126	4
Benzene	mg/kg (ppm)	2.5	94	94	70-115	0
Trichloroethene	mg/kg (ppm)	2.5	95	97	70-113	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	96	97	79-110	1
Bromodichloromethane	mg/kg (ppm)	2.5	106	109	76-119	3
Dibromomethane	mg/kg (ppm)	2.5	102	104	78-115	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	94	96	80-120	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	113	116	80-117	3
Toluene	mg/kg (ppm)	2.5	93	95	79-112	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	108	81-118	2
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	96	98	83-111	2
2-Hexanone	mg/kg (ppm)	12.5	89	91	80-121	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	93	94	81-114	1
Tetrachloroethene	mg/kg (ppm)	2.5	95	96	73-117	1
Dibromochloromethane	mg/kg (ppm)	2.5	115	117	59-143	2
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	104	82-113	2
Chlorobenzene	mg/kg (ppm)	2.5	97	99	81-110	2
Ethylbenzene	mg/kg (ppm)	2.5	95	97	79-116	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	109	76-121	2
m,p-Xylene	mg/kg (ppm)	5	99	101	80-115	2
o-Xylene	mg/kg (ppm)	2.5	101	102	81-113	1
Styrene	mg/kg (ppm)	2.5	102	104	79-118	2
Isopropylbenzene	mg/kg (ppm)	2.5	101	103	81-114	2
Bromoform	mg/kg (ppm)	2.5	116	118	36-166	2
n-Propylbenzene	mg/kg (ppm)	2.5	98	100	82-114	2
Bromobenzene	mg/kg (ppm)	2.5	98	101	83-113	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	102	105	82-115	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	102	103	81-116	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	91	93	53-136	2
2-Chlorotoluene	mg/kg (ppm)	2.5	94	97	81-113	3
4-Chlorotoluene	mg/kg (ppm)	2.5	97	100	83-111	3
tert-Butylbenzene	mg/kg (ppm)	2.5	101	103	81-113	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	102	82-115	1
sec-Butylbenzene	mg/kg (ppm)	2.5	101	104	81-115	3
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	105	82-115	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	98	100	81-113	2
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	96	98	82-109	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	100	101	82-111	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	103	106	72-123	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	90	93	81-110	3
Hexachlorobutadiene	mg/kg (ppm)	2.5	95	98	78-116	3
Naphthalene	mg/kg (ppm)	2.5	106	108	85-114	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	102	105	86-112	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

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

Laboratory Code: 209075-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	117	62-131
Chloromethane	ug/L (ppb)	50	<10	103	68-127
Vinyl chloride	ug/L (ppb)	50	1.6	114	76-124
Bromomethane	ug/L (ppb)	50	<1	99	67-127
Chloroethane	ug/L (ppb)	50	<1	103	69-123
Trichlorofluoromethane	ug/L (ppb)	50	<1	105	75-121
Acetone	ug/L (ppb)	250	<10	86	68-137
1,1-Dichloroethene	ug/L (ppb)	50	<1	96	75-118
Methylene chloride	ug/L (ppb)	50	<5	90	64-120
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	97	74-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	99	82-109
2,2-Dichloropropane	ug/L (ppb)	50	<1	95	62-124
cis-1,2-Dichloroethene	ug/L (ppb)	50	6.1	97	83-109
Chloroform	ug/L (ppb)	50	<1	96	81-110
2-Butanone (MEK)	ug/L (ppb)	250	<10	89	75-122
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	99	77-116
1,1-Dichloropropene	ug/L (ppb)	50	<1	96	81-110
Carbon tetrachloride	ug/L (ppb)	50	<1	100	74-119
Benzene	ug/L (ppb)	50	0.73	97	79-108
Trichloroethene	ug/L (ppb)	50	4.1	93	79-105
1,2-Dichloropropane	ug/L (ppb)	50	<1	99	83-110
Bromodichloromethane	ug/L (ppb)	50	<1	100	77-118
Dibromomethane	ug/L (ppb)	50	<1	96	82-109
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	94	78-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	104	76-120
Toluene	ug/L (ppb)	50	<1	96	82-108
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	77-118
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	98	83-110
2-Hexanone	ug/L (ppb)	250	<10	94	75-128
1,3-Dichloropropane	ug/L (ppb)	50	<1	97	84-109
Tetrachloroethene	ug/L (ppb)	50	22	97 b	69-114
Dibromochloromethane	ug/L (ppb)	50	<1	101	66-133
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	98	85-110
Chlorobenzene	ug/L (ppb)	50	<1	94	82-107
Ethylbenzene	ug/L (ppb)	50	<1	95	79-112
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	98	78-118
m,p-Xylene	ug/L (ppb)	100	<2	94	81-111
o-Xylene	ug/L (ppb)	50	<1	94	82-110
Styrene	ug/L (ppb)	50	<1	92	73-116
Isopropylbenzene	ug/L (ppb)	50	<1	98	80-112
Bromoform	ug/L (ppb)	50	<1	93	45-151
n-Propylbenzene	ug/L (ppb)	50	<1	95	77-116
Bromobenzene	ug/L (ppb)	50	<1	93	84-110
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	94	78-114
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	104	82-117
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	95	77-116
2-Chlorotoluene	ug/L (ppb)	50	<1	94	79-112
4-Chlorotoluene	ug/L (ppb)	50	<1	93	80-112
tert-Butylbenzene	ug/L (ppb)	50	<1	96	81-114
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	94	76-115
sec-Butylbenzene	ug/L (ppb)	50	<1	96	80-115
p-Isopropyltoluene	ug/L (ppb)	50	<1	96	78-116
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	93	81-110
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	92	79-109
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	94	81-110
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	102	67-128
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	88	77-113
Hexachlorobutadiene	ug/L (ppb)	50	<1	94	66-122
Naphthalene	ug/L (ppb)	50	<1	97	79-120
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	97	78-115

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ENVIRONMENTAL CHEMISTS

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**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	111	119	56-138	7
Chloromethane	ug/L (ppb)	50	102	103	66-131	1
Vinyl chloride	ug/L (ppb)	50	113	114	73-126	1
Bromomethane	ug/L (ppb)	50	100	102	65-131	2
Chloroethane	ug/L (ppb)	50	104	107	69-125	3
Trichlorofluoromethane	ug/L (ppb)	50	104	106	75-124	2
Acetone	ug/L (ppb)	250	81	83	64-136	2
1,1-Dichloroethene	ug/L (ppb)	50	97	99	72-122	2
Methylene chloride	ug/L (ppb)	50	90	93	56-128	3
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	98	100	76-120	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	94	98	74-122	4
1,1-Dichloroethane	ug/L (ppb)	50	97	99	85-107	2
2,2-Dichloropropane	ug/L (ppb)	50	105	108	83-119	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	98	85-105	1
Chloroform	ug/L (ppb)	50	95	97	83-107	2
2-Butanone (MEK)	ug/L (ppb)	250	85	87	75-118	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	92	93	85-107	1
1,1,1-Trichloroethane	ug/L (ppb)	50	98	101	81-114	3
1,1-Dichloropropene	ug/L (ppb)	50	95	97	85-107	2
Carbon tetrachloride	ug/L (ppb)	50	100	103	77-118	3
Benzene	ug/L (ppb)	50	95	97	81-107	2
Trichloroethene	ug/L (ppb)	50	94	97	80-104	3
1,2-Dichloropropane	ug/L (ppb)	50	97	99	86-106	2
Bromodichloromethane	ug/L (ppb)	50	101	102	76-117	1
Dibromomethane	ug/L (ppb)	50	95	98	86-106	3
4-Methyl-2-pentanone	ug/L (ppb)	250	92	96	85-113	4
cis-1,3-Dichloropropene	ug/L (ppb)	50	112	114	78-120	2
Toluene	ug/L (ppb)	50	95	96	86-105	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	110	112	82-116	2
1,1,2-Trichloroethane	ug/L (ppb)	50	97	98	87-106	1
2-Hexanone	ug/L (ppb)	250	90	91	84-117	1
1,3-Dichloropropane	ug/L (ppb)	50	97	98	86-107	1
Tetrachloroethene	ug/L (ppb)	50	97	97	81-106	0
Dibromochloromethane	ug/L (ppb)	50	107	109	57-138	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	98	101	89-107	3
Chlorobenzene	ug/L (ppb)	50	94	96	86-104	2
Ethylbenzene	ug/L (ppb)	50	96	97	87-107	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	98	100	79-117	2
m,p-Xylene	ug/L (ppb)	100	97	98	87-107	1
o-Xylene	ug/L (ppb)	50	96	98	86-107	2
Styrene	ug/L (ppb)	50	102	103	87-110	1
Isopropylbenzene	ug/L (ppb)	50	99	101	87-108	2
Bromoform	ug/L (ppb)	50	107	107	27-167	0
n-Propylbenzene	ug/L (ppb)	50	97	99	87-109	2
Bromobenzene	ug/L (ppb)	50	96	97	86-108	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	100	103	88-108	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	103	104	82-116	1
1,2,3-Trichloropropane	ug/L (ppb)	50	94	97	75-117	3
2-Chlorotoluene	ug/L (ppb)	50	95	97	85-109	2
4-Chlorotoluene	ug/L (ppb)	50	95	97	87-107	2
tert-Butylbenzene	ug/L (ppb)	50	99	101	86-110	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	99	102	87-109	3
sec-Butylbenzene	ug/L (ppb)	50	99	101	88-110	2
p-Isopropyltoluene	ug/L (ppb)	50	100	101	87-112	1
1,3-Dichlorobenzene	ug/L (ppb)	50	95	97	88-105	2
1,4-Dichlorobenzene	ug/L (ppb)	50	92	95	87-104	3
1,2-Dichlorobenzene	ug/L (ppb)	50	96	98	86-107	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	102	106	65-126	4
1,2,4-Trichlorobenzene	ug/L (ppb)	50	94	96	86-109	2
Hexachlorobutadiene	ug/L (ppb)	50	101	101	78-116	0
Naphthalene	ug/L (ppb)	50	103	108	89-114	5
1,2,3-Trichlorobenzene	ug/L (ppb)	50	102	108	89-111	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209106-05 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	0.048	89 b	23-144
Chrysene	mg/kg (ppm)	0.17	0.075	75 b	45-122
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.091	99 b	31-144
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	0.026	103	45-130
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.075	99 b	39-128
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.057	139 b	28-146
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	0.012	137 vo	46-129

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	88	98	51-115	11
Chrysene	mg/kg (ppm)	0.17	96	99	55-129	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	104	126 vo	56-123	19
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	99	114	54-131	14
Benzo(a)pyrene	mg/kg (ppm)	0.17	88	100	51-118	13
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	88	107	49-148	19
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	90	111	50-141	21 vo

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/12

Date Received: 09/07/12

Project: Mill Creek / Seattle Times, F&BI 209072

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

Laboratory Code: 209033-01 (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	109	112	70-130	3
Aroclor 1260	mg/kg (ppm)	0.8	103	104	70-130	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.



209072

SAMPLE CHAIN OF CUSTODY

ME 09-07-12

Page # 1 of 1

Send Report To Eric Koltas  
 Company Environmental Partners  
 Address 295 NE Gilman Blvd.  
 City, State, ZIP Issaquah WA  
 Phone # 425-922-5666 Fax # 425-395-0011

SAMPLERS (signature) [Signature]  
 PROJECT NAME/NO. Mill Creek / Seattle Times PO# \_\_\_\_\_  
 REMARKS \_\_\_\_\_

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED											Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	MRAS Metals	ED/EDC/ATSE	CPAHs	PCBS			
MW1-10	01A-F	9/5/12	1629	Soil	6	X	X		X			X						
MW1-30	02A-F	9/5/12	1650	soil	6													Hold
W2-10	03A-G	9/6/12	1126	Soil	7	X	X		X			X	X	X	X			
W2-15	04A-G	9/6/12	1134	Soil	7													Hold
MW1-0912	05 T	9/6/12	1638	H <sub>2</sub> O	7	X	X		X			X						Total + Disposed per ER 9/7/12
MW2-0912	06	9/6/12	1746	H <sub>2</sub> O	7	X	X		X			X						↓
Samples received at <u>9</u> o'clock																		

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
<u>[Signature]</u>	Monty Busbee	EPF	9/6/12	1800
<u>[Signature]</u>	Eric Caddell	EPF	11	18:00
<u>[Signature]</u>	Eric Caddell	EPF	9/7/12	08:39
<u>[Signature]</u>	Michael Erdahl	FGH		

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

September 18, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek 63801.1

Dear Mr. Koltes:

Included are the results from the testing of material submitted on September 7, 2012 from the Mill Creek 63801.1, F&BI 209073 project. There are 29 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0918R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 7, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek 63801.1, F&BI 209073 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
209073-01	S-4:5
209073-02	C-10:0.5
209073-03	C-11:0.5
209073-04	C-12
209073-05	A-2:9
209073-06	A-3:8.5
209073-07	A-1:9
209073-08	O-1:8
209073-09	O-2:9
209073-10	O-3:5
209073-11	H-5:7
209073-12	H-6:8
209073-13	S-3:7

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
 Date Received: 09/07/12  
 Project: Mill Creek 63801.1, F&BI 209073  
 Date Extracted: 09/10/12  
 Date Analyzed: 09/10/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
 FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES  
 USING EPA METHOD 8021B**

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>Surrogate (% Recovery)</u> (Limit 50-150)
A-2:9 209073-05	<0.02	<0.02	<0.02	<0.06	84
A-3:8.5 209073-06	<0.02	<0.02	<0.02	<0.06	82
A-1:9 209073-07	<0.02	<0.02	<0.02	<0.06	82
O-1:8 209073-08	<0.02	<0.02	<0.02	<0.06	79
O-2:9 209073-09	<0.02	<0.02	<0.02	<0.06	88
O-3:5 209073-10	<0.02	<0.02	<0.02	<0.06	87
Method Blank 02-1609 MB	<0.02	<0.02	<0.02	<0.06	80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
 Date Received: 09/07/12  
 Project: Mill Creek 63801.1, F&BI 209073  
 Date Extracted: 09/10/12  
 Date Analyzed: 09/11/12

**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> (% Recovery) (Limit 53-144)
S-4:5 209073-01	<50	<250	86
C-10:0.5 209073-02	<50	<250	93
C-11:0.5 209073-03	<50	<250	97
C-12 209073-04	<50	420	98
A-2:9 209073-05	290 x	1,700	86
A-3:8.5 209073-06	940 x	4,600	84
A-1:9 209073-07	560 x	4,600	87
O-1:8 209073-08	<50	<250	83
O-2:9 209073-09	<50	<250	84
O-3:5 209073-10	<50	<250	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
Date Received: 09/07/12  
Project: Mill Creek 63801.1, F&BI 209073  
Date Extracted: 09/10/12  
Date Analyzed: 09/11/12

**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 53-144)
H-5:7 209073-11	<50	<250	88
H-6:8 209073-12	<50	<250	87
S-3:7 209073-13	<50	<250	88
Method Blank 02-1611 MB	<50	<250	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-4:5	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	209073-01
Date Analyzed:	09/10/12	Data File:	209073-01 rr.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	113	60	125
Indium	95	60	125
Holmium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	21.2
Arsenic	1.85
Cadmium	<1
Lead	8.69

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	H-5:7	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	209073-11
Date Analyzed:	09/10/12	Data File:	209073-11.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	123	60	125
Indium	101	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	18.5
Arsenic	1.76
Cadmium	<1
Lead	3.89



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	H-6:8	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	209073-12
Date Analyzed:	09/10/12	Data File:	209073-12.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	114	60	125
Indium	98	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	14.1
Arsenic	1.25
Cadmium	<1
Lead	1.65

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-3:7	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	209073-13
Date Analyzed:	09/10/12	Data File:	209073-13.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	124	60	125
Indium	99	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	18.3
Arsenic	2.30
Cadmium	<1
Lead	3.67

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	I2-593 mb
Date Analyzed:	09/10/12	Data File:	I2-593 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	98	60	125
Holmium	99	60	125

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

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12  
Date Received: 09/07/12  
Project: Mill Creek 63801.1, F&BI 209073  
Date Extracted: 09/07/12  
Date Analyzed: 09/12/12

**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>
S-4:5 209073-01	<0.1
H-5:7 209073-11	<0.1
H-6:8 209073-12	<0.1
S-3:7 209073-13	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	S-4:5	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	209073-01
Date Analyzed:	09/08/12	Data File:	090743.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	98	50	150

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:	S-3:7	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	209073-13
Date Analyzed:	09/08/12	Data File:	090744.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	98	50	150

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:	Environmental Partners
Date Received:	Not Applicable	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/07/12	Lab ID:	02-1592 mb
Date Analyzed:	09/07/12	Data File:	090722.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

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 PCBs By EPA Method 8082

Client Sample ID:	S-4:5	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-01
Date Analyzed:	09/12/12	Data File:	091238.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	104	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-10:0.5	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-02
Date Analyzed:	09/12/12	Data File:	091240.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-11:0.5	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-03
Date Analyzed:	09/12/12	Data File:	091242.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	103	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-12	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-04
Date Analyzed:	09/12/12	Data File:	091244.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	1.2
Aroclor 1260	1.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	H-5:7	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-11
Date Analyzed:	09/12/12	Data File:	091246.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	117	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	H-6:8	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-12
Date Analyzed:	09/12/12	Data File:	091248.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	S-3:7	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	209073-13
Date Analyzed:	09/13/12	Data File:	091252.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	103	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Mill Creek 63801.1, F&BI 209073
Date Extracted:	09/10/12	Lab ID:	02-1612 mb
Date Analyzed:	09/12/12	Data File:	091230.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	117	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR BENZENE, TOLUENE, ETHYLBENZENE,  
AND XYLENES  
USING EPA METHOD 8021B**

Laboratory Code: 209073-05 (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	105	69-120
Toluene	mg/kg (ppm)	0.5	105	70-117
Ethylbenzene	mg/kg (ppm)	0.5	103	65-123
Xylenes	mg/kg (ppm)	1.5	103	66-120



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

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

Laboratory Code: 209073-09 (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	79	81	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

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

Laboratory Code: 209072-01 (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	13.1	92 b	86 b	63-120	7 b
Arsenic	mg/kg (ppm)	10	1.80	106	98	56-125	8
Cadmium	mg/kg (ppm)	10	<1	106	98	85-117	8
Lead	mg/kg (ppm)	50	2.31	104	97	64-139	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	112	81-117
Arsenic	mg/kg (ppm)	10	108	79-112
Cadmium	mg/kg (ppm)	10	105	88-114
Lead	mg/kg (ppm)	50	105	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

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

Laboratory Code: 209072-01 (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	89	95	54-156	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	85	73-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

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

Laboratory Code: 209033-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	14	10-60
Chloromethane	mg/kg (ppm)	2.5	<0.5	42	10-89
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	46	10-91
Bromomethane	mg/kg (ppm)	2.5	<0.5	57	10-102
Chloroethane	mg/kg (ppm)	2.5	<0.5	57	10-97
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	45	10-94
Acetone	mg/kg (ppm)	12.5	<0.5	69	37-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	34-108
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	79	42-103
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	73	37-97
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	73	29-105
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	41-101
Chloroform	mg/kg (ppm)	2.5	<0.05	76	43-100
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	68	48-104
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	77	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	76	35-102
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	70	34-100
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	74	30-107
Benzene	mg/kg (ppm)	2.5	<0.03	74	39-98
Trichloroethene	mg/kg (ppm)	2.5	<0.03	79	38-101
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	45-101
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	86	45-115
Dibromomethane	mg/kg (ppm)	2.5	<0.05	82	46-101
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	76	52-105
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	91	42-120
Toluene	mg/kg (ppm)	2.5	<0.05	76	45-99
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	87	46-118
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	51-104
2-Hexanone	mg/kg (ppm)	12.5	<0.5	76	49-108
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	49-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	74	38-102
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	93	42-132
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	83	49-105
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	78	47-100
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	78	47-101
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	84	46-112
m,p-Xylene	mg/kg (ppm)	5	<0.1	80	48-102
o-Xylene	mg/kg (ppm)	2.5	<0.05	82	49-101
Styrene	mg/kg (ppm)	2.5	<0.05	83	49-106
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	81	47-104
Bromoform	mg/kg (ppm)	2.5	<0.05	97	25-171
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	80	47-105
Bromobenzene	mg/kg (ppm)	2.5	<0.05	79	48-105
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	47-105
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	78	51-108
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	77	50-104
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	47-102
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	80	47-102
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	80	48-105
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	82	48-105
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	82	47-106
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	82	47-107
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	47-103
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	46-102
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	79	48-104
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	84	39-130
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	74	44-106
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	80	44-106
Naphthalene	mg/kg (ppm)	2.5	<0.05	83	48-108
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	83	46-107

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

### 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	44	42	11-84	5
Chloromethane	mg/kg (ppm)	2.5	68	66	41-99	3
Vinyl chloride	mg/kg (ppm)	2.5	84	81	51-102	4
Bromomethane	mg/kg (ppm)	2.5	86	89	51-111	3
Chloroethane	mg/kg (ppm)	2.5	90	96	53-113	6
Trichlorofluoromethane	mg/kg (ppm)	2.5	91	94	61-113	3
Acetone	mg/kg (ppm)	12.5	87	87	69-132	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	90	93	67-116	3
Methylene chloride	mg/kg (ppm)	2.5	88	90	62-130	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	98	99	78-116	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	96	99	70-116	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	97	79-109	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	108	109	70-123	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	100	76-113	2
Chloroform	mg/kg (ppm)	2.5	97	98	77-113	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	86	84	76-114	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	98	99	79-114	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	102	105	73-119	3
1,1-Dichloropropene	mg/kg (ppm)	2.5	96	95	77-110	1
Carbon tetrachloride	mg/kg (ppm)	2.5	104	108	67-126	4
Benzene	mg/kg (ppm)	2.5	94	94	70-115	0
Trichloroethene	mg/kg (ppm)	2.5	95	97	70-113	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	96	97	79-110	1
Bromodichloromethane	mg/kg (ppm)	2.5	106	109	76-119	3
Dibromomethane	mg/kg (ppm)	2.5	102	104	78-115	2
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	94	96	80-120	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	113	116	80-117	3
Toluene	mg/kg (ppm)	2.5	93	95	79-112	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	108	81-118	2
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	96	98	83-111	2
2-Hexanone	mg/kg (ppm)	12.5	89	91	80-121	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	93	94	81-114	1
Tetrachloroethene	mg/kg (ppm)	2.5	95	96	73-117	1
Dibromochloromethane	mg/kg (ppm)	2.5	115	117	59-143	2
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	104	82-113	2
Chlorobenzene	mg/kg (ppm)	2.5	97	99	81-110	2
Ethylbenzene	mg/kg (ppm)	2.5	95	97	79-116	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	109	76-121	2
m,p-Xylene	mg/kg (ppm)	5	99	101	80-115	2
o-Xylene	mg/kg (ppm)	2.5	101	102	81-113	1
Styrene	mg/kg (ppm)	2.5	102	104	79-118	2
Isopropylbenzene	mg/kg (ppm)	2.5	101	103	81-114	2
Bromoform	mg/kg (ppm)	2.5	116	118	36-166	2
n-Propylbenzene	mg/kg (ppm)	2.5	98	100	82-114	2
Bromobenzene	mg/kg (ppm)	2.5	98	101	83-113	3
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	102	105	82-115	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	102	103	81-116	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	91	93	53-136	2
2-Chlorotoluene	mg/kg (ppm)	2.5	94	97	81-113	3
4-Chlorotoluene	mg/kg (ppm)	2.5	97	100	83-111	3
tert-Butylbenzene	mg/kg (ppm)	2.5	101	103	81-113	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	102	82-115	1
sec-Butylbenzene	mg/kg (ppm)	2.5	101	104	81-115	3
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	105	82-115	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	98	100	81-113	2
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	96	98	82-109	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	100	101	82-111	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	103	106	72-123	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	90	93	81-110	3
Hexachlorobutadiene	mg/kg (ppm)	2.5	95	98	78-116	3
Naphthalene	mg/kg (ppm)	2.5	106	108	85-114	2
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	102	105	86-112	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/12

Date Received: 09/07/12

Project: Mill Creek 63801.1, F&BI 209073

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

Laboratory Code: 209073-12 (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	120	114	70-130	5
Aroclor 1260	mg/kg (ppm)	0.8	123	107	70-130	14

**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.

209073

**SAMPLE CHAIN OF CUSTODY** ME 09/07/12

BIZ/NSZ

Send Report To Eric Colter  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd.  
 City, State, ZIP Issaquah, WA 98027  
 Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) [Signature]  
 PROJECT ID/ADDRESS Mill Creek JOB # 63801.1  
 SITE NAME \_\_\_\_\_ REMARKS \_\_\_\_\_

PAGE # 1 OF 1

**TURNAROUND TIME**  
 Standard  
 RUSH  
 Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED										Notes
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	PCBs	MtMtl	MTCAS		
S-4:5	01A-E	9/5/12	10:38	Soil	5		X			X		X	X			
C-10:0.5	02		11:11		1		X					X	X			
C-11:0.5	03		11:20		1		X					X	X			
C-12	04		11:30		1		X					X	X			
A-2:9	05A-D		16:30		4		X	X								
A-3:8.5	06		16:50		4		X	X								
A-1:9	07	9/6/12	09:24		4		X	X								
O-1:8	08		13:13		4		X	X								
O-2:9	09		13:25		4		X	X								
O-3:5	10		14:00		4		X	X								
H-5:7	11		16:05		(4)		X					X	X			
H-6:8	12A-E		16:15		5		X					X	X			
S-3:7	13		17:00		5		X			X		X	X			

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
<u>[Signature]</u>	Eric Colter	EPI	9/7/12	08:59
<u>[Signature]</u>	Michael Erdahl	F&B		
Relinquished by:				
Received by:				
Relinquished by:				
Received by:		Samples received at	9 °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

September 20, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek

Dear Mr. Koltes:

Included are the results from the testing of material submitted on September 7, 2012 from the Mill Creek, F&BI 209093 project. There are 29 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0920R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 7, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek, F&BI 209093 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
209093-01	C-13
209093-02	C-14
209093-03	C-15
209093-04	P-21
209093-05	P-22
209093-06	P-23
209093-07	P-24
209093-08	P-25
209093-09	P-26
209093-10	P-27
209093-11	P-28
209093-12	P-29
209093-13	P-30
209093-14	P-31
209093-15	P-32
209093-16	P-33
209093-17	P-34
209093-18	P-35
209093-19	P-36
209093-20	P-37
209093-21	P-38
209093-22	P-39
209093-23	P-40

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-13	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-01
Date Analyzed:	09/14/12	Data File:	091414.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	115	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	0.47
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-14	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-02
Date Analyzed:	09/14/12	Data File:	091416.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	114	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	0.50
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-15	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-03
Date Analyzed:	09/14/12	Data File:	091418.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	111	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	0.54
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-21	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-04
Date Analyzed:	09/14/12	Data File:	091420.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	12
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-22	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/18/12	Lab ID:	209093-05
Date Analyzed:	09/18/12	Data File:	091808.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	111	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	1.4
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-23	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-06
Date Analyzed:	09/14/12	Data File:	091424.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	7.1
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-24	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-07
Date Analyzed:	09/14/12	Data File:	091426.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	7.6
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-25	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-08
Date Analyzed:	09/14/12	Data File:	091428.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	5.8
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-26	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-09
Date Analyzed:	09/14/12	Data File:	091432.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	106	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	3.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-27	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-10
Date Analyzed:	09/14/12	Data File:	091434.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	103	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	1.5
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-28	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-11
Date Analyzed:	09/15/12	Data File:	091436.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	5.0
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-29	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-12
Date Analyzed:	09/15/12	Data File:	091438.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	2.5
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-30	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-13
Date Analyzed:	09/15/12	Data File:	091440.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	1.9
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-31	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-14
Date Analyzed:	09/15/12	Data File:	091442.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	3.0
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-32	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-15
Date Analyzed:	09/15/12	Data File:	091444.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	5.7
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-33	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-16
Date Analyzed:	09/15/12	Data File:	091446.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	1.9
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-34	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-17
Date Analyzed:	09/15/12	Data File:	091448.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	95	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	9.7
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-35	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-18
Date Analyzed:	09/15/12	Data File:	091450.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	86	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	4.8
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-36	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-19
Date Analyzed:	09/15/12	Data File:	091454.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	98	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	6.7
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-37	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-20
Date Analyzed:	09/15/12	Data File:	091456.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	95	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	8.6
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-38	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-21
Date Analyzed:	09/15/12	Data File:	091464.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	106	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	9.3
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-39	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-22
Date Analyzed:	09/15/12	Data File:	091466.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	23
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-40	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	209093-23
Date Analyzed:	09/15/12	Data File:	091468.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	84	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	8.9
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	02-1648 mb
Date Analyzed:	09/14/12	Data File:	091408.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	117	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	Mill Creek, F&BI 209093
Date Extracted:	09/13/12	Lab ID:	02-1649 mb
Date Analyzed:	09/15/12	Data File:	091458.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	103	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/20/12

Date Received: 09/07/12

Project: Mill Creek, F&BI 209093

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/wipe	50	100	105	70-130	5
Aroclor 1260	ug/wipe	50	89	91	70-130	2

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/20/12

Date Received: 09/07/12

Project: Mill Creek, F&BI 209093

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/wipe	50	96	93	70-130	3
Aroclor 1260	ug/wipe	50	91	90	70-130	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.

209093

SAMPLE CHAIN OF CUSTODY

ME 09/07/12

203

Send Report To Eric Kolter  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd, Ste 201  
 City, State, ZIP Everett, WA 98027  
 Phone # 425-395-0010 Fax # \_\_\_\_\_

SAMPLER'S (signature) [Signature]

PROJECT NAME/NO. Mill Creek PO# \_\_\_\_\_

REMARKS \_\_\_\_\_

Page # 1 of 3

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_

SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBs					
C-13	01	9/7/12	09:50	wipo	1												10cm x 10cm Area
C-14	02		09:55														
C-15	03		10:00														
P-21	04		11:10														
P-22	05		11:17														
P-23	06		11:23														
P-24	07		11:24														
P-25	08		11:33														
P-26	09		11:42														
P-27	10		12:51														

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
<u>[Signature]</u>	Eric Cadey	EPI	9/7/12	16:00
<u>[Signature]</u>	D D UO	F&BE	"	"
Relinquished by:			Samples received at <u>23</u> °C	
Received by:				

209093

SAMPLE CHAIN OF CUSTODY

ME 09/07/12

E03

Page # 2 of 3

Send Report To Eric Kaltes  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd, #201  
 City, State, ZIP Issaquah, WA 98027  
 Phone # 425-395-0000 Fax # \_\_\_\_\_

SAMPLERS (signature) \_\_\_\_\_  
 PROJECT NAME/NO. Mill Creek PO# \_\_\_\_\_  
 REMARKS \_\_\_\_\_

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBs						
P-28	11	9/7/12	12:56	wipe	1												X	10cm X 10cm Area
P-29	12		13:03		1												X	
P-30	13		13:10		1												X	
P-31	14		13:16		1												X	
P-32	15		13:22		1												X	
P-33	16		13:31		1												X	
P-34	17		13:42		1												X	
P-35	18		14:00		1												X	
P-36	19		14:10		1												X	
P-37	20		14:24		1												X	

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

Relinquished by: <u>[Signature]</u>	PRINT NAME <u>Eric Cadley</u>	COMPANY <u>EPI</u>	DATE <u>9/7/12</u>	TIME <u>16:00</u>
Received by: <u>[Signature]</u>	<u>David</u>	<u>F&amp;BI</u>	<u>11</u>	<u>11</u>
Relinquished by:				
Received by:			samples received at <u>23</u> °C	



209093

SAMPLE CHAIN OF CUSTODY

ME 09/07/12

Send Report To Eric Koltas  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd, Ste 201  
 City, State, ZIP Issaquah, WA 98029  
 Phone # 425-895-6010 Fax # \_\_\_\_\_

SAMPLERS (signature) \_\_\_\_\_  
 PROJECT NAME/NO. Mill Creek PO# \_\_\_\_\_  
 REMARKS \_\_\_\_\_

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBS						
P-38	21	9/7/12	14:30	wipe	1												X	10cm X 10cm area
P-39	22	↓	14:42	↓	1												X	
P-40	23	↓	15:05	↓	1												X	

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>	<u>Eric Cadey</u>	<u>EPI</u>	<u>9/7/12</u>	<u>16:00</u>
Received by: <u>[Signature]</u>	<u>D D UD</u>	<u>F&amp;BI</u>	<u>11</u>	<u>1</u>
Received by:		Samples received at <u>23</u> °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

September 21, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek, F&BI 209071

Dear Mr. Koltes:

Included are the results from the testing of material submitted on September 7, 2012 from the Mill Creek, F&BI 209071 project. There are 12 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0921R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 7, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek, F&BI 209071 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
209071-01	S-2:Water
209071-02	S-5:Water
209071-03	S-4:Water

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/12  
Date Received: 09/07/12  
Project: Mill Creek, F&BI 209071  
Date Extracted: 09/07/12  
Date Analyzed: 09/08/12

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-134)
S-2:Water 209071-01	<100	95
S-5:Water 209071-02	<100	98
S-4:Water 209071-03	<100	94
Method Blank 02-1605 MB	<100	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/12  
Date Received: 09/07/12  
Project: Mill Creek, F&BI 209071  
Date Extracted: 09/10/12  
Date Analyzed: 09/10/12 and 09/19/12

**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> 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> (% Recovery) (Limit 51-134)
S-2:Water 209071-01	<50	<250	85
S-5:Water 209071-02 1/10	110,000 x	10,000 x	ip
S-4:Water 209071-03	310 x	1,900	104
Method Blank 02-1608 MB	<50	<250	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	S-2:Water	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209071
Date Extracted:	09/10/12	Lab ID:	209071-01
Date Analyzed:	09/10/12	Data File:	091032.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	93	50	150

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	S-5:Water	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209071
Date Extracted:	09/10/12	Lab ID:	209071-02
Date Analyzed:	09/10/12	Data File:	091033.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	95	50	150

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	1.0	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:	S-4:Water	Client:	Environmental Partners
Date Received:	09/07/12	Project:	Mill Creek, F&BI 209071
Date Extracted:	09/10/12	Lab ID:	209071-03
Date Analyzed:	09/11/12	Data File:	091048.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek, F&BI 209071
Date Extracted:	09/10/12	Lab ID:	02-1613 mb
Date Analyzed:	09/10/12	Data File:	091020.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

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: 09/21/12

Date Received: 09/07/12

Project: Mill Creek, F&BI 209071

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 209082-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	95	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/12

Date Received: 09/07/12

Project: Mill Creek, F&BI 209071

**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	79	79	58-134	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/12

Date Received: 09/07/12

Project: Mill Creek, F&BI 209071

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

Laboratory Code: 209075-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	117	62-131
Chloromethane	ug/L (ppb)	50	<10	103	68-127
Vinyl chloride	ug/L (ppb)	50	1.6	114	76-124
Bromomethane	ug/L (ppb)	50	<1	99	67-127
Chloroethane	ug/L (ppb)	50	<1	103	69-123
Trichlorofluoromethane	ug/L (ppb)	50	<1	105	75-121
Acetone	ug/L (ppb)	250	<10	86	68-137
1,1-Dichloroethene	ug/L (ppb)	50	<1	96	75-118
Methylene chloride	ug/L (ppb)	50	<5	90	64-120
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	97	74-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	99	82-109
2,2-Dichloropropane	ug/L (ppb)	50	<1	95	62-124
cis-1,2-Dichloroethene	ug/L (ppb)	50	6.1	97	83-109
Chloroform	ug/L (ppb)	50	<1	96	81-110
2-Butanone (MEK)	ug/L (ppb)	250	<10	89	75-122
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	99	77-116
1,1-Dichloropropene	ug/L (ppb)	50	<1	96	81-110
Carbon tetrachloride	ug/L (ppb)	50	<1	100	74-119
Benzene	ug/L (ppb)	50	0.73	97	79-108
Trichloroethene	ug/L (ppb)	50	4.1	93	79-105
1,2-Dichloropropane	ug/L (ppb)	50	<1	99	83-110
Bromodichloromethane	ug/L (ppb)	50	<1	100	77-118
Dibromomethane	ug/L (ppb)	50	<1	96	82-109
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	94	78-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	104	76-120
Toluene	ug/L (ppb)	50	<1	96	82-108
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	77-118
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	98	83-110
2-Hexanone	ug/L (ppb)	250	<10	94	75-128
1,3-Dichloropropane	ug/L (ppb)	50	<1	97	84-109
Tetrachloroethene	ug/L (ppb)	50	22	97 b	69-114
Dibromochloromethane	ug/L (ppb)	50	<1	101	66-133
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	98	85-110
Chlorobenzene	ug/L (ppb)	50	<1	94	82-107
Ethylbenzene	ug/L (ppb)	50	<1	95	79-112
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	98	78-118
m,p-Xylene	ug/L (ppb)	100	<2	94	81-111
o-Xylene	ug/L (ppb)	50	<1	94	82-110
Styrene	ug/L (ppb)	50	<1	92	73-116
Isopropylbenzene	ug/L (ppb)	50	<1	98	80-112
Bromoform	ug/L (ppb)	50	<1	93	45-151
n-Propylbenzene	ug/L (ppb)	50	<1	95	77-116
Bromobenzene	ug/L (ppb)	50	<1	93	84-110
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	94	78-114
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	104	82-117
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	95	77-116
2-Chlorotoluene	ug/L (ppb)	50	<1	94	79-112
4-Chlorotoluene	ug/L (ppb)	50	<1	93	80-112
tert-Butylbenzene	ug/L (ppb)	50	<1	96	81-114
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	94	76-115
sec-Butylbenzene	ug/L (ppb)	50	<1	96	80-115
p-Isopropyltoluene	ug/L (ppb)	50	<1	96	78-116
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	93	81-110
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	92	79-109
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	94	81-110
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	102	67-128
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	88	77-113
Hexachlorobutadiene	ug/L (ppb)	50	<1	94	66-122
Naphthalene	ug/L (ppb)	50	<1	97	79-120
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	97	78-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/12

Date Received: 09/07/12

Project: Mill Creek, F&BI 209071

**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	111	119	56-138	7
Chloromethane	ug/L (ppb)	50	102	103	66-131	1
Vinyl chloride	ug/L (ppb)	50	113	114	73-126	1
Bromomethane	ug/L (ppb)	50	100	102	65-131	2
Chloroethane	ug/L (ppb)	50	104	107	69-125	3
Trichlorofluoromethane	ug/L (ppb)	50	104	106	75-124	2
Acetone	ug/L (ppb)	250	81	83	64-136	2
1,1-Dichloroethene	ug/L (ppb)	50	97	99	72-122	2
Methylene chloride	ug/L (ppb)	50	90	93	56-128	3
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	98	100	76-120	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	94	98	74-122	4
1,1-Dichloroethane	ug/L (ppb)	50	97	99	85-107	2
2,2-Dichloropropane	ug/L (ppb)	50	105	108	83-119	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	98	85-105	1
Chloroform	ug/L (ppb)	50	95	97	83-107	2
2-Butanone (MEK)	ug/L (ppb)	250	85	87	75-118	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	92	93	85-107	1
1,1,1-Trichloroethane	ug/L (ppb)	50	98	101	81-114	3
1,1-Dichloropropene	ug/L (ppb)	50	95	97	85-107	2
Carbon tetrachloride	ug/L (ppb)	50	100	103	77-118	3
Benzene	ug/L (ppb)	50	95	97	81-107	2
Trichloroethene	ug/L (ppb)	50	94	97	80-104	3
1,2-Dichloropropane	ug/L (ppb)	50	97	99	86-106	2
Bromodichloromethane	ug/L (ppb)	50	101	102	76-117	1
Dibromomethane	ug/L (ppb)	50	95	98	86-106	3
4-Methyl-2-pentanone	ug/L (ppb)	250	92	96	85-113	4
cis-1,3-Dichloropropene	ug/L (ppb)	50	112	114	78-120	2
Toluene	ug/L (ppb)	50	95	96	86-105	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	110	112	82-116	2
1,1,2-Trichloroethane	ug/L (ppb)	50	97	98	87-106	1
2-Hexanone	ug/L (ppb)	250	90	91	84-117	1
1,3-Dichloropropane	ug/L (ppb)	50	97	98	86-107	1
Tetrachloroethene	ug/L (ppb)	50	97	97	81-106	0
Dibromochloromethane	ug/L (ppb)	50	107	109	57-138	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	98	101	89-107	3
Chlorobenzene	ug/L (ppb)	50	94	96	86-104	2
Ethylbenzene	ug/L (ppb)	50	96	97	87-107	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	98	100	79-117	2
m,p-Xylene	ug/L (ppb)	100	97	98	87-107	1
o-Xylene	ug/L (ppb)	50	96	98	86-107	2
Styrene	ug/L (ppb)	50	102	103	87-110	1
Isopropylbenzene	ug/L (ppb)	50	99	101	87-108	2
Bromoform	ug/L (ppb)	50	107	107	27-167	0
n-Propylbenzene	ug/L (ppb)	50	97	99	87-109	2
Bromobenzene	ug/L (ppb)	50	96	97	86-108	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	100	103	88-108	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	103	104	82-116	1
1,2,3-Trichloropropane	ug/L (ppb)	50	94	97	75-117	3
2-Chlorotoluene	ug/L (ppb)	50	95	97	85-109	2
4-Chlorotoluene	ug/L (ppb)	50	95	97	87-107	2
tert-Butylbenzene	ug/L (ppb)	50	99	101	86-110	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	99	102	87-109	3
sec-Butylbenzene	ug/L (ppb)	50	99	101	88-110	2
p-Isopropyltoluene	ug/L (ppb)	50	100	101	87-112	1
1,3-Dichlorobenzene	ug/L (ppb)	50	95	97	88-105	2
1,4-Dichlorobenzene	ug/L (ppb)	50	92	95	87-104	3
1,2-Dichlorobenzene	ug/L (ppb)	50	96	98	86-107	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	102	106	65-126	4
1,2,4-Trichlorobenzene	ug/L (ppb)	50	94	96	86-109	2
Hexachlorobutadiene	ug/L (ppb)	50	101	101	78-116	0
Naphthalene	ug/L (ppb)	50	103	108	89-114	5
1,2,3-Trichlorobenzene	ug/L (ppb)	50	102	108	89-111	6

**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.

209071

# SAMPLE CHAIN OF CUSTODY

ME 09/07/12 E03/V2  
PAGE # 1 OF 1

Send Report To Eric Koltes  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd.  
 City, State, ZIP Issaquah, WA 98027  
 Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) [Signature]

PROJECT ID/ADDRESS Mill Creek JOB # \_\_\_\_\_

SITE NAME \_\_\_\_\_ REMARKS \_\_\_\_\_

**TURNAROUND TIME**  
 Standard  
 RUSH  
 Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED						Notes
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	
S-2: water	01A-E	9/6/12	14:50	water	5	X	X			X		
S-5: water	02T	11	17:15	11	11	X	X			X		
S-4: water	03	9/7/12	08:18	11	5	X	X			X		

iedman & Bruya, Inc.  
 12 16th Avenue West  
 tile, WA 98119-2029  
 (206) 285-8282  
 x (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	Eric Gaddy	EPI	9/7/12	08:39
Received by: <u>[Signature]</u>	Michael [Signature]	FERM	↓	↓
Relinquished by:				
Received by:		Samples received at	9	90

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

August 1, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek

Dear Mr. Koltes:

Included are the results from the testing of material submitted on July 20, 2012 from the Mill Creek, F&BI 207273 project. There are 31 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0801R.DOC



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 20, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek, F&BI 207273 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
207273-01	P1:0
207273-02	P1:3
207273-03	P2:0
207273-04	P2:3
207273-05	P3:0
207273-06	P3:3
207273-07	P4:0
207273-08	P4:3
207273-09	P5:0
207273-10	P5:3
207273-11	P6:0
207273-12	P6:3
207273-13	P7:0
207273-14	P7:3
207273-15	T1:4

Several 8260C compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
Date Received: 07/20/12  
Project: Mill Creek, F&BI 207273  
Date Extracted: 07/20/12  
Date Analyzed: 07/20/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis  
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 58-139)
P1:0 207273-01	<2	97
P2:0 207273-03	<2	94
P3:0 207273-05	<2	92
P4:0 207273-07	<2	93
P5:0 207273-09	<2	92
P6:0 207273-11	<2	92
P7:0 207273-13	<2	97
Method Blank 02-1287 MB	<2	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
 Date Received: 07/20/12  
 Project: Mill Creek, F&BI 207273  
 Date Extracted: 07/20/12  
 Date Analyzed: 07/20/12

**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> (% Recovery) (Limit 50-150)
P1:0 207273-01	<50	<250	105
P2:0 207273-03	<50	<250	106
P3:0 207273-05	<50	<250	103
P4:0 207273-07	<50	<250	105
P5:0 207273-09	<50	<250	107
P6:0 207273-11	<50	<250	106
P7:0 207273-13	<50	<250	107
T1:4 207273-15	<50	<250	104
Method Blank 02-1284 MB2	<50	<250	109

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P1:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-01
Date Analyzed:	07/24/12	Data File:	207273-01.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	106	60	125
Indium	95	60	125
Holmium	102	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	19.7
Arsenic	4.95
Selenium	<1
Silver	1.13
Cadmium	<1
Barium	89.3
Lead	7.41

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P2:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-03
Date Analyzed:	07/24/12	Data File:	207273-03.034
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	104	60	125
Indium	96	60	125
Holmium	103	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	17.8
Arsenic	5.50
Selenium	<1
Silver	<1
Cadmium	<1
Barium	70.1
Lead	12.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P3:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-05
Date Analyzed:	07/24/12	Data File:	207273-05.035
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	107	60	125
Indium	97	60	125
Holmium	105	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	15.9
Arsenic	2.88
Selenium	<1
Silver	<1
Cadmium	<1
Barium	61.6
Lead	11.3

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	P4:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-07
Date Analyzed:	07/24/12	Data File:	207273-07.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	114	60	125
Indium	96	60	125
Holmium	104	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	22.9
Arsenic	3.11
Selenium	<1
Silver	<1
Cadmium	<1
Barium	97.1
Lead	5.54

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P5:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-09
Date Analyzed:	07/24/12	Data File:	207273-09.037
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	106	60	125
Indium	97	60	125
Holmium	104	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	18.9
Arsenic	4.47
Selenium	<1
Silver	<1
Cadmium	<1
Barium	51.0
Lead	5.38



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P6:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-11
Date Analyzed:	07/24/12	Data File:	207273-11.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	97	60	125
Holmium	106	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	14.4
Arsenic	2.36
Selenium	<1
Silver	<1
Cadmium	<1
Barium	36.0
Lead	4.32

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P7:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-13
Date Analyzed:	07/24/12	Data File:	207273-13.039
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	102	60	125
Indium	94	60	125
Holmium	104	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	13.2
Arsenic	1.73
Selenium	<1
Silver	<1
Cadmium	<1
Barium	37.1
Lead	1.70

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	T1:4	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	207273-15
Date Analyzed:	07/24/12	Data File:	207273-15.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	101	60	125
Indium	97	60	125
Holmium	104	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	17.0
Arsenic	5.70
Selenium	<1
Silver	<1
Cadmium	<1
Barium	58.6
Lead	32.2

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/23/12	Lab ID:	I2-487 mb
Date Analyzed:	07/24/12	Data File:	I2-487 mb rr.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125
Indium	97	60	125
Holmium	103	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
Date Received: 07/20/12  
Project: Mill Creek, F&BI 207273  
Date Extracted: 07/23/12  
Date Analyzed: 07/23/12

**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>
P1:0 207273-01	<0.1
P2:0 207273-03	<0.1
P3:0 207273-05	<0.1
P4:0 207273-07	<0.1
P5:0 207273-09	<0.1
P6:0 207273-11	<0.1
P7:0 207273-13	<0.1
T1:4 207273-15	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P1:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-01
Date Analyzed:	07/21/12	Data File:	072045.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	101	50	150

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:	P2:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-03
Date Analyzed:	07/21/12	Data File:	072046.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	100	50	150

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:	P3:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-05
Date Analyzed:	07/21/12	Data File:	072047.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	102	50	150

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:	P4:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-07
Date Analyzed:	07/21/12	Data File:	072048.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	103	50	150

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:	P5:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-09
Date Analyzed:	07/21/12	Data File:	072049.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	100	50	150

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:	P6:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-11
Date Analyzed:	07/21/12	Data File:	072050.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

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:	P7:0	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-13
Date Analyzed:	07/21/12	Data File:	072051.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	101	50	150

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:	T1:4	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	207273-15
Date Analyzed:	07/21/12	Data File:	072052.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	101	50	150

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:	Environmental Partners
Date Received:	NA	Project:	Mill Creek, F&BI 207273
Date Extracted:	07/20/12	Lab ID:	02-1266 mb
Date Analyzed:	07/20/12	Data File:	072013.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

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: 08/01/12  
 Date Received: 07/20/12  
 Project: Mill Creek, F&BI 207273  
 Date Extracted: 07/23/12  
 Date Analyzed: 07/26/12

**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>	
P1:0 207273-01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	118
P2:0 207273-03	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	114
P3:0 207273-05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	112
P4:0 207273-07	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	116
P5:0 207273-09	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	101
P6:0 207273-11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	120
P7:0 207273-13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	120
Method Blank	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	103

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 207273-03 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	95	61-153



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

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

Laboratory Code: 207262-02 (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	107	107	64-133	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	101	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

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

Laboratory Code: 207294-04 (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	12.8	95 b	98 b	63-120	3 b
Arsenic	mg/kg (ppm)	10	1.87	101	100	56-125	1
Selenium	mg/kg (ppm)	5	<1	91	96	64-118	5
Silver	mg/kg (ppm)	10	<1	105	104	83-112	1
Cadmium	mg/kg (ppm)	10	<1	108	109	85-117	1
Barium	mg/kg (ppm)	50	34.6	102 b	105 b	65-132	3 b
Lead	mg/kg (ppm)	50	2.72	101	103	64-139	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	111	81-117
Arsenic	mg/kg (ppm)	10	101	79-112
Selenium	mg/kg (ppm)	5	91	83-113
Silver	mg/kg (ppm)	10	104	85-113
Cadmium	mg/kg (ppm)	10	107	88-114
Barium	mg/kg (ppm)	50	103	87-113
Lead	mg/kg (ppm)	50	106	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

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

Laboratory Code: 207294-04 (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	93	99	54-156	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	88	73-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

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

Laboratory Code: 207257-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	9 vo	50-150
Chloromethane	mg/kg (ppm)	2.5	<0.5	31 vo	50-150
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	31 vo	50-150
Bromomethane	mg/kg (ppm)	2.5	<0.5	38 vo	50-150
Chloroethane	mg/kg (ppm)	2.5	<0.5	40 vo	50-150
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	28 vo	50-150
Acetone	mg/kg (ppm)	12.5	<0.5	67	50-150
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	40 vo	50-150
Methylene chloride	mg/kg (ppm)	2.5	<0.5	57	50-150
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	62	50-150
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	48 vo	50-150
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	55	50-150
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	54	50-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	50-150
Chloroform	mg/kg (ppm)	2.5	<0.05	61	50-150
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	64	50-150
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	61	50-150
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	55	50-150
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	52	50-150
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	55	50-150
Benzene	mg/kg (ppm)	2.5	<0.03	56	50-150
Trichloroethene	mg/kg (ppm)	2.5	<0.03	56	50-150
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	60	50-150
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	69	50-150
Dibromomethane	mg/kg (ppm)	2.5	<0.05	63	50-150
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	68	50-150
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	65	50-150
Toluene	mg/kg (ppm)	2.5	<0.05	62	50-150
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	67	50-150
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	50-150
2-Hexanone	mg/kg (ppm)	12.5	<0.5	70	50-150
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	65	50-150
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	59	50-150
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	75	50-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	67	50-150
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	64	50-150
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	63	50-150
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	69	50-150
m,p-Xylene	mg/kg (ppm)	5	<0.1	64	50-150
o-Xylene	mg/kg (ppm)	2.5	<0.05	64	50-150
Styrene	mg/kg (ppm)	2.5	<0.05	66	50-150
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	64	50-150
Bromoform	mg/kg (ppm)	2.5	<0.05	78	50-150
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	65	50-150
Bromobenzene	mg/kg (ppm)	2.5	<0.05	66	50-150
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	66	50-150
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	68	50-150
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	69	50-150
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	64	50-150
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	65	50-150
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	66	50-150
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	65	50-150
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	65	50-150
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	66	50-150
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	65	50-150
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	65	50-150
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	66	50-150
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	73	50-150
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	63	50-150
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	64	50-150
Naphthalene	mg/kg (ppm)	2.5	<0.05	67	50-150
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	68	50-150

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

**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	52	53	10-79	2
Chloromethane	mg/kg (ppm)	2.5	67	73	26-95	9
Vinyl chloride	mg/kg (ppm)	2.5	79	81	36-100	2
Bromomethane	mg/kg (ppm)	2.5	71	75	47-99	5
Chloroethane	mg/kg (ppm)	2.5	75	75	28-114	0
Trichlorofluoromethane	mg/kg (ppm)	2.5	80	83	39-118	4
Acetone	mg/kg (ppm)	12.5	98	102	50-124	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	86	89	47-121	3
Methylene chloride	mg/kg (ppm)	2.5	91	95	50-134	4
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	93	97	53-123	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	94	47-121	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	94	96	55-117	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	103	106	52-129	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	101	66-116	3
Chloroform	mg/kg (ppm)	2.5	97	100	58-120	3
2-Butanone (MEK)	mg/kg (ppm)	12.5	96	100	68-109	4
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	94	97	48-127	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	98	100	57-125	2
1,1-Dichloropropene	mg/kg (ppm)	2.5	95	98	60-115	3
Carbon tetrachloride	mg/kg (ppm)	2.5	102	105	57-130	3
Benzene	mg/kg (ppm)	2.5	93	96	56-117	3
Trichloroethene	mg/kg (ppm)	2.5	93	95	64-114	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	95	100	66-113	5
Bromodichloromethane	mg/kg (ppm)	2.5	103	105	76-113	2
Dibromomethane	mg/kg (ppm)	2.5	98	101	62-121	3
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	99	103	63-126	4
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	104	107	75-117	3
Toluene	mg/kg (ppm)	2.5	99	100	61-115	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	107	110	74-117	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	99	101	73-111	2
2-Hexanone	mg/kg (ppm)	12.5	103	105	50-129	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	99	101	60-118	2
Tetrachloroethene	mg/kg (ppm)	2.5	99	102	59-120	3
Dibromochloromethane	mg/kg (ppm)	2.5	108	110	72-117	2
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	103	105	71-113	2
Chlorobenzene	mg/kg (ppm)	2.5	99	102	64-112	3
Ethylbenzene	mg/kg (ppm)	2.5	100	103	60-121	3
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	110	74-118	3
m,p-Xylene	mg/kg (ppm)	5	101	103	63-118	2
o-Xylene	mg/kg (ppm)	2.5	100	103	64-117	3
Styrene	mg/kg (ppm)	2.5	102	104	67-120	2
Isopropylbenzene	mg/kg (ppm)	2.5	100	103	65-118	3
Bromoform	mg/kg (ppm)	2.5	105	108	47-145	3
n-Propylbenzene	mg/kg (ppm)	2.5	100	102	67-115	2
Bromobenzene	mg/kg (ppm)	2.5	99	103	69-115	4
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	100	103	67-118	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	101	104	73-111	3
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	99	103	46-125	4
2-Chlorotoluene	mg/kg (ppm)	2.5	99	102	64-115	3
4-Chlorotoluene	mg/kg (ppm)	2.5	99	102	66-114	3
tert-Butylbenzene	mg/kg (ppm)	2.5	100	104	70-113	4
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	100	103	67-117	3
sec-Butylbenzene	mg/kg (ppm)	2.5	100	104	68-116	4
p-Isopropyltoluene	mg/kg (ppm)	2.5	101	104	69-117	3
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	98	102	67-113	4
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	97	101	67-110	4
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	99	101	71-109	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	102	105	70-119	3
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	97	101	75-109	4
Hexachlorobutadiene	mg/kg (ppm)	2.5	99	102	70-116	3
Naphthalene	mg/kg (ppm)	2.5	99	106	72-113	7
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	100	106	74-113	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek, F&BI 207273

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

Laboratory Code: 207294-12 (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)	1.6	96	88	60-142	9
Aroclor 1260	mg/kg (ppm)	0.8	102	96	63-144	6

**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.

207273

SAMPLE CHAIN OF CUSTODY

ME 07/20/12

VSZ/BT-2  
Page # 1 of 2

Send Report To Erik Koltas  
Company EPT  
Address 295 NE Gilman Blvd Suite 201  
City, State, ZIP Issaquah WA 98027  
Phone # 425-395-0010 Fax #

SAMPLERS (signature) <u>Mary Holder</u>	
PROJECT NAME/NO. <u>Mill Creek</u>	PO#
REMARKS	

<b>TURNAROUND TIME</b> <input type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH Rush charges authorized by _____
<b>SAMPLE DISPOSAL</b> <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBS 8092	PCBA 8 metals					
P1:0	01	7/19/12	1201	Soil	5	XX		X				XX	X					
P1:3	02		1220		5													Archive
P2:0	03		1240		5	XX		X				XX	X					
P2:3	04		1245		5													Archive
P3:0	05		1306		5	XX		X				XX	X					
P3:3	06		1316		5													Archive
P4:0	07		1347		5	XX		X				XX	X					
P4:3	08		1352		5													Archive
P5:0	09		1449		5	XX		X				XX	X					
P5:3	10		1454		5													Archive

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>Mary Holder</u>	MARY HOLDER	EPT	7/20/12	1050
Received by: <u>Nhan Phan</u>	Nhan Phan	FEBT	7/20/12	1050
Relinquished by:				
Received by:				

Samples received at 4 °C



207273

SAMPLE CHAIN OF CUSTODY

ME 07/20/12

vs2/BI3  
Page # 2 of 2

Send Report To Erik Koltes  
Company EPI  
Address \_\_\_\_\_  
City, State, ZIP \_\_\_\_\_  
Phone # \_\_\_\_\_ Fax # \_\_\_\_\_

SAMPLERS (signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>Mill Creek</u>	PO#
REMARKS	

<b>TURNAROUND TIME</b> <input type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH Rush charges authorized by _____
<b>SAMPLE DISPOSAL</b> <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED								Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBs 80 82	PCRA 8 metals	
P6:0	11 <sup>A</sup> E	7/19/12	1512	Soil	5	XX		X				X	X	
P6:3	12	↓	1520	↓	5									Archive
P7:0	13	↓	1536	↓	5	XX		X				X	X	
P7:3	14 <sup>D</sup>	↓	1550	↓	5									Archive
T1:4	15 <sup>A</sup> D	↓	1604	↓	5	X		X				X		

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>	<u>Mary Holder</u>	<u>EPI</u>	<u>7/20/12</u>	<u>10:50</u>
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FBI</u>	<u>07/20/12</u>	<u>10:50</u>
Relinquished by:				
Received by:		Samples received at	<u>4</u>	<u>OC</u>

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

August 1, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek 63801.0

Dear Mr. Koltes:

Included are the results from the testing of material submitted on July 20, 2012 from the Mill Creek 63801.0, F&BI 207294 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0801R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 20, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek 63801.0, F&BI 207294 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
207294-01	U-1:15
207294-02	U-2:15
207294-03	U-3:8
207294-04	I-1:5
207294-05	I-1:3
207294-06	I-2:5
207294-07	I-2:3
207294-08	I-3:5
207294-09	I-3:3
207294-10	I-4:5
207294-11	I-4:3
207294-12	T-1A:4
207294-13	T-1A:7
207294-14	P-8:1
207294-15	P-8:3

The 8260C calibration standard failed the acceptance criteria for dichlorofluoromethane. The data were flagged accordingly.

Several 8260C compounds failed below the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

Several compounds in the 8260C laboratory control sample and laboratory control sample duplicate exceeded the acceptance criteria. The analytes were not detected in the sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
Date Received: 07/20/12  
Project: Mill Creek 63801.0, F&BI 207294  
Date Extracted: 07/23/12  
Date Analyzed: 07/23/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis  
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 58-139)
I-1:.5 207294-04	<2	91
I-2:.5 207294-06	<2	93
I-3:.5 207294-08	<2	96
I-4:.5 207294-10	<2	92
P-8:1 207294-14	<2	92
Method Blank 02-1296 MB	<2	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
Date Received: 07/20/12  
Project: Mill Creek 63801.0, F&BI 207294  
Date Extracted: 07/23/12  
Date Analyzed: 07/23/12

**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)
U-1:15 207294-01	<0.02	<0.02	<0.02	<0.06	<2	75
U-2:15 207294-02	<0.02	<0.02	<0.02	<0.06	<2	79
U-3:8 207294-03	<0.02	<0.02	<0.02	<0.06	<2	79
Method Blank 02-1296 MB	<0.02	<0.02	<0.02	<0.06	<2	77

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
 Date Received: 07/20/12  
 Project: Mill Creek 63801.0, F&BI 207294  
 Date Extracted: 07/23/12  
 Date Analyzed: 07/23/12

**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> (% Recovery) (Limit 50-150)
U-1:15 207294-01	<50	<250	123
U-2:15 207294-02	<50	<250	108
U-3:8 207294-03	<50	<250	108
I-1:.5 207294-04	<50	<250	109
I-2:.5 207294-06	<50	<250	110
I-3:.5 207294-08	<50	<250	110
I-4:.5 207294-10	<50	<250	107
T-1A:4 207294-12	<50	<250	108
P-8:1 207294-14	<50	<250	101
Method Blank 02-1292 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	I-1.:5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-04
Date Analyzed:	07/24/12	Data File:	207294-04.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	98	60	125
Indium	94	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	12.8
Arsenic	1.87
Selenium	<1
Silver	<1
Cadmium	<1
Barium	34.6
Lead	2.72

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	I-2.:5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-06
Date Analyzed:	07/24/12	Data File:	207294-06.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	115	60	125
Indium	95	60	125
Holmium	103	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	22.7
Arsenic	2.80
Selenium	<1
Silver	<1
Cadmium	<1
Barium	86.5
Lead	5.50



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	I-3.:5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-08
Date Analyzed:	07/24/12	Data File:	207294-08.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	96	60	125
Holmium	104	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	7.50
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	23.2
Lead	1.29

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	I-4.:5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-10
Date Analyzed:	07/24/12	Data File:	207294-10.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	104	60	125
Indium	95	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	11.7
Arsenic	1.96
Selenium	<1
Silver	<1
Cadmium	<1
Barium	41.5
Lead	2.80

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	T-1A:4	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-12
Date Analyzed:	07/24/12	Data File:	207294-12.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	93	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	14.5
Arsenic	1.55
Selenium	<1
Silver	<1
Cadmium	<1
Barium	35.7
Lead	19.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-8:1	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-14
Date Analyzed:	07/24/12	Data File:	207294-14.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	105	60	125
Indium	95	60	125
Holmium	102	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	16.2
Arsenic	6.02
Selenium	<1
Silver	<1
Cadmium	<1
Barium	69.1
Lead	8.41

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	I2-487 mb
Date Analyzed:	07/24/12	Data File:	I2-487 mb rr.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125
Indium	97	60	125
Holmium	103	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12  
Date Received: 07/20/12  
Project: Mill Creek 63801.0, F&BI 207294  
Date Extracted: 07/23/12  
Date Analyzed: 07/23/12

**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>
I-1:.5 207294-04	<0.1
I-2:.5 207294-06	<0.1
I-3:.5 207294-08	<0.1
I-4:.5 207294-10	<0.1
T-1A:4 207294-12	<0.1
P-8:1 207294-14	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	I-1.:5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-04
Date Analyzed:	07/23/12	Data File:	072324.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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:	I-2:.5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-06
Date Analyzed:	07/23/12	Data File:	072325.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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:	I-3:.5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-08
Date Analyzed:	07/23/12	Data File:	072326.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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:	I-4.:5	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-10
Date Analyzed:	07/23/12	Data File:	072327.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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:	T-1A:4	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-12
Date Analyzed:	07/23/12	Data File:	072328.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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:	P-8:1	Client:	Environmental Partners
Date Received:	07/20/12	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	207294-14
Date Analyzed:	07/24/12	Data File:	072329.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	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:	Environmental Partners
Date Received:	NA	Project:	Mill Creek 63801.0, F&BI 207294
Date Extracted:	07/23/12	Lab ID:	02-1267 mb
Date Analyzed:	07/23/12	Data File:	072308.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	100	50	150

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: 08/01/12  
 Date Received: 07/20/12  
 Project: Mill Creek 63801.0, F&BI 207294  
 Date Extracted: 07/23/12  
 Date Analyzed: 07/26/12

**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>	
T-1A:4 207294-12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	111
P-8:1 207294-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	123
Method Blank	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	103

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

**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: 207294-01 (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	80	66-121
Toluene	mg/kg (ppm)	0.5	81	72-128
Ethylbenzene	mg/kg (ppm)	0.5	83	69-132
Xylenes	mg/kg (ppm)	1.5	83	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

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

Laboratory Code: 207293-02 (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	1,200	109	108	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	103	79-144



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

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

Laboratory Code: 207294-04 (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	12.8	95 b	98 b	63-120	3 b
Arsenic	mg/kg (ppm)	10	1.87	101	100	56-125	1
Selenium	mg/kg (ppm)	5	<1	91	96	64-118	5
Silver	mg/kg (ppm)	10	<1	105	104	83-112	1
Cadmium	mg/kg (ppm)	10	<1	108	109	85-117	1
Barium	mg/kg (ppm)	50	34.6	102 b	105 b	65-132	3 b
Lead	mg/kg (ppm)	50	2.72	101	103	64-139	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	111	81-117
Arsenic	mg/kg (ppm)	10	101	79-112
Selenium	mg/kg (ppm)	5	91	83-113
Silver	mg/kg (ppm)	10	104	85-113
Cadmium	mg/kg (ppm)	10	107	88-114
Barium	mg/kg (ppm)	50	103	87-113
Lead	mg/kg (ppm)	50	106	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

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

Laboratory Code: 207294-04 (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	93	99	54-156	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	88	73-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

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

Laboratory Code: 207295-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	18 vo	50-150
Chloromethane	mg/kg (ppm)	2.5	<0.5	43 vo	50-150
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	47 vo	50-150
Bromomethane	mg/kg (ppm)	2.5	<0.5	53	50-150
Chloroethane	mg/kg (ppm)	2.5	<0.5	53	50-150
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	51	50-150
Acetone	mg/kg (ppm)	12.5	<0.5	87	50-150
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	63	50-150
Methylene chloride	mg/kg (ppm)	2.5	<0.5	79	50-150
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	85	50-150
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	50-150
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	81	50-150
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	90	50-150
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	85	50-150
Chloroform	mg/kg (ppm)	2.5	<0.05	88	50-150
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	87	50-150
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	86	50-150
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	84	50-150
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	80	50-150
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	88	50-150
Benzene	mg/kg (ppm)	2.5	<0.03	82	50-150
Trichloroethene	mg/kg (ppm)	2.5	<0.03	83	50-150
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	86	50-150
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	105	50-150
Dibromomethane	mg/kg (ppm)	2.5	<0.05	90	50-150
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	93	50-150
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	101	50-150
Toluene	mg/kg (ppm)	2.5	<0.05	87	50-150
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	102	50-150
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	90	50-150
2-Hexanone	mg/kg (ppm)	12.5	<0.5	93	50-150
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	89	50-150
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	88	50-150
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	127	50-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	95	50-150
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	90	50-150
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	91	50-150
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	99	50-150
m,p-Xylene	mg/kg (ppm)	5	<0.1	91	50-150
o-Xylene	mg/kg (ppm)	2.5	<0.05	92	50-150
Styrene	mg/kg (ppm)	2.5	<0.05	94	50-150
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	92	50-150
Bromoform	mg/kg (ppm)	2.5	<0.05	145	50-150
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	91	50-150
Bromobenzene	mg/kg (ppm)	2.5	<0.05	91	50-150
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	92	50-150
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	93	50-150
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	91	50-150
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	90	50-150
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	90	50-150
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	92	50-150
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	92	50-150
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	93	50-150
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	96	50-150
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	91	50-150
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	92	50-150
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	92	50-150
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	112	50-150
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	91	50-150
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	92	50-150
Naphthalene	mg/kg (ppm)	2.5	<0.05	93	50-150
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	94	50-150

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

**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	49	44	10-79	11
Chloromethane	mg/kg (ppm)	2.5	67	67	26-95	0
Vinyl chloride	mg/kg (ppm)	2.5	77	78	36-100	1
Bromomethane	mg/kg (ppm)	2.5	71	71	47-99	0
Chloroethane	mg/kg (ppm)	2.5	72	73	28-114	1
Trichlorofluoromethane	mg/kg (ppm)	2.5	79	79	39-118	0
Acetone	mg/kg (ppm)	12.5	95	95	50-124	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	88	87	47-121	1
Methylene chloride	mg/kg (ppm)	2.5	96	94	50-134	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	96	95	53-123	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	92	91	47-121	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	96	96	55-117	0
2,2-Dichloropropane	mg/kg (ppm)	2.5	107	106	52-129	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	100	100	66-116	0
Chloroform	mg/kg (ppm)	2.5	98	98	58-120	0
2-Butanone (MEK)	mg/kg (ppm)	12.5	94	94	68-109	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	96	96	48-127	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	101	99	57-125	2
1,1-Dichloropropene	mg/kg (ppm)	2.5	98	96	60-115	2
Carbon tetrachloride	mg/kg (ppm)	2.5	108	106	57-130	2
Benzene	mg/kg (ppm)	2.5	96	95	56-117	1
Trichloroethene	mg/kg (ppm)	2.5	95	95	64-114	0
1,2-Dichloropropane	mg/kg (ppm)	2.5	99	98	66-113	1
Bromodichloromethane	mg/kg (ppm)	2.5	120 vo	117 vo	76-113	3
Dibromomethane	mg/kg (ppm)	2.5	99	100	62-121	1
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	103	101	63-126	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	112	112	75-117	0
Toluene	mg/kg (ppm)	2.5	101	98	61-115	3
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	116	113	74-117	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	101	98	73-111	3
2-Hexanone	mg/kg (ppm)	12.5	98	100	50-129	2
1,3-Dichloropropane	mg/kg (ppm)	2.5	100	99	60-118	1
Tetrachloroethene	mg/kg (ppm)	2.5	100	101	59-120	1
Dibromochloromethane	mg/kg (ppm)	2.5	148 vo	143 vo	72-117	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	105	104	71-113	1
Chlorobenzene	mg/kg (ppm)	2.5	100	99	64-112	1
Ethylbenzene	mg/kg (ppm)	2.5	102	101	60-121	1
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	113	110	74-118	3
m,p-Xylene	mg/kg (ppm)	5	102	102	63-118	0
o-Xylene	mg/kg (ppm)	2.5	102	101	64-117	1
Styrene	mg/kg (ppm)	2.5	103	103	67-120	0
Isopropylbenzene	mg/kg (ppm)	2.5	102	101	65-118	1
Bromoform	mg/kg (ppm)	2.5	163 vo	160 vo	47-145	2
n-Propylbenzene	mg/kg (ppm)	2.5	101	100	67-115	1
Bromobenzene	mg/kg (ppm)	2.5	101	100	69-115	1
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	102	101	67-118	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	102	104	73-111	2
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	101	100	46-125	1
2-Chlorotoluene	mg/kg (ppm)	2.5	100	99	64-115	1
4-Chlorotoluene	mg/kg (ppm)	2.5	101	100	66-114	1
tert-Butylbenzene	mg/kg (ppm)	2.5	104	102	70-113	2
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	102	101	67-117	1
sec-Butylbenzene	mg/kg (ppm)	2.5	102	101	68-116	1
p-Isopropyltoluene	mg/kg (ppm)	2.5	104	103	69-117	1
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	101	100	67-113	1
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	100	99	67-110	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	100	99	71-109	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	123 vo	123 vo	70-119	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	101	101	75-109	0
Hexachlorobutadiene	mg/kg (ppm)	2.5	102	101	70-116	1
Naphthalene	mg/kg (ppm)	2.5	103	103	72-113	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	104	103	74-113	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/01/12

Date Received: 07/20/12

Project: Mill Creek 63801.0, F&BI 207294

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

Laboratory Code: 207294-12 (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)	1.6	96	88	60-142	9
Aroclor 1260	mg/kg (ppm)	0.8	102	96	63-144	6

**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.

207294

SAMPLE CHAIN OF CUSTODY ME 07-20-12

VS 3 / E03  
Page # 1 of 2

Send Report To Eric Colter  
 Company EPI  
 Address 295 NE Gilman Ave  
 City, State, ZIP Irrigah, WA 98027  
 Phone # 425-281-3629 Fax #

SAMPLERS (signature) \_\_\_\_\_  
 PROJECT NAME/NO. Mill Creek / 63801.0 PO# \_\_\_\_\_  
 REMARKS \_\_\_\_\_

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	RCRA 8 Metals					
U-1:15	01A-E	7/19/20	10:26	soil	5	X	X	X									
U-2:15	02	"	12:26		5	X	X	X									
U-3:8	03	7/20/20	0908		5	X	X	X									
I-1:5	04		11:44		5	X	X		X			X					
I-1:3	05		11:49		5												Archive
I-2:5	06		11:55		5	X	X		X			X					
I-2:3	07		12:05		5												Archive
I-3:5	08		12:18		5	X	X		X			X					
I-3:3	09		12:25		5												Archive
I-4:5	10		13:20		5	X	X		X			X					

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	Eric Caddey	EPI	7/20/20	16:10
	VINTA	FBI	7/20/20	16:10
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

received at 4 °C

207294

SAMPLE CHAIN OF CUSTODY

ME 07-20-12

V53/E03  
2 of 2

Send Report To Eric Kaltes

Company EPI

Address 295 NE Gilman Blvd Ste 201

City, State, ZIP Irving, WA 98027

Phone # 425-281-3624 Fax #

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. M-V Creek / 63801.0 PO#

REMARKS

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	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBS	8 ALIPHATIC				
I-4:3	11 AE	7/20/12	13:30	soil	5												Archive
T-1A:4	12 T		14:10		5	X			X				X	X			
T-1A:7	13		14:20		5												Archive
P-8:1	14		14:30		5	X	X		X				X	X			
P-8:3	15		14:35		5												not received Archive

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	Eric Caddox	EPI	7/20/12	16:10
<u>[Signature]</u>	VINH	FBI	7/20/12	16:10
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

not received at 4



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

August 2, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek Trust, PO 63801.0

Dear Mr. Koltes:

Included are the results from the testing of material submitted on July 24, 2012 from the Mill Creek Trust, PO 63801.0, F&BI 207338 project. There are 50 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Jerry Boyd  
EPI0802R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 24, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek Trust, PO 63801.0, F&BI 207338 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
207338-01	T-2:1.75
207338-02	T-2:4.5
207338-03	T-3:2
207338-04	T-3:5.5
207338-05	P-9:1.5
207338-06	P-9:4
207338-07	P-10:1.5
207338-08	P-10:4
207338-09	C-1:0.75
207338-10	C-2:0.75
207338-11	C-3:0.75
207338-12	C-7
207338-13	C-8
207338-14	C-9
207338-15	C-4
207338-16	C-5
207338-17	C-6
207338-18	P-11
207338-19	P-12
207338-20	P-13
207338-21	P-14

For the PCB analysis of the wipe samples the 1016 and 1260 aroclor failed below the laboratory control sample acceptance criteria. The data were flagged accordingly.

Dichlorofluoromethane failed below the acceptance criteria in the matrix spike sample. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

The 8260C laboratory control sample and laboratory control sample duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

Date Extracted: 07/25/12

Date Analyzed: 07/25/12

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 58-139)
P-9:1.5 207338-05	<2	94
P-10:1.5 207338-07	<2	94
C-1:0.75 207338-09	<2	95
C-2:0.75 207338-10	<2	94
C-3:0.75 207338-11	<2	94
Method Blank 02-1306 MB	<2	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

Date Extracted: 07/25/12

Date Analyzed: 07/25/12

**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> (% Recovery) (Limit 53-144)
T-2:1.75 207338-01	<50	<250	93
T-2:4.5 207338-02	<50	<250	100
T-3:2 207338-03	<50	<250	89
P-9:1.5 207338-05	<50	<250	95
P-10:1.5 207338-07	<50	<250	97
C-1:0.75 207338-09	<50	<250	99
C-2:0.75 207338-10	<50	<250	100
C-3:0.75 207338-11	<50	<250	91
Method Blank 02-1308 MB	<50	<250	93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	T-2:1.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-01
Date Analyzed:	07/27/12	Data File:	207338-01.018
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

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

Analyte:	Concentration mg/kg (ppm)
Chromium	21.2
Arsenic	3.24
Selenium	<1
Silver	<1
Cadmium	<1
Barium	34.6
Lead	2.14

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	T-2:4.5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-02
Date Analyzed:	07/27/12	Data File:	207338-02.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	96	60	125
Indium	85	60	125
Holmium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	17.1
Arsenic	1.16
Selenium	<1
Silver	<1
Cadmium	<1
Barium	35.1
Lead	1.99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	T-3:2	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-03
Date Analyzed:	07/27/12	Data File:	207338-03.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	100	60	125
Indium	85	60	125
Holmium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	21.0
Arsenic	1.43
Selenium	<1
Silver	<1
Cadmium	<1
Barium	51.7
Lead	3.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-9:1.5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-05
Date Analyzed:	07/27/12	Data File:	207338-05.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	95	60	125
Indium	82	60	125
Holmium	85	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	14.6
Arsenic	2.02
Selenium	<1
Silver	<1
Cadmium	<1
Barium	40.9
Lead	11.4



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	P-10:1.5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-07
Date Analyzed:	07/27/12	Data File:	207338-07.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	99	60	125
Indium	85	60	125
Holmium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	11.8
Arsenic	2.42
Selenium	<1
Silver	<1
Cadmium	<1
Barium	45.2
Lead	19.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-1:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-09
Date Analyzed:	07/27/12	Data File:	207338-09.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	99	60	125
Indium	82	60	125
Holmium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	16.9
Arsenic	1.74
Selenium	<1
Silver	<1
Cadmium	<1
Barium	43.5
Lead	6.49

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-2:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-10
Date Analyzed:	07/27/12	Data File:	207338-10.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	114	60	125
Indium	86	60	125
Holmium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	18.4
Arsenic	2.98
Selenium	<1
Silver	1.69
Cadmium	<1
Barium	65.7
Lead	47.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	C-3:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-11
Date Analyzed:	07/27/12	Data File:	207338-11.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	100	60	125
Indium	84	60	125
Holmium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	15.2
Arsenic	1.86
Selenium	<1
Silver	<1
Cadmium	<1
Barium	58.0
Lead	6.67

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	I2-502 mb
Date Analyzed:	07/27/12	Data File:	I2-502 mb.016
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	87	60	125
Indium	86	60	125
Holmium	89	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

Date Extracted: 07/27/12

Date Analyzed: 07/30/12

**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>
T-2:1.75 207338-01	<0.1
T-2:4.5 207338-02	<0.1
T-3:2 207338-03	<0.1
P-9:1.5 207338-05	<0.1
P-10:1.5 207338-07	<0.1
C-1:0.75 207338-09	<0.1
C-2:0.75 207338-10	<0.1
C-3:0.75 207338-11	<0.1
Method Blank	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	T-2:1.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/25/12	Lab ID:	207338-01
Date Analyzed:	07/30/12	Data File:	073017.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	T-2:4.5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/25/12	Lab ID:	207338-02
Date Analyzed:	07/30/12	Data File:	073018.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	T-3:2	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/25/12	Lab ID:	207338-03
Date Analyzed:	07/30/12	Data File:	073019.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: P-9:1.5	Client: Environmental Partners
Date Received: 07/24/12	Project: Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted: 07/25/12	Lab ID: 207338-05
Date Analyzed: 07/30/12	Data File: 073020.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	98	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: P-10:1.5	Client: Environmental Partners
Date Received: 07/24/12	Project: Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted: 07/25/12	Lab ID: 207338-07
Date Analyzed: 07/30/12	Data File: 073021.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	96	55	145
4-Bromofluorobenzene	100	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:	C-1:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/25/12	Lab ID:	207338-09
Date Analyzed:	07/30/12	Data File:	073022.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	C-2:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/25/12	Lab ID:	207338-10
Date Analyzed:	07/30/12	Data File:	073023.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: C-3:0.75	Client: Environmental Partners
Date Received: 07/24/12	Project: Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted: 07/25/12	Lab ID: 207338-11
Date Analyzed: 07/30/12	Data File: 073024.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm)	Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	100	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:	Environmental Partners
Date Received:	NA	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/25/12	Lab ID:	02-1270 mb
Date Analyzed:	07/30/12	Data File:	073004.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	100	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 PCBs By EPA Method 8082

Client Sample ID:	P-9:1.5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/30/12	Lab ID:	207338-05
Date Analyzed:	07/31/12	Data File:	073116.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	124	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-10:1.5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/30/12	Lab ID:	207338-07
Date Analyzed:	07/31/12	Data File:	073120.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	104	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-1:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/30/12	Lab ID:	207338-09
Date Analyzed:	07/31/12	Data File:	073122.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	117	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-2:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/30/12	Lab ID:	207338-10
Date Analyzed:	07/31/12	Data File:	073124.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	110	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	1.3
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-3:0.75	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/30/12	Lab ID:	207338-11
Date Analyzed:	07/31/12	Data File:	073126.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	101	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/30/12	Lab ID:	02-1338 mb
Date Analyzed:	07/31/12	Data File:	073110.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	ML

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	118	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-7	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-12
Date Analyzed:	07/30/12	Data File:	073020.D\ECD1A.CH
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	98	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-8	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-13
Date Analyzed:	07/30/12	Data File:	073022.D\ECD1A.CH
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	91	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-9	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-14
Date Analyzed:	07/30/12	Data File:	073024.D\ECD1A.CH
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	95	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	02-1336 mb
Date Analyzed:	07/30/12	Data File:	073014.D\ECD1A.CH
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	115	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-4	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-15
Date Analyzed:	07/30/12	Data File:	073036.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	103	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	<1.0
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-5	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-16
Date Analyzed:	07/31/12	Data File:	073038.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	100	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	<1.0
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	C-6	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-17
Date Analyzed:	07/31/12	Data File:	073040.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	86	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	<1.0
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-11	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-18
Date Analyzed:	07/31/12	Data File:	073042.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	80	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	2.7 jl
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-12	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-19
Date Analyzed:	07/31/12	Data File:	073044.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	83	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	4.6 jl
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-13	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-20
Date Analyzed:	07/31/12	Data File:	073046.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	75	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	2.2 jl
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	P-14	Client:	Environmental Partners
Date Received:	07/24/12	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	207338-21
Date Analyzed:	07/31/12	Data File:	073048.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	79	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	5.5 jl
Aroclor 1260	<1.0



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	NA	Project:	Mill Creek Trust, PO 63801.0, F&BI 207338
Date Extracted:	07/27/12	Lab ID:	02-1337 mb
Date Analyzed:	07/30/12	Data File:	073030.D\ECD1A.CH
Matrix:	Wipe	Instrument:	GC7
Units:	ug/wipe	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCX	75	50	150

Compounds:	Concentration ug/wipe
Aroclor 1221	<1.0
Aroclor 1232	<1.0
Aroclor 1016	<1.0
Aroclor 1242	<1.0
Aroclor 1248	<1.0
Aroclor 1254	<1.0
Aroclor 1260	<1.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 207333-04 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	mg/kg (ppm)	3 a	4 a	29 a

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	95	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: 207338-01 (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	112	101	64-133	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	105	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: 207338-01 (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	21.2	86 b	80 b	63-120	7 b
Arsenic	mg/kg (ppm)	10	3.24	105 b	100 b	56-125	5 b
Selenium	mg/kg (ppm)	5	<1	99	100	64-118	1
Silver	mg/kg (ppm)	10	<1	107	107	83-112	0
Cadmium	mg/kg (ppm)	10	<1	106	108	85-117	2
Barium	mg/kg (ppm)	50	34.6	107 b	109 b	65-132	2 b
Lead	mg/kg (ppm)	50	2.14	109	107	64-139	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	99	81-117
Arsenic	mg/kg (ppm)	10	102	79-112
Selenium	mg/kg (ppm)	5	104	83-113
Silver	mg/kg (ppm)	10	104	85-113
Cadmium	mg/kg (ppm)	10	108	88-114
Barium	mg/kg (ppm)	50	101	87-113
Lead	mg/kg (ppm)	50	108	83-118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: 207338-01 (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	76	86	54-156	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	82	73-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: 207335-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	7 vo	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	26	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	23	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	38	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	44	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	53	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	66	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	43	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	53	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	64	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	53	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	58	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	32	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	65	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	55	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	69	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	61	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	55	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	61	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	61	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.03	59	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	65	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	71	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	70	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	71	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	60	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	67	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	65	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	72	30-142
2-Hexanone	mg/kg (ppm)	12.5	<0.5	78	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	71	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	63	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	74	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	72	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	70	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	70	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	71	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	71	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	72	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	58	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	72	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	75	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	71	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	72	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	71	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	70	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	72	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	71	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	72	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	71	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	71	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	71	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	73	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	70	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	70	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	69	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	63	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	62	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	65	19-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	64	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	63	20-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

**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	49	29	10-146	51 vo
Chloromethane	mg/kg (ppm)	2.5	64	46	27-133	33 vo
Vinyl chloride	mg/kg (ppm)	2.5	73	53	22-139	32 vo
Bromomethane	mg/kg (ppm)	2.5	85	68	38-114	22 vo
Chloroethane	mg/kg (ppm)	2.5	84	72	20-153	15
Trichlorofluoromethane	mg/kg (ppm)	2.5	114	111	10-196	3
Acetone	mg/kg (ppm)	12.5	106	93	52-141	13
1,1-Dichloroethene	mg/kg (ppm)	2.5	91	75	47-128	19
Methylene chloride	mg/kg (ppm)	2.5	87	80	42-132	8
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	98	89	60-123	10
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	95	85	67-127	11
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	87	68-115	11
2,2-Dichloropropane	mg/kg (ppm)	2.5	129	121	57-133	6
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	92	72-113	7
Chloroform	mg/kg (ppm)	2.5	97	91	66-120	6
2-Butanone (MEK)	mg/kg (ppm)	12.5	111	105	57-123	6
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	97	90	56-135	7
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	104	96	62-131	8
1,1-Dichloropropene	mg/kg (ppm)	2.5	99	91	69-128	8
Carbon tetrachloride	mg/kg (ppm)	2.5	110	101	60-139	9
Benzene	mg/kg (ppm)	2.5	97	89	68-114	9
Trichloroethene	mg/kg (ppm)	2.5	88	82	68-114	7
1,2-Dichloropropane	mg/kg (ppm)	2.5	98	91	72-127	7
Bromodichloromethane	mg/kg (ppm)	2.5	103	96	72-130	7
Dibromomethane	mg/kg (ppm)	2.5	102	95	70-120	7
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	103	98	45-145	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	107	101	75-136	6
Toluene	mg/kg (ppm)	2.5	99	93	66-126	6
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	100	72-132	6
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	99	95	75-113	4
2-Hexanone	mg/kg (ppm)	12.5	96	89	33-152	8
1,3-Dichloropropane	mg/kg (ppm)	2.5	99	94	72-130	5
Tetrachloroethene	mg/kg (ppm)	2.5	100	94	72-114	6
Dibromochloromethane	mg/kg (ppm)	2.5	106	100	74-125	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	96	74-132	6
Chlorobenzene	mg/kg (ppm)	2.5	98	93	76-111	5
Ethylbenzene	mg/kg (ppm)	2.5	100	94	64-123	6
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	101	95	69-135	6
m,p-Xylene	mg/kg (ppm)	5	101	98	78-122	3
o-Xylene	mg/kg (ppm)	2.5	104	97	77-124	7
Styrene	mg/kg (ppm)	2.5	105	99	74-126	6
Isopropylbenzene	mg/kg (ppm)	2.5	101	96	76-127	5
Bromoform	mg/kg (ppm)	2.5	105	101	56-132	4
n-Propylbenzene	mg/kg (ppm)	2.5	102	94	74-124	8
Bromobenzene	mg/kg (ppm)	2.5	103	97	72-122	6
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	101	94	76-126	7
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	104	97	56-143	7
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	97	91	61-137	6
2-Chlorotoluene	mg/kg (ppm)	2.5	100	92	74-121	8
4-Chlorotoluene	mg/kg (ppm)	2.5	101	94	75-122	7
tert-Butylbenzene	mg/kg (ppm)	2.5	100	93	73-130	7
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	94	76-125	7
sec-Butylbenzene	mg/kg (ppm)	2.5	99	92	71-130	7
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	95	70-132	8
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	100	94	75-121	6
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	100	94	74-117	6
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	98	92	76-121	6
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	83	79	61-136	5
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	90	81	70-129	11
Hexachlorobutadiene	mg/kg (ppm)	2.5	93	84	50-153	10
Naphthalene	mg/kg (ppm)	2.5	90	82	60-125	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	90	80	62-130	12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: 207338-05 (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	106	110	70-130	4
Aroclor 1260	mg/kg (ppm)	0.8	102	96	70-130	6



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	25	95	83	70-130	13
Aroclor 1260	mg/kg (ppm)	25	92	87	70-130	6

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/24/12

Project: Mill Creek Trust, PO 63801.0, F&BI 207338

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/wipe (ppm)	50	61 vo	65 vo	70-130	6
Aroclor 1260	ug/wipe (ppm)	50	71	64 vo	70-130	10

**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.

207338

SAMPLE CHAIN OF CUSTODY

ME 07/24/12

US2/A004  
Page # 1 of 3

Send Report to Eric Kaltos  
 Company Environmental Partners Inc.  
 Address 295 NE Gilman Blvd, 57600  
 City, State, ZIP Issaquah, WA 98027  
 Phone # 425-395-0010 Fax #

SAMPLERS (signature) [Signature]  
 PROJECT NAME/NO. Mill Creek Truvt PO# 63801.0  
 REMARKS

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	8 PCBs Metals	PCBs					
T-2:1.75	01 <sup>A</sup> E	7/24/12	09:12	soil	5	X			X			X						
T-2:4.5	02 <sup>A</sup> E		09:25			X			X			X						
T-2:2	03 <sup>A</sup> E		09:41			X			X			X						
T-3:5.5	04 <sup>A</sup> E		09:50															Archive
P-9:1.5	05 <sup>A</sup> E		10:00			X	X		X			X	X					
P-9:4	06 <sup>A</sup> E		10:05															Archive
P-10:1.5	07 <sup>A</sup> E		10:20			X	X		X			X	X					
P-10:4	08 <sup>A</sup> E		10:25															Archive
C-1:1.75	09 <sup>A</sup> E		10:41			X	X		X			X	X					
C-2:1.75	10 <sup>A</sup> E		10:50			X	X		X			X	X					

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
<u>[Signature]</u>	Eric Caddey	EPI	7/24/12	15:15
<u>[Signature]</u>	Nhan Phan	FeBI	7/24/12	15:15
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Samples received at				6 °C

207338

SAMPLE CHAIN OF CUSTODY

ME 07/24/12

USA/ACU/ Page # 2 of 3

Send Report To Eric Koltas  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd, Ste 201  
 City, State, ZIP Irrigah, WA 98027  
 Phone # 425-395-0010 Fax # \_\_\_\_\_

SAMPLERS *(signature)*  
 PROJECT NAME/NO. Mill Creek Trust PO# 63801.0  
 REMARKS \_\_\_\_\_

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBs					
C-3:75	11A-E	7/24/12	10:54	soil	5	X	X		X			X	X				
C-7	12		11:00	oil	1								X				
C-8	13		11:09	↓	1								X				
C-9	14		11:22	↓	1								X				
C-4	15		11:55	wipe	1								X				10cm X 10cm
C-5	16		12:05	↓	1								X				"
C-6	17		12:11	↓	1								X				"
P-11	18		12:30	↓	1								X				"
P-12	19		12:47	↓	1								X				"
P-13	20		12:58	↓	1								X				"

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
<i>(Signature)</i>	Eric Caddell	EPI	7/24/12	15:15
<i>(Signature)</i>	Nhan Phan	FEBI	7/24/12	15:15
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
				Samples received at 6 °C

207338

SAMPLE CHAIN OF CUSTODY

ME 07/24/12

VSZ/A04

Page # 3 of 3

Send Report To Eric Kolter  
 Company Environmental Partners, Inc.  
 Address 295 NE Gilman Blvd, Ste 201  
 City, State, ZIP Prague, WA 98027  
 Phone # 425-395-0010 Fax #

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. Mill Creek Trwt PO# 63801.0

REMARKS

TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by \_\_\_\_\_

SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCBs					
P-14	21	7/24/12	13:13	wipgs	1								X				10cm x 10cm

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
<u>[Signature]</u>	Eric Cadey	EPI	7/24/12	15:15
<u>[Signature]</u>	Nhan Phan	Fe B T	7/24/12	V
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				
Samples received at				6 °C

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

August 2, 2012

Eric Koltes, Project Manager  
Environmental Partners, Inc.  
295 NE Gilman Blvd., Suite 201  
Issaquah, WA 98027

RE: Mill Creek, Job 63801.0

Dear Mr. Koltes:

Included are the results from the testing of material submitted on July 26, 2012 from the Mill Creek Trust, Job 63801.0, F&BI 207392 project. There are 14 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
EPI0802R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 26, 2012 by Friedman & Bruya, Inc. from the Environmental Partners Mill Creek Trust, Job 63801.0, F&BI 207392 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Partners</u>
207392-01	U-6:10
207392-02	U-6:15
207392-03	U-6:GW
207392-04	U-6:20
207392-05	U-7:10
207392-06	U-7:15
207392-07	U-7:20
207392-08	U-8:10
207392-09	U-8:15
207392-10	U-8:20
207392-11	U-9:10
207392-12	U-9:15
207392-13	U-9:20

All quality control requirements were acceptable.



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

Date Extracted: 07/27/12

Date Analyzed: 07/27/12

**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)
U-6:15 207392-02	<0.02	<0.02	<0.02	<0.06	<2	77
U-7:15 207392-06	<0.02	<0.02	<0.02	<0.06	<2	80
U-8:15 207392-09	<0.02	<0.02	<0.02	<0.06	<2	79
U-9:15 207392-12	<0.02	<0.02	<0.02	<0.06	<2	78
Method Blank 02-1319 MB	<0.02	<0.02	<0.02	<0.06	<2	75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

Date Extracted: 07/27/12

Date Analyzed: 07/27/12

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

Results Reported as ug/L (ppb)

<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)
U-6:GW 207392-03	<1	<1	<1	<3	<100	77
Method Blank 02-1320 MB	<1	<1	<1	<3	<100	77

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

Date Extracted: 07/27/12

Date Analyzed: 07/27/12 and 07/28/12

**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)
U-6:15 207392-02	<50	<250	121
U-7:15 207392-06	<50	<250	115
U-8:15 207392-09	<50	<250	109
U-9:15 207392-12	<50	<250	111
Method Blank 02-1317 MB	<50	<250	113

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

Date Extracted: 07/30/12

Date Analyzed: 07/31/12

**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)
U-6:GW 207392-03	<50	<250	127
Method Blank 02-1340 MB	<50	<250	109

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: U-6:GW	Client: Environmental Partners
Date Received: 07/26/12	Project: Mill Creek Trust, Job 63801.0, F&BI 207392
Date Extracted: 07/27/12	Lab ID: 207392-03
Date Analyzed: 07/27/12	Data File: 072713.D
Matrix: Water	Instrument: GCMS4
Units: ug/L (ppb)	Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	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	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	2.4	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	9.0	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:	Environmental Partners
Date Received:	NA	Project:	Mill Creek Trust, Job 63801.0, F&BI 207392
Date Extracted:	07/27/12	Lab ID:	02-1321 mb
Date Analyzed:	07/27/12	Data File:	072709.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	100	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: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

**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: 207379-01 (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	83	66-121
Toluene	mg/kg (ppm)	0.5	82	72-128
Ethylbenzene	mg/kg (ppm)	0.5	85	69-132
Xylenes	mg/kg (ppm)	1.5	83	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

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

Laboratory Code: 207397-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	90	72-119
Toluene	ug/L (ppb)	50	87	71-113
Ethylbenzene	ug/L (ppb)	50	87	72-114
Xylenes	ug/L (ppb)	150	82	72-113
Gasoline	ug/L (ppb)	1,000	100	70-119



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

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

Laboratory Code: 207379-01 (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	108	105	63-146	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

**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	83	84	63-142	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

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

Laboratory Code: 207400-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	105	10-172
Chloromethane	ug/L (ppb)	50	<10	100	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	101	36-166
Bromomethane	ug/L (ppb)	50	<1	102	47-169
Chloroethane	ug/L (ppb)	50	<1	105	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	113	44-165
Acetone	ug/L (ppb)	250	<10	92	10-182
1,1-Dichloroethene	ug/L (ppb)	50	21	100 b	60-136
Methylene chloride	ug/L (ppb)	50	<5	94	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	96	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	101	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	102	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	96	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	101	71-127
Chloroform	ug/L (ppb)	50	<1	101	65-132
2-Butanone (MEK)	ug/L (ppb)	250	44	77	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	106	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	109	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	103	69-133
Carbon tetrachloride	ug/L (ppb)	50	<1	118	56-152
Benzene	ug/L (ppb)	50	<0.35	102	76-125
Trichloroethene	ug/L (ppb)	50	<1	91	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	101	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	107	61-150
Dibromomethane	ug/L (ppb)	50	<1	106	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	104	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	72-132
Toluene	ug/L (ppb)	50	<1	102	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	104	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	104	68-131
2-Hexanone	ug/L (ppb)	250	<10	118	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	102	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	100	73-129
Dibromochloromethane	ug/L (ppb)	50	<1	108	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	103	69-134
Chlorobenzene	ug/L (ppb)	50	<1	101	77-122
Ethylbenzene	ug/L (ppb)	50	<1	104	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	104	73-137
m,p-Xylene	ug/L (ppb)	100	<2	105	69-135
o-Xylene	ug/L (ppb)	50	<1	106	68-137
Styrene	ug/L (ppb)	50	<1	107	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	105	65-142
Bromoform	ug/L (ppb)	50	<1	108	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	101	58-144
Bromobenzene	ug/L (ppb)	50	<1	102	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	101	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	102	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	100	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	101	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	102	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	99	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	100	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	99	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	101	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	100	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	99	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	99	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	92	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	89	76-132
Hexachlorobutadiene	ug/L (ppb)	50	<1	90	60-143
Naphthalene	ug/L (ppb)	50	<1	93	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	93	69-148

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/12

Date Received: 07/26/12

Project: Mill Creek Trust, Job 63801.0, F&BI 207392

**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	112	113	25-158	1
Chloromethane	ug/L (ppb)	50	104	104	45-156	0
Vinyl chloride	ug/L (ppb)	50	105	107	50-154	2
Bromomethane	ug/L (ppb)	50	100	102	55-143	2
Chloroethane	ug/L (ppb)	50	95	97	58-146	2
Trichlorofluoromethane	ug/L (ppb)	50	119	120	50-150	1
Acetone	ug/L (ppb)	250	104	101	60-155	3
1,1-Dichloroethene	ug/L (ppb)	50	101	103	67-136	2
Methylene chloride	ug/L (ppb)	50	98	96	39-148	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	101	102	64-147	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	101	103	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	102	103	79-121	1
2,2-Dichloropropane	ug/L (ppb)	50	112	113	55-143	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	104	104	80-123	0
Chloroform	ug/L (ppb)	50	100	102	80-121	2
2-Butanone (MEK)	ug/L (ppb)	250	110	112	57-149	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	102	103	73-132	1
1,1,1-Trichloroethane	ug/L (ppb)	50	107	108	83-130	1
1,1-Dichloropropene	ug/L (ppb)	50	105	106	77-129	1
Carbon tetrachloride	ug/L (ppb)	50	114	116	75-158	2
Benzene	ug/L (ppb)	50	102	105	69-134	3
Trichloroethene	ug/L (ppb)	50	92	93	80-120	1
1,2-Dichloropropane	ug/L (ppb)	50	102	104	77-123	2
Bromodichloromethane	ug/L (ppb)	50	104	106	81-133	2
Dibromomethane	ug/L (ppb)	50	105	105	82-125	0
4-Methyl-2-pentanone	ug/L (ppb)	250	104	105	70-140	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	107	108	82-132	1
Toluene	ug/L (ppb)	50	104	106	72-122	2
trans-1,3-Dichloropropene	ug/L (ppb)	50	106	107	80-136	1
1,1,2-Trichloroethane	ug/L (ppb)	50	103	105	75-124	2
2-Hexanone	ug/L (ppb)	250	101	101	64-152	0
1,3-Dichloropropane	ug/L (ppb)	50	102	105	76-126	3
Tetrachloroethene	ug/L (ppb)	50	106	108	76-121	2
Dibromochloromethane	ug/L (ppb)	50	107	109	84-133	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	104	105	82-125	1
Chlorobenzene	ug/L (ppb)	50	101	103	83-114	2
Ethylbenzene	ug/L (ppb)	50	103	105	77-124	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	103	106	84-127	3
m,p-Xylene	ug/L (ppb)	100	105	109	83-125	4
o-Xylene	ug/L (ppb)	50	106	107	86-121	1
Styrene	ug/L (ppb)	50	107	109	85-127	2
Isopropylbenzene	ug/L (ppb)	50	106	108	87-122	2
Bromoform	ug/L (ppb)	50	105	105	74-136	0
n-Propylbenzene	ug/L (ppb)	50	103	104	74-126	1
Bromobenzene	ug/L (ppb)	50	105	106	80-121	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	103	104	80-126	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	99	101	66-126	2
1,2,3-Trichloropropane	ug/L (ppb)	50	99	100	67-124	1
2-Chlorotoluene	ug/L (ppb)	50	101	103	77-127	2
4-Chlorotoluene	ug/L (ppb)	50	103	104	78-128	1
tert-Butylbenzene	ug/L (ppb)	50	101	103	85-127	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	102	104	82-125	2
sec-Butylbenzene	ug/L (ppb)	50	102	104	80-125	2
p-Isopropyltoluene	ug/L (ppb)	50	103	105	82-127	2
1,3-Dichlorobenzene	ug/L (ppb)	50	102	104	85-116	2
1,4-Dichlorobenzene	ug/L (ppb)	50	100	102	84-121	2
1,2-Dichlorobenzene	ug/L (ppb)	50	99	101	85-116	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	88	86	57-141	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	90	91	72-130	1
Hexachlorobutadiene	ug/L (ppb)	50	93	93	53-141	0
Naphthalene	ug/L (ppb)	50	91	91	64-133	0
1,2,3-Trichlorobenzene	ug/L (ppb)	50	91	92	65-136	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.

207392

# SAMPLE CHAIN OF CUSTODY

ME 07-26-12

BI3 / 083 / 111

Send Report To Eric Kolter

Company Environmental Partners, Inc.

Address 295 NE Gilman Blvd.

City, State, ZIP Issaquah, WA 98027

Phone # (425) 395-0010 Fax # (425) 395-0011

SAMPLERS (signature) [Signature]

PROJECT ID/ADDRESS Mill Creek Tract JOB # 63801.0

SITE NAME \_\_\_\_\_ REMARKS \_\_\_\_\_

PAGE # 1 OF 1

TURNAROUND TIME A03

Standard  
 RUSH  
Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	LAB ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED						Notes
						8015 - GRO	8015 - DRO	BTEX by 8021B	BTEX by 602	VOC by 8260C	VOC by 524	
U-6:10	01A-E	7/26/12	09:25	Soil	5							Archive
U-6:15	02A-E		09:30	Soil	5	X	X	X				
U-6:16W	03A-D		10:00	Water	4	X	X			X		
U-6:20	04A-E		10:15	Soil	5							Archive
U-7:10	05 T		11:15	Soil	5							Archive
U-7:15	06 T		11:24	Soil	5	X	X	X				
U-7:20	07A-D		11:34	Soil	5							Archive
U-8:10	08A-E		13:10	Soil	5							Archive
U-8:15	09 T		13:18		5	X	X	X				
U-8:20	10 T		13:28		5							Archive
U-9:10	11 T		14:24		5							Archive
U-9:15	12 T		14:34		5	X	X	X				
U-9:20	13 T		14:43		5							Archive

riedman & Bruya, Inc.  
212 16th Avenue West  
Seattle, WA 98119-2029  
t. (206) 285-8282  
fx (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	Eric Cadey	EPI	7/26/12	16:00
<u>[Signature]</u>	HONG NEWYEN	EPI		
Relinquished by:				
Received by:				

received at 6:00