



SoundEarth Strategies, Inc.
2811 Fairview Avenue East, Suite 2000
Seattle, Washington 98102

August 6, 2014

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

**SUBJECT: RI/FS/CAP ADDENDUM
Avtech Corporation Property
3400 Wallingford Avenue North
Seattle, Washington
Job Number: 0789-004-13**

Dear Mr. Koppelman:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this letter report to present the results of additional soil and groundwater sampling activities conducted at the Avtech Corporation property, located at 3400 Wallingford Avenue North in Seattle, Washington (the Property), as shown in Figure 1. The Property encompasses 2.04-acres, spanning portions of two city blocks on the north and south sides of North 34th Street (North Block, South Block; Figure 2). An avionics manufacturer, Avtech Corporation (Avtech), occupied the Property from 1973 until 2011. Avtech used chlorinated solvents and various other electrical engineering-related chemical compounds typically found in the avionics production process.

SITE BACKGROUND

Subsurface investigations conducted by SoundEarth at the Property in 2011 through 2013 were summarized in SoundEarth's Draft Remedial Investigation and Feasibility Study report (Draft RI/FS Report) dated January 10, 2014, and the Draft Cleanup Action Plan (CAP) dated March 14, 2014. The results of the remedial investigation indicated that soil and groundwater contamination has resulted from a release of trichloroethene (TCE) on the north side of North 34th Street. Sampling conducted through 2013 indicated that soil was impacted by TCE in the loading dock area of Building 2 at depths ranging from 9 to 20 feet below grade. Soil was likely impacted at other depths, as indicated by the presence of TCE in groundwater present at approximately 25 to 30 feet below grade. Concentrations of tetrachloroethene, lead, and polycyclic aromatic hydrocarbons (PAH) have also been confirmed in soil in localized areas at concentrations that slightly exceed applicable Washington State Model Toxics Control Act (MTCA) Method A cleanup levels.

Groundwater containing TCE concentrations exceeding the MTCA Method A cleanup level is present on the southern half of the North Block, migrating across North 34th Street to the South Block. The full lateral and vertical extents of the impacts originating from the releases at the Property constitute the Avtech Corporation Site (the Site).

Based on the results of the RI and completion of a conceptual site model, a feasibility study (FS) was conducted to develop and evaluate cleanup action alternatives that would facilitate selection of a cleanup action for the Site, as defined in the FS and in accordance with Part 350(8) of Chapter 340 of Title 173 of the Washington Administrative Code. The FS identified Cleanup Action Alternative 1 (Excavation of Soil with In Situ Chemical Oxidation of Groundwater by Permanganate) as the recommended alternative for the Site because it ranked comparatively high in environmental benefit and is both technically feasible and cost effective.

Cleanup Action Alternative 1 satisfies MTCA requirements and significantly reduces risk from contamination to the maximum extent practicable via removal of the source by excavation, along with in situ chemical oxidation to address residual groundwater contamination beneath the Property and rights-of-way. As part of a planned redevelopment on both sides of North 34th Street, the Property will be excavated from lot-line to lot-line and a large portion of TCE-impacted source soil (located on the North Block) will be removed in the course of the redevelopment excavation. The redevelopment excavation will also remove localized areas of soil impacted with PAHs and lead.

The following summarizes additional soil and groundwater data acquired subsequent to the January 2014 Draft RI/FS Report and March 2014 Draft CAP.

GROUNDWATER MONITORING—MARCH 25 AND APRIL 18, 2014

The groundwater monitoring events were conducted on March 25 (MW01, MW05, MW07, MW09, MW10, and MW11) and April 16 and 17, 2014 (MW06 and MW15). Wells MW03, MW04, MW12, and MW13 contained purple-colored water from a previous permanganate injection pilot test (September 2013) and were, therefore, not sampled. Groundwater sampling from injection wells (IW01 through IW06) and new monitoring wells MW16 and MW11D was also conducted in April and is discussed in additional sections below.

The groundwater samples were collected in accordance with the U.S. Environmental Protection Agency (EPA) *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (April 1996). Purging and sampling of each monitoring well were performed using a bladder pump or peristaltic pump and dedicated polyethylene tubing at flow rates ranging from 80 to 125 milliliters per minute. The intake was placed approximately 2 to 3 feet below the surface of the groundwater or mid-screen in each monitoring well. During purging, water quality was monitored using a Quanta water quality meter equipped with a flow-through cell. The water quality parameters that were monitored and recorded included; temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Each monitoring well was purged until a minimum subset of pH, specific conductivity, and turbidity or dissolved oxygen stabilized.

Following purging, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell and placed directly into clean, laboratory-prepared sample containers. Each container was labeled with a unique sample identification number, placed on ice in a cooler, and transported to Friedman & Bruya, Inc., of Seattle, Washington, under standard chain-of-custody protocols for laboratory analysis.

The groundwater samples were submitted for analysis of chlorinated solvents and other volatile organic compounds (VOC) by EPA Method 8260C. Purge water generated during the monitoring event was placed in an appropriately labeled 55-gallon steel drum and temporarily stored on the Property pending receipt of analytical data and proper disposal.

Groundwater Results

Groundwater levels measured on March 25, 2014, ranged from 24.82 (MW10) to 44.86 (MW11) feet below the top of the monitoring well casings (Table 1). Groundwater elevations ranged from 60.68 feet North American Vertical Datum 1988 (NAVD88) in MW10, to 29.84 feet in MW05. The groundwater elevations indicate groundwater is generally flowing to the south-southeast with an average gradient of 0.07 feet per foot between wells MW10 and MW05. Elevations, gradient, and flow direction were consistent with measurements collected in 2012 and 2013.

Groundwater analytical results from the monitoring events are summarized below (Figure 2; Table 1). Laboratory reports are included in Attachment A.

- Concentrations of TCE exceeding the MTCA Method A cleanup level of 5 micrograms per liter ($\mu\text{g/L}$) were detected in groundwater collected from monitoring wells MW05 (9.9 $\mu\text{g/L}$), MW07 (6.4 $\mu\text{g/L}$), MW09 (51 $\mu\text{g/L}$), and MW11 (48 $\mu\text{g/L}$). The remaining VOCs were below their respective laboratory reporting limits and/or MTCA Method A cleanup levels in the groundwater samples collected from these wells.
- Groundwater samples collected from wells MW01, MW06, MW10, and MW15 did not contain concentrations of VOCs that exceeded their respective laboratory reporting limits and/or MTCA Method A cleanup levels.

2014 SUPPLEMENTAL SOURCE AREA PHASE II FIELD WORK

To further evaluate the location and depth of TCE-impacted soil beneath Building 2, SoundEarth advanced a total of 14 hollow-stem auger soil borings to depths of 25 to 45 feet. The borings were advanced inside Building 2, aided by coring of the floor slabs and partial demolition of walls and ceilings. The borings were conducted in potential source areas, including the former hazardous materials storage area, the former 1950s-era machine shop, the former 1970s-era machine shop/production facility, and downgradient areas on the southern end of the building. Six of the borings were completed as future injection wells, and one boring was completed as a future groundwater monitoring compliance well.

April 2014—Interior Soil Borings and Injection Well Installation and Sampling

On April 1 through 3, 2014, Boretac Inc., under the direction of SoundEarth, advanced 7 hollow-stem auger borings (B-IW01 through B-IW06, and B-MW16). The borings were advanced by a tractor-mounted hollow-stem auger rig to depths up to 45 feet below floor slab (floor slab elevation is 85.5 feet NAVD88). Soil samples were collected at 5-foot depth intervals and field-screened by a photoionization detector (PID) for the presence of VOCs indicative of solvent releases. Soil types were logged by a SoundEarth geologist in accordance with the Unified Soil Classification System.

Based on boring locations, screening results, sampling depths, and observed soil characteristics, selected samples were submitted for analysis of chlorinated VOCs by EPA Method 8260C. Samples were labeled,

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

The borings were completed as injection wells IW01 through IW06, and monitoring well MW16 (Figure 3). The wells were screened from 30 to 45 feet (IW02, IW03, and MW16), 28 to 43 feet (IW04), 25 to 40 feet (IW01), 26 to 41 feet (IW05), and 23 to 38 feet (IW06). The wells were developed using a whale pump on April 9, 2014, and sampled with bladder pumps on April 16 2014.

May 2014—Additional Interior Soil Borings and Soil Sampling

Based on the results of sampling and analysis for the soil samples collected April 1 through April 3 (laboratory results discussed below), seven additional borings were advanced to further define the extent of TCE in soil beneath Building 2. On May 21 and 22, 2014, Boretec Inc., under the direction of SoundEarth, advanced borings SB206 through SB212 to depths of 25 to 30 feet below the floor slab (elevation 85.0 NAVD88). Soil samples were collected at 2.5 to 5-foot depth intervals.

Based on boring locations, sampling depths, and observed soil characteristics, a total of 61 samples were submitted for analysis of chlorinated VOCs by EPA Method 8260C.

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

No solvent odors or sheens were noted during sampling. PID readings from soil samples were generally less than 2 parts per million per volume (background levels), with most readings showing less than 0.5 part per million by volume.

Copies of boring logs and well logs are in Attachment B. Geologic cross sections of the TCE source area are presented on Figures 4 and 5. Analytical results are discussed below.

Soil Results

Of the 61 samples submitted for analysis, concentrations of TCE above the MTCA Method A cleanup level of 0.03 milligrams per kilogram (mg/kg) were detected in 6 samples from the following borings and depths:

- B-IW03 at depths of 15 feet (0.044 mg/kg) and 25 feet (0.063 mg/kg)
- B-MW16 at depths of 15 feet (0.034 mg/kg), 25 feet (0.066 mg/kg), and 30 feet (0.042 mg/kg)
- SB209 at a depth of 25 feet (0.090 mg/kg)

Concentrations of TCE below the MTCA Method A cleanup level of 0.03 mg/kg were detected in three samples from the following borings and depths:

- SB206 at a depth of 12.5 feet (0.025 mg/kg)
- SB209 at a depth of 15 feet (0.029 mg/kg)
- SB211 at a depth of 30 feet (0.022 mg/kg)

The borings with detectable concentrations (above and below MTCA) of TCE are highlighted in orange on Figure 4. This includes borings previously identified in the Draft RI/FS Report and CAP (borings B14, B104, SB203, and SB204). These boring areas at the specified depths will require disposal of development excavation soils as “contained-in” material at a Subtitle D landfill.

TCE was not detected in any of the following borings: B-IW01, B-IW02, B-IW04, B-IW05, B-IW06, SB207, SB208, SB210, and SB212. These borings (as well previous borings conducted to at least 20 feet) are highlighted in green on Figure 4. These boring areas are shown to be absent of detectable TCE and will therefore not require special handling or disposal at a regulated landfill.

Soil analytical results for VOCs are summarized on Table 2. The laboratory analytical reports are presented in Attachment A.

Groundwater Results

Following development and purging, groundwater samples were collected from all of the injection wells (IW01 through IW06) and new monitoring well MW16. TCE was detected in IW03 (17 µg/L) and IW04 (44 µg/L). Both concentrations exceeded the MTCA Method A cleanup level of 5 µg/L.

TCE was not detected in wells IW02 and MW16. This area was treated with permanganate in September 2013 (test pilot injections were made into wells MW04 and MW13). TCE was not detected in any of the other wells. The results are summarized on Figure 2. Laboratory reports are included in Attachment A.

DEEP GROUNDWATER WELL

To further assess the vertical extent of TCE in groundwater at the Site, deep well MW11D was installed 7 feet west of MW11 on April 28, 2014. A 10.25-inch conductor casing was installed to a depth of 55 feet, with a 4.25-inch-diameter auger drilled to a depth of 75 feet. Soil sampled at 75 feet was described as wet, dense, fine to medium sandy gravel to gravelly sand. The well was screened from 60 to 75 feet. Depth to water was measured at 44.6 feet on April 29, 2014.

The well was developed on April 29, 2014, and sampled on April 30, 2014. The sample was submitted to Freidman & Bruya, Inc. for analysis of chlorinated VOCs by EPA Method 8260C.

Sample MW11D contained no detectable TCE or other chlorinated solvents. Therefore, it appears that TCE impacts are limited to the upper 10 to 15 feet of groundwater at the Site, above a dense silt layer present at 50 to 55 feet.

JUNE 2014 INJECTION WELL INSTALLATIONS

On June 23 through 27, 2014, Cascade Drilling, under the direction of SoundEarth, advanced 13 hollow-stem auger borings on the north and south sides of North 34th Street (Figure 6). The borings were generally drilled to depths of 50 feet on the north side (IW07 through IW12, and IW19) and 55 feet on the south side (IW13 through IW18). However, boring IW13 was drilled to a depth of 70 feet to further define soil types in the deeper groundwater zone near well MW11D. Soil types in IW13 included very dense sandy silt at 50 feet, underlain by very dense silty fine sand from 60 to 70 feet. Soil conditions were observed as damp at 50 and 55 feet, moist to wet at 60 feet, and damp at 70 feet (no recovery at

65 feet). The boring was backfilled with bentonite to 50 feet and completed as a well screened from 35 to 50 feet.

Soil samples were collected from borings IW09 to confirm soil types in the screened zone and further assess potential for TCE impacts in vadose zone soil. Very dense silty fine sand was encountered at 30 and 35 feet, with very dense damp clayey silt at 40 feet, wet silt at 44 feet, and wet sand at 45 feet. A soil sample collected at 30 feet was submitted for analysis of chlorinated VOCs by EPA Method 8260C. Sample IW09-30 did not contain detectable TCE or other chlorinated VOCs.

SUMMARY AND CONCLUSIONS

Groundwater

Concentrations of TCE in groundwater are generally consistent with previous sampling. However, the southeastern extent of TCE above the MTCA Method A cleanup level appears to extend beyond well MW05, beneath the Burke Avenue North right of way. The absence of detectable TCE in wells MW16 and IW02 is likely due to permanganate injections conducted in wells MW04 and MW13 in September 2013.

TCE was not detected in deep well MW11D screened at 60 to 75 feet. Therefore, the depth of TCE impacts to groundwater appears to be limited to within approximately 10 feet of the perched water table.

Soil

Concentrations of TCE exceeding the MTCA Method A cleanup level in soil were detected in only 6 out of 61 samples collected in the Building 2 source area. The concentrations ranged from 0.034 mg/kg to 0.090 mg/kg. TCE was also detected in 3 samples at concentrations below the MTCA Method A cleanup level.

Including the data obtained in 2012 and 2013, TCE has been detected in eight soil borings advanced beneath Building 2 and two borings immediately east of the Building 2 loading dock. Six borings with TCE detections are within the proposed excavation footprint. Borings with TCE detections are highlighted in orange on Figure 3.

TCE was not detected in the upper 10 feet of soil in any of the borings beneath Building 2 (Elevations 75 to 85 NAVD88).

TCE-containing vadose zone soils were identified at the following depth ranges for each area (Figure 4):

- Area 1. TCE was detected at 12.5 feet below the Building 2 floor slab, and not detected at 10, 15, and 25 feet. Therefore TCE appears limited to the 10- to 15-foot depth range (Elevations 70 to 75 feet NAVD88).
- Area 2. TCE was detected at 15, 25, and 30 feet below the Building 2 floor slab, and at 9 and 20 feet below grade in the loading dock driveway (Elevation 55 to 72 feet NAVD88).

- Area 3. TCE was detected at 15, 25, and 30 feet below the Building 2 floor slab. TCE was not detected at 12.5 feet. Therefore, TCE-containing soil appears to be limited to the 12.5- to 30-foot depth range (Elevation 55 to 72.5 feet NAVD88).

CLEANUP ACTION PLAN MODIFICATIONS

Based on the additional soil and groundwater data, modifications to the Draft CAP are described below.

Soil

Removal of soils containing TCE above the MTCA Method A cleanup level will be limited mainly to soils excavated for the proposed development. Development plans for the Building 2 TCE source area include excavation of soil to a depth of approximately 17 feet at the southwest corner (elevation 68 NAVD88), 13 to 15 feet and the northwest corner (elevation 72 to 70 NAVD88), and 17 to 20 feet in the loading dock area (elevation 68 to 65 NAVD88), as shown on Figure 4.

Removal of soil containing detectable TCE. Assuming the upper 10 feet of soil is absent of detectable TCE as indicated by all of the existing data, the approximate volume of TCE-containing soil by area is summarized as follows:

- Area 1. An area of 1,875 square feet, with average TCE soil depth of 5 feet (350 cubic yards).
- Area 2. An area of 6,325 square feet, with average TCE soil depth of 7 feet (1,640 cubic yards).
- Area 3. An area of 3,600 square feet, with average TCE soil depth of 6 feet (800 cubic yards).

In summary, approximately 2,800 cubic yards, or approximately 4,500 tons of TCE-containing soil are estimated to be removed from TCE Excavation Areas 1, 2, and 3. TCE-containing soils will be handled as “contained-in” material for disposal at a Subtitle D landfill facility (pending Washington State Department of Ecology approval).

Potential TCE “Hot Spot” Excavation. Based on the TCE concentrations detected in groundwater, higher concentrations of TCE in soil may exist in a targeted source area. If encountered during the redevelopment excavation and identified by confirmation sampling (from a planned 25-foot sampling grid), an area of localized TCE impacts would, if feasible, be excavated to depths of 17 to 30 feet NAVD88 (the average depth of development excavation and the approximate depth to groundwater in the loading dock area, respectively). For purposes of contingency planning, a 25- by 25-foot source area with a 1H:1V (Horizontal:Vertical) slope, excavated 13 feet below the development would account for approximately 690 cubic yards of soil (1,100 tons of additional TCE-containing soil).

Treatment of Residual TCE Soils. Due to the low-level presence of TCE in soil at depths of 25 to 30 feet at the southern edge of the North Block development (as indicated in borings B-IW03, B-MW16, and SB209), excavation of all soil containing exceedances of the MTCA Method A cleanup level for TCE is not practicable. Borings B-IW03 and B-MW16 are outside of the development excavation and, therefore, will not be excavated.

To remediate residual TCE concentrations and be protective of groundwater, a combination of horizontal SVE and permanganate slurry will be used in the remaining impacted vadose zone soils. Slotted PVC piping will be installed in trenches three to five feet deeper than the base of the

development excavation and routed to a central manifold. The horizontal SVE piping includes nine, 20-foot long slotted PVC sections that will be bedded in the trench and surrounded with a permeable backfill material. A vacuum will be applied to the horizontal SVE lines to extract soil vapors. The building footing drains will be configured to allow for a negative pressure to be applied to protect against vapor intrusion, if necessary. A permanganate slurry will be injected into those injection wells in the areas where residual TCE contamination will remain in the vadose zone. Injection wells will be screened so that the permanganate slurry will saturate in soil voids immediately above the water table. The permanganate slurry in the vadose zone would treat any TCE mobilized by rising groundwater levels and/or surface water infiltration.

Groundwater

Based on the recent exceedance of the MTCA Method A cleanup level of TCE in groundwater collected from well MW05, the locations of the 11 southeastern-most injection wells have been repositioned to address this area. If the concentrations in MW05 remain above MTCA cleanup levels, an additional downgradient well will likely be installed in Fall 2014. Injection well locations (existing and proposed) are shown on Figure 6. The wells will be installed following development excavation scheduled for November and December 2014. Injections into existing wells will likely be conducted in September or October 2014.

LIMITATIONS

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

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

CLOSING

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

Respectfully,

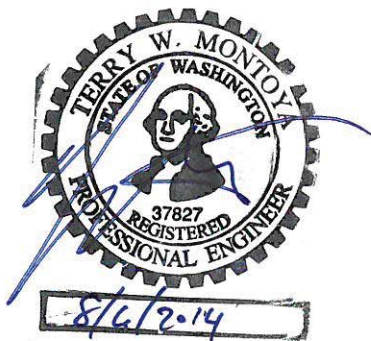
SoundEarth Strategies, Inc.



Rob Roberts
Senior Scientist



John R. Funderburk, MSPH
Senior Principal



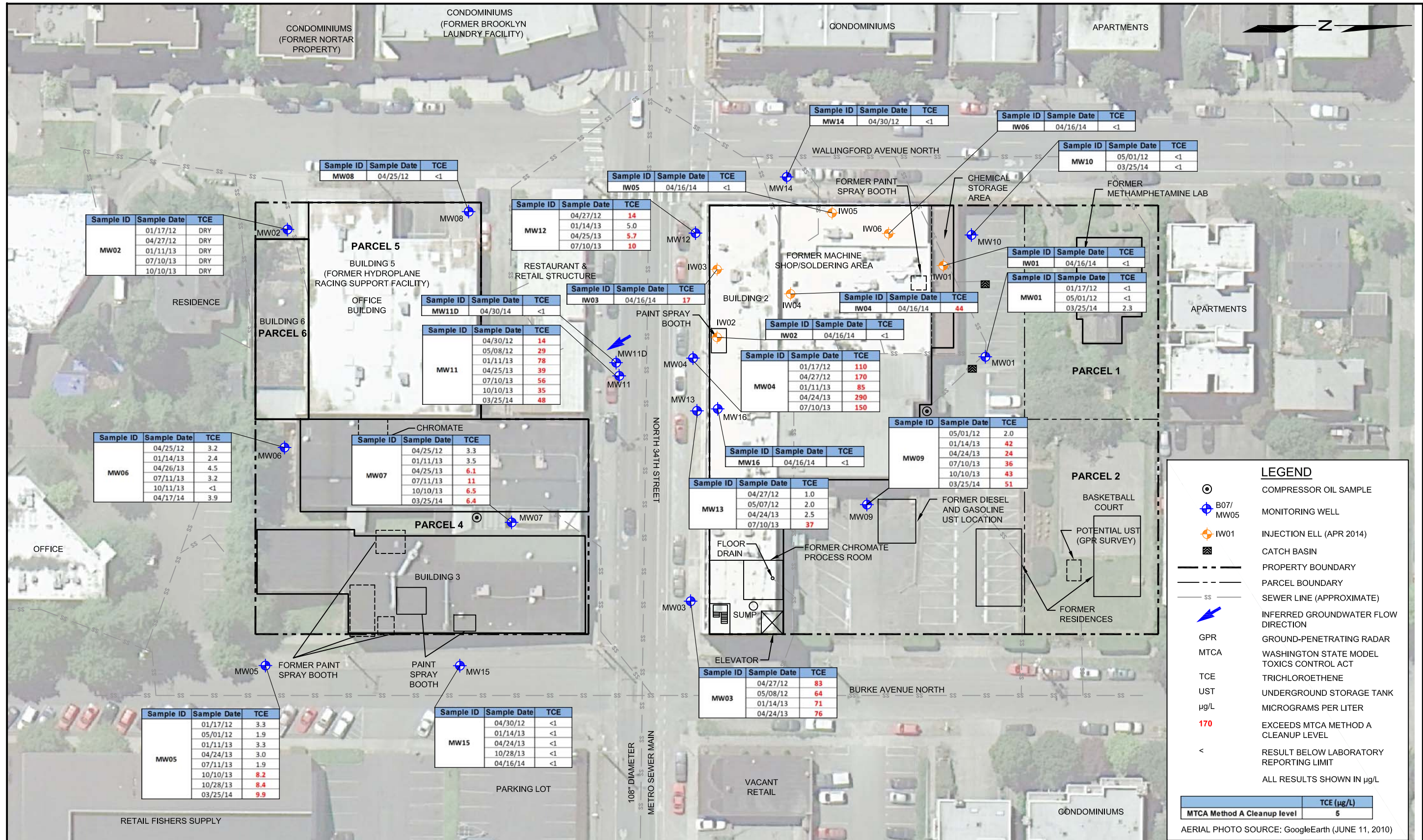
Terry Montoya, PE
Principal

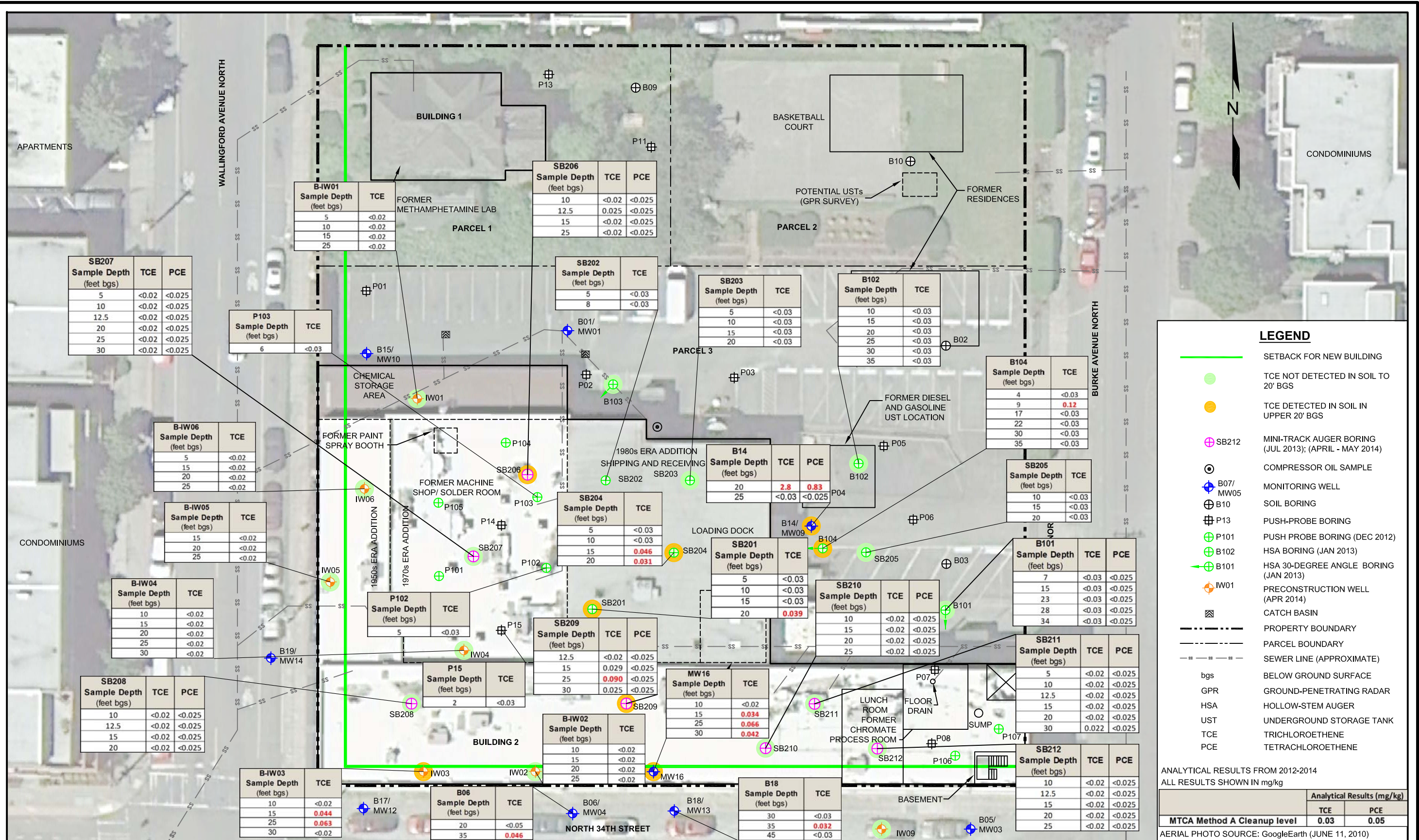
- Attachments:
- Figure 1, Property Location Map
 - Figure 2, Groundwater TCE Results
 - Figure 3, TCE Concentrations in Soil and Boring Location Plan – North Block
 - Figure 4, Conceptual TCE Excavation Areas
 - Figure 5, Geologic Cross Sections D–D' and E–E', TCE Source Area Remedial Excavation-
 - Figure 6, Injection Well Location Plan
 - Table 1, Summary of Groundwater Data
 - Table 2, Summary of Soil Analytical Results for VOCs
 - A, Laboratory Analytical Reports
 - Friedman & Bruya, Inc. #403358*
 - Friedman & Bruya, Inc. #404027*
 - Friedman & Bruya, Inc. #404067*
 - Friedman & Bruya, Inc. #404094 and additional*
 - Friedman & Bruya, Inc. #404097*
 - Friedman & Bruya, Inc. #404323*
 - Friedman & Bruya, Inc. #404540*
 - Friedman & Bruya, Inc. #405421*
 - Friedman & Bruya, Inc. #405463 and additional*
 - Friedman & Bruya, Inc. #406425*
 - B, Boring Logs

CER/JRF:dnm/amr

FIGURES







DATE: 07/09/14
DRAWN BY: NAC/BLR/JQC
CHECKED BY: CER
CAD FILE: 0789-004_2014PRECON_TCE

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

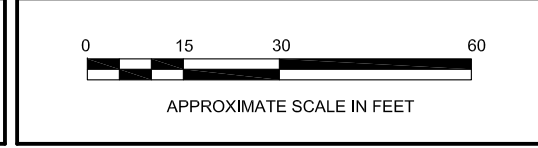
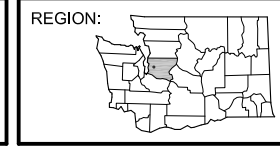
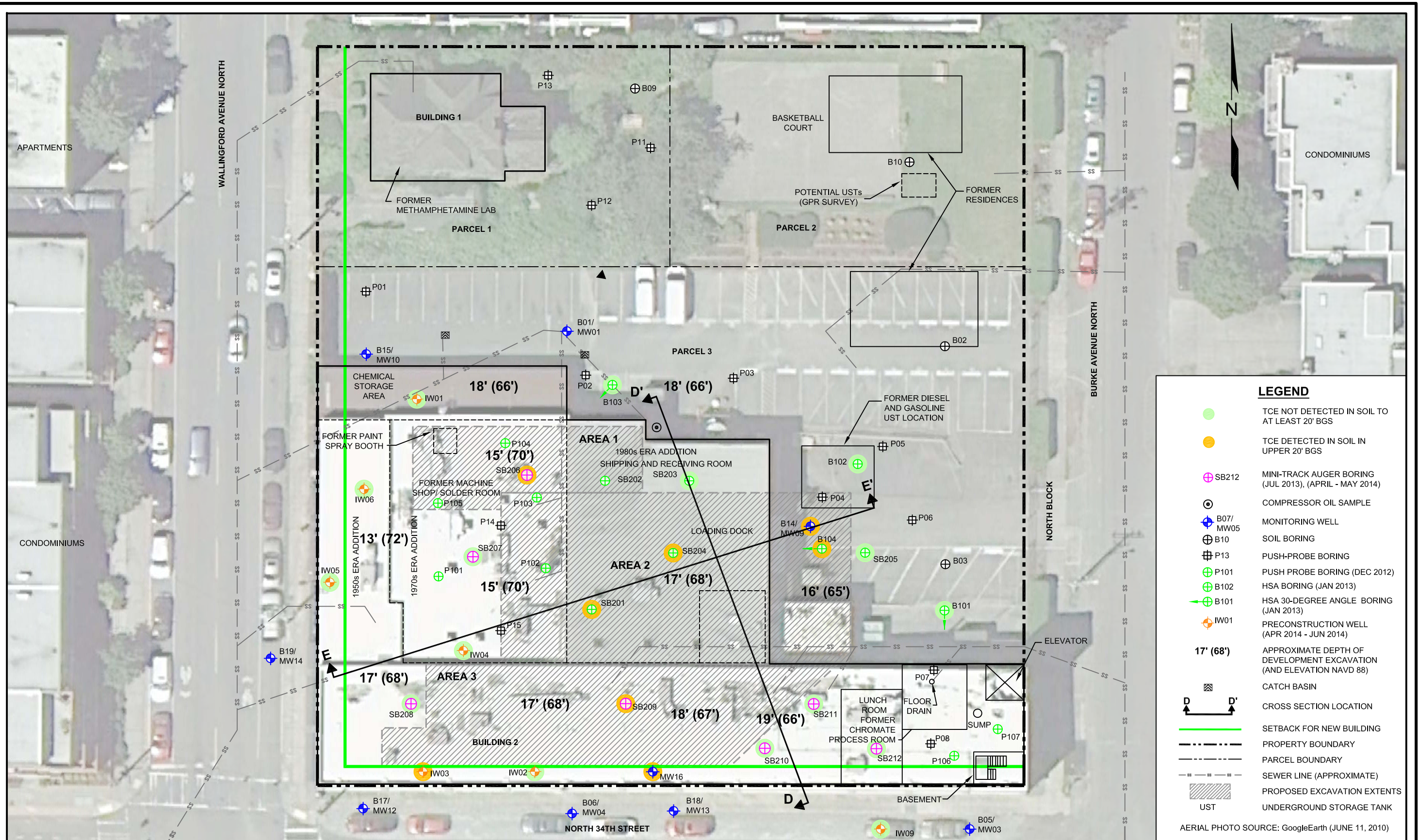


FIGURE 3
TCE CONCENTRATIONS IN SOIL AND BORING LOCATION PLAN - NORTH BLOCK



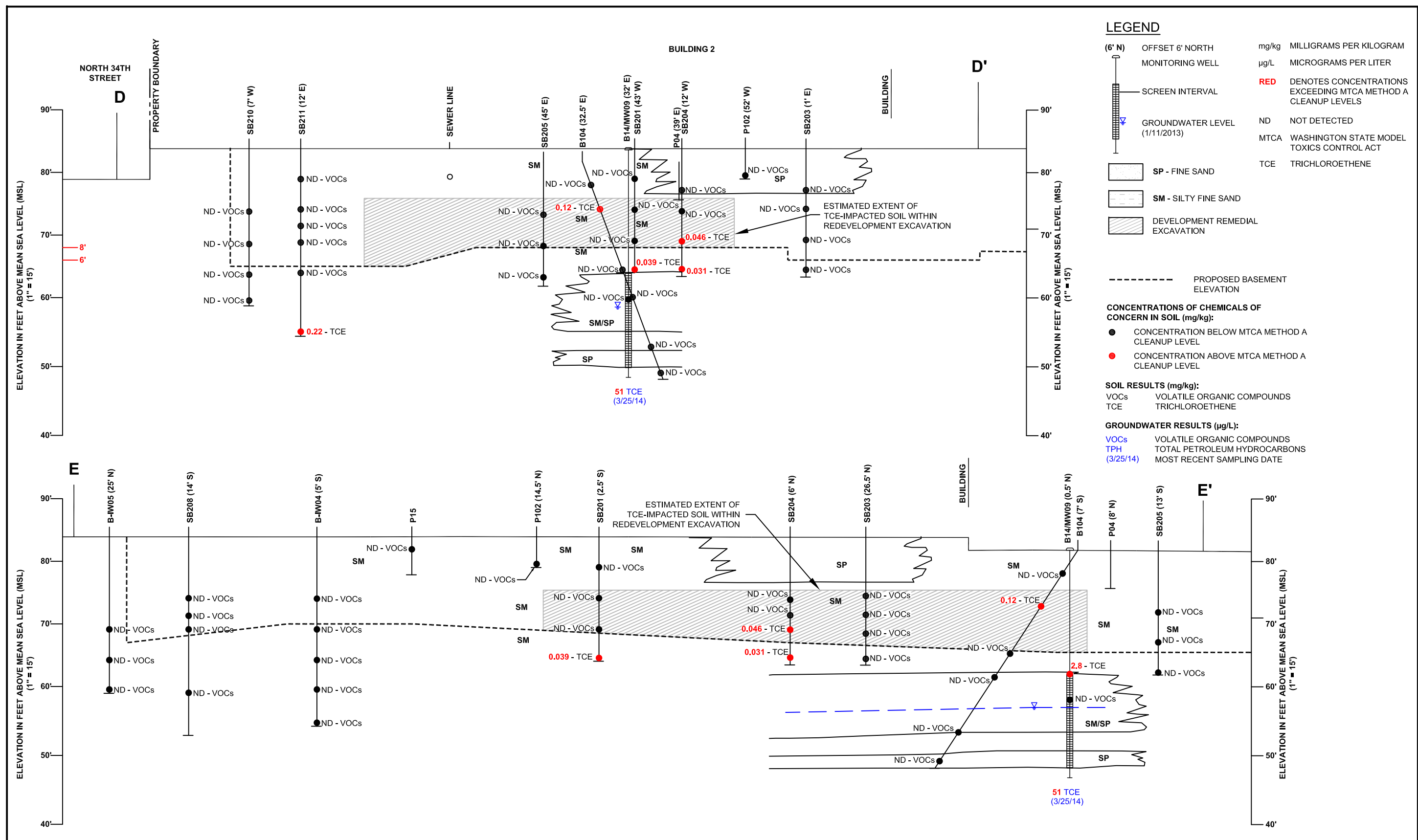
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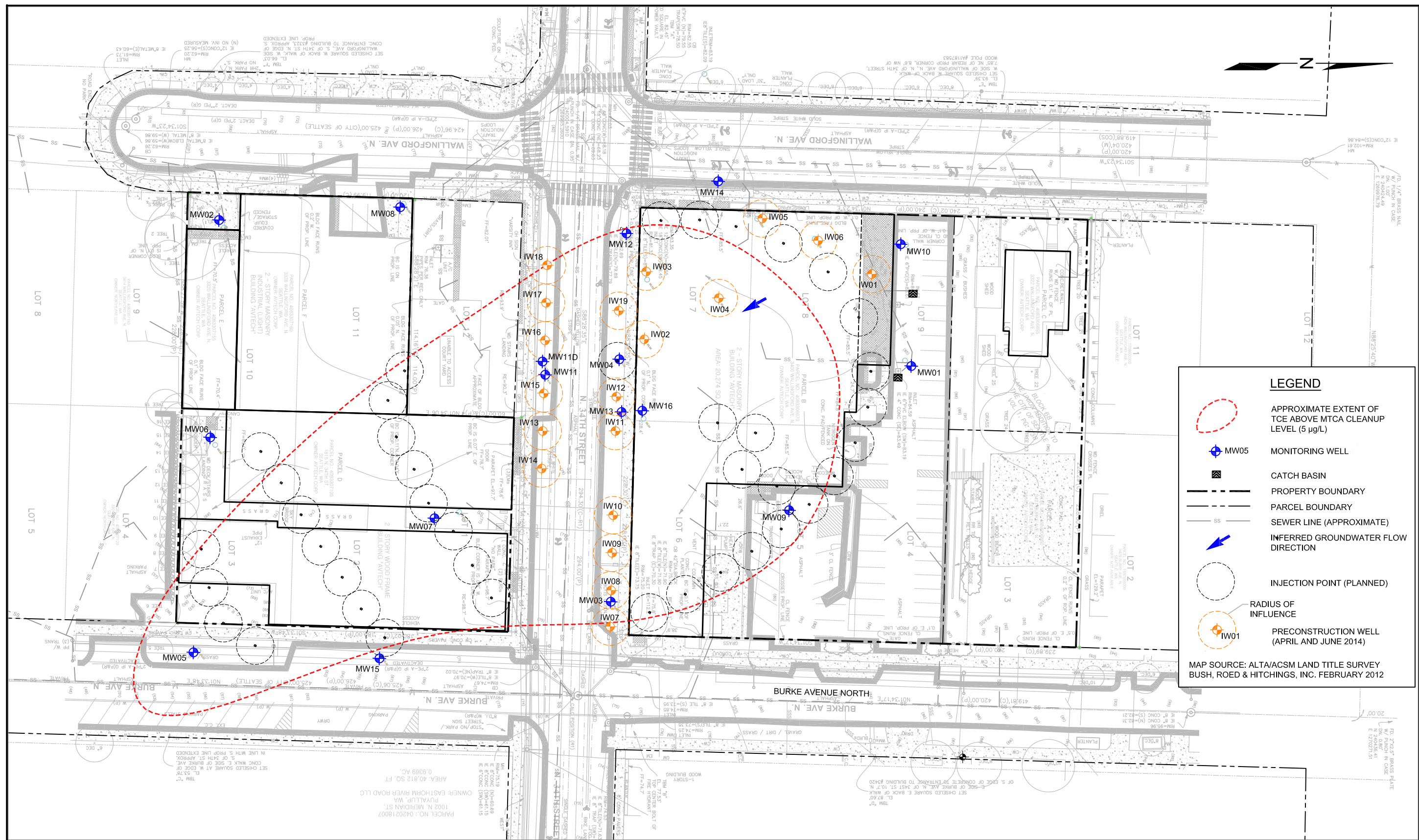
PROJECT NAME: AVTECH PROPERTY
PROJECT NUMBER: 0789-004
STREET ADDRESS: 3400 WALLINGFORD AVENUE NORTH
CITY, STATE: SEATTLE, WASHINGTON

REGION:

APPROXIMATE SCALE IN FEET

FIGURE 4
CONCEPTUAL TCE EXCAVATION AREAS





TABLES



Table 1
Summary of Groundwater Data
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample ID and TOC Elevation	Sample Date	Depth to Groundwater ⁽¹⁾ (feet)	Groundwater Elevation ⁽²⁾ (feet)	Analytical Results (µg/L)																		
				DRPH ⁽³⁾	ORPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethylbenzene ⁽⁴⁾	Total Xylenes ⁽⁴⁾	Vinyl Chloride ⁽⁴⁾	cis-1,2-DCE ⁽⁴⁾	TCE ⁽⁴⁾	PCE ⁽⁴⁾	Naphthalene ⁽⁴⁾	Dissolved Chromium ⁽⁵⁾	Dissolved Arsenic ⁽⁵⁾	Dissolved Selenium ⁽⁵⁾	Dissolved Silver ⁽⁵⁾	Dissolved Cadmium ⁽⁵⁾	Dissolved Barium ⁽⁵⁾	Dissolved Lead ⁽⁵⁾	Dissolved Mercury ⁽⁶⁾
MW01 84.44	01/17/12	27.59	56.85	<50	<250	<0.35	<1	<1	<3	<0.2 ^{DF}	<1	<1	<1	<1	1.58	1.43	<1	<1	<1	3.94	<1	<0.1
	05/01/12	25.02	59.42	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	01/11/13	26.25	58.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13	24.75	59.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/10/13	25.55	58.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	27.43	57.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/25/14	27.67	56.77	--	--	--	--	--	--	<0.2	<1	2.3	<1	--	--	--	--	--	--	--	--	--
MW02 69.73	01/17/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/27/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/11/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/10/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW03 75.48	01/17/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/27/12	31.18	44.30	--	--	--	--	--	--	<0.2	2.2	83	<1	--	--	--	--	--	--	--	--	--
	05/08/12	31.06	44.42	--	--	--	--	--	--	<0.2	1.9	64	<1	--	1.69	1.44	<1	<1	<1	11.9	<1	<0.1
	01/14/13	31.78	43.70	--	--	--	--	--	--	<0.2	1.7	71	<1	--	--	--	--	--	--	--	--	--
	04/24/13	30.96	44.52	--	--	--	--	--	--	<0.2	1.8	76	<1	--	--	--	--	--	--	--	--	--
	07/10/13	Inaccessible																				
	10/10/13	Inaccessible																				
MW04 79.47	01/17/12	36.70	42.77	--	--	<0.35	<1	<1	<3	<0.2 ^{DF}	<1	110	<1	<1	18.6	<1	<1	<1	<1	4.33	<1	<0.1
	04/27/12	36.09	43.38	--	--	--	--	--	--	<0.2	<1	170	<1	--	--	--	--	--	--	--	--	--
	01/11/13	36.44	43.03	--	--	--	--	--	--	<0.2	<1	85	<1	--	--	--	--	--	--	--	--	--
	04/24/13	35.93	43.54	--	--	--	--	--	--	<0.2	<1	290	<1	--	--	--	--	--	--	--	--	--
	07/10/13	36.15	43.32	--	--	--	--	--	--	<0.2	<1	150	<1	--	--	--	--	--	--	--	--	--
	10/10/13	36.90	42.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW04 (Field Dup) 79.47	01/17/12	36.70	42.77	--	--	<0.35	<1	<1	<3	<0.2 ^{DF}	<1	120	<1	<1	18.6	<1	<1	<1	<1	4.65	<1	<0.1
	04/27/12	36.09	43.38	--	--	--	--	--	--	<0.2	<1	170	<1	--	--	--	--	--	--	--	--	--
MW05 55.61	01/17/12	24.90	30.71	--	--	<0.35	<1	<1	<3	<0.2 ^{DF}	<1	3.3	<1	<1	<1	5.31	3.55	<1	<1	22.6	<1	<0.1
	05/01/12	23.40	32.21	--	--	--	--	--	--	<0.2	<1	1.9	<1	--	--	--	--	--	--	--	--	--
	01/14/13	24.34	31.27	--	--	--	--	--	--	<0.2	<1	3.3	<1	--	--	--	--	--	--	--	--	--
	04/24/13	22.86	32.75	--	--	--	--	--	--	<0.2	<1	3.0	<1	--	--	--	--	--	--	--	--	--
	07/10/13	23.71	31.90	--	--	--	--	--	--	<0.2	<1	1.9	<1	--	--	--	--	--	--	--	--	--
	10/10/13	25.57	30.04	--	--	--	--	--	--	<0.2	1.1	8.2	<1	--	--	--	--	--	--	--	--	--
	10/28/13	--	--	--	--	--	--	--	--	<0.2	1.1	8.4	<1	--	--	--	--	--	--	--	--	--
	03/25/14	25.77	29.84	--	--	--	--	--	--	<0.2	2.1	9.9	<1	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater ⁽⁷⁾				500	500	5	1,000	700	1,000	0.2	NE	5	5	160	50	5	NE	NE	5	NE	15	2



Table 1
Summary of Groundwater Data
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample ID and TOC Elevation	Sample Date	Depth to Groundwater ⁽¹⁾ (feet)	Groundwater Elevation ⁽²⁾ (feet)	Analytical Results (µg/L)																		
				DRPH ⁽³⁾	ORPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethylbenzene ⁽⁴⁾	Total Xylenes ⁽⁴⁾	Vinyl Chloride ⁽⁴⁾	cis-1,2-DCE ⁽⁴⁾	TCE ⁽⁴⁾	PCE ⁽⁴⁾	Naphthalene ⁽⁴⁾	Dissolved Chromium ⁽⁵⁾	Dissolved Arsenic ⁽⁵⁾	Dissolved Selenium ⁽⁵⁾	Dissolved Silver ⁽⁵⁾	Dissolved Cadmium ⁽⁵⁾	Dissolved Barium ⁽⁵⁾	Dissolved Lead ⁽⁵⁾	Dissolved Mercury ⁽⁶⁾
MW06 68.39	04/25/12	31.84	36.55	--	--	--	--	--	--	<0.2	<1	3.2	<1	--	--	--	--	--	--	--	--	--
	01/14/13	31.86	36.53	--	--	--	--	--	--	<0.2	<1	2.4	<1	--	--	--	--	--	--	--	--	--
	04/26/13	30.85	37.54	--	--	--	--	--	--	<0.2	<1	4.5	<1	--	--	--	--	--	--	--	--	--
	07/11/13	32.01	36.38	--	--	--	--	--	--	<0.2	<1	3.2	<1	--	--	--	--	--	--	--	--	--
	10/11/13	33.61	34.78	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	04/17/14	--	--	--	--	--	--	--	--	<0.2	<1	3.9	<1	--	--	--	--	--	--	--	--	--
MW07 76.78	04/25/12	37.43	39.35	--	--	--	--	--	--	<0.2	<1	3.3	<1	--	--	--	--	--	--	--	--	--
	01/11/13	37.59	39.19	--	--	--	--	--	--	<0.2	<1	3.5	<1	--	--	--	--	--	--	--	--	--
	04/25/13	36.52	40.26	--	--	--	--	--	--	<0.2	<1	6.1	<1	--	--	--	--	--	--	--	--	--
	07/11/13	36.97	39.81	--	--	--	--	--	--	<0.2	<1	11	<1	--	--	--	--	--	--	--	--	--
	10/10/13	37.97	38.81	--	--	--	--	--	--	<0.2	<1	6.5	<1	--	--	--	--	--	--	--	--	--
	03/25/14	38.32	38.46	--	--	--	--	--	--	<0.2	<1	6.4	<1	--	--	--	--	--	--	--	--	--
MW08 76.61	04/25/12	37.86	38.75	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	01/11/13	37.34	39.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13	Inaccessible																				
	07/10/13	Inaccessible																				
	10/10/13	Inaccessible																				
MW09 81.17	05/01/12	23.19	57.98	--	--	--	--	--	--	<0.2	<1	2.0	<1	--	--	--	--	--	--	--	--	--
	01/14/13	24.00	57.17	--	--	--	--	--	--	<0.2	1.5	42	<1	--	--	--	--	--	--	--	--	--
	04/24/13	22.87	58.30	--	--	--	--	--	--	<0.2	<1	24	<1	--	--	--	--	--	--	--	--	--
	07/10/13	23.65	57.52	--	--	--	--	--	--	<0.2	<1	36	<1	--	--	--	--	--	--	--	--	--
	10/10/13	25.52	55.65	--	--	--	--	--	--	<0.2	1.5	43	<1	--	--	--	--	--	--	--	--	--
	03/25/14	25.72	55.45	--	--	--	--	--	--	<0.2	2.4	51	<1	--	--	--	--	--	--	--	--	--
MW10 85.50	05/01/12	21.90	63.60	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	01/11/13	22.56	62.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13	21.49	64.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/10/13	22.63	62.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	24.75	60.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/25/14	24.82	60.68	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
MW11 78.80	04/30/12	44.56	34.24	--	--	--	--	--	--	<0.2	<1	14	<1	--	--	--	--	--	--	--	--	--
	05/08/12	44.52	34.28	--	--	--	--	--	--	<0.2	<1	29	<1	--	--	--	--	--	--	--	--	--
	01/11/13	44.74	34.06	--	--	--	--	--	--	<0.2	<1	78	<1	--	--	--	--	--	--	--	--	--
	04/25/13	43.56	35.24	--	--	--	--	--	--	<0.2	<1	39	<1	--	--	--	--	--	--	--	--	--
	07/10/13	43.90	34.90	--	--	--	--	--	--	<0.2	<1	56	<1	--	--	--	--	--	--	--	--	--
	10/10/13	44.59	34.21	--	--	--	--	--	--	<0.2	<1	35	<1	--	--	--	--	--	--	--	--	--
MW11D	03/25/14	44.86	33.94	--	--	--	--	--	--	<0.2	<1	48	<1	--	--	--	--	--	--	--	--	--
	04/30/14	43.74	NS	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater ⁽⁷⁾				500	500	5	1,000	700	1,000	0.2	NE	5	5	160	50	5	NE	NE	5	NE	15	2



Table 1
Summary of Groundwater Data
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample ID and TOC Elevation	Sample Date	Depth to Groundwater ⁽¹⁾ (feet)	Groundwater Elevation ⁽²⁾ (feet)	Analytical Results (µg/L)																		
				DRPH ⁽³⁾	ORPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethylbenzene ⁽⁴⁾	Total Xylenes ⁽⁴⁾	Vinyl Chloride ⁽⁴⁾	cis-1,2-DCE ⁽⁴⁾	TCE ⁽⁴⁾	PCE ⁽⁴⁾	Naphthalene ⁽⁴⁾	Dissolved Chromium ⁽⁵⁾	Dissolved Arsenic ⁽⁵⁾	Dissolved Selenium ⁽⁵⁾	Dissolved Silver ⁽⁵⁾	Dissolved Cadmium ⁽⁵⁾	Dissolved Barium ⁽⁵⁾	Dissolved Lead ⁽⁵⁾	Dissolved Mercury ⁽⁵⁾
MW12 81.83	04/27/12	32.81	49.02	--	--	--	--	--	--	<0.2	<1	14	<1	--	--	--	--	--	--	--	--	--
	01/14/13	33.30	48.53	--	--	--	--	--	--	<0.2	<1	5.0	<1	--	--	--	--	--	--	--	--	--
	04/25/13	32.76	49.07	--	--	--	--	--	--	<0.2	<1	5.7	<1	--	--	--	--	--	--	--	--	--
	07/10/13	33.08	48.75	--	--	--	--	--	--	<0.2	<1	10	<1	--	--	--	--	--	--	--	--	--
	10/10/13	32.95	48.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW13 78.94	04/27/12	34.97	43.97	--	--	--	--	--	--	<0.2	<1	1.0	<1	--	--	--	--	--	--	--	--	--
	05/07/12	34.94	44.00	--	--	--	--	--	--	<0.2	<1	2.0	<1	--	--	--	--	--	--	--	--	--
	04/24/13	34.88	44.06	--	--	--	--	--	--	<0.2	<1	2.5	<1	--	--	--	--	--	--	--	--	--
	07/10/13	35.15	43.79	--	--	--	--	--	--	<0.2	<1	37	<1	--	--	--	--	--	--	--	--	--
	10/10/13	35.73	43.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW14 84.60	04/30/12	29.99	54.61	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	01/11/13	30.95	53.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13			Inaccessible																		
	07/10/13	30.56	54.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	32.00	52.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW15 66.09	04/30/12	27.37	38.72	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	01/14/13	27.76	38.33	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	04/24/13	26.69	39.40	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	07/10/13			Inaccessible																		
	10/28/13	28.02	38.07	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
MW16	04/16/14	28.38	37.71	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
	04/16/14	40.18	NS	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater ⁽⁷⁾				500	500	5	1,000	700	1,000	0.2	NE	5	5	160	50	5	NE	NE	5	NE	15	2



Table 1
Summary of Groundwater Data
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample ID and TOC Elevation	Sample Date	Depth to Groundwater ⁽¹⁾ (feet)	Groundwater Elevation ⁽²⁾ (feet)	Analytical Results (µg/L)																		
				DRPH ⁽³⁾	ORPH ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethylbenzene ⁽⁴⁾	Total Xylenes ⁽⁴⁾	Vinyl Chloride ⁽⁴⁾	cis-1,2-DCE ⁽⁴⁾	TCE ⁽⁴⁾	PCE ⁽⁴⁾	Naphthalene ⁽⁴⁾	Dissolved Chromium ⁽⁵⁾	Dissolved Arsenic ⁽⁵⁾	Dissolved Selenium ⁽⁵⁾	Dissolved Silver ⁽⁵⁾	Dissolved Cadmium ⁽⁵⁾	Dissolved Barium ⁽⁵⁾	Dissolved Lead ⁽⁵⁾	Dissolved Mercury ⁽⁶⁾
IW01	04/16/14	24.90	NS	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
IW02	04/16/14	36.91	NS	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
IW03	04/16/14	33.20	NS	--	--	--	--	--	--	<0.2	<1	17	<1	--	--	--	--	--	--	--	--	--
IW04	04/16/14	30.05	NS	--	--	--	--	--	--	<0.2	<1	44	<1	--	--	--	--	--	--	--	--	--
IW05	04/16/14	30.29	NS	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
IW06	04/16/14	28.75	NS	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater ⁽⁷⁾				500	500	5	1,000	700	1,000	0.2	NE	5	5	160	50	5	NE	NE	5	NE	15	2

NOTES:

Red denotes concentrations exceeding the MTCA Method A Cleanup Level.

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

TOC elevations surveyed by Triad Associates on May 3, 2012.

⁽¹⁾Measured in feet below a fixed spot on the top of the well casing rim.

⁽²⁾Elevation datum NAVD 88, Seattle BM#2609CC 58A at 60.344' and BM#2609CC 55A at 32.066'.

⁽³⁾Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx.

⁽⁴⁾Analyzed by EPA Method 8260C. All other 8260C analytes were not detected above the laboratory reporting limit.

⁽⁵⁾Analyzed by EPA Method 6020 or 200.8.

⁽⁶⁾Analyzed by EPA Method 1631E.

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

Laboratory Note:

^PSample received with incorrect preservation. Results should be considered an estimate.

-- = not analyzed/not measured

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

µg/L = micrograms per liter

1,2-DCE = 1,2-dichloroethene

DRPH = diesel-range petroleum hydrocarbons

EPA = U.S. Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

NE = no MTCA Method A cleanup level established for this analyte

NS = well casing not surveyed

ORPH = oil-range petroleum hydrocarbons

PCE = tetrachloroethene

TCE = trichloroethene

TOC = top of casing elevation



Table 2
Summary of Soil Analytical Results for VOCs
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample Location	Approx.Surface Elevation (NAVD 88)	Sample ID	Sample Date	Sample Depth (feet bgs)	Approx. Elevation (NAVD88)	Analytical Results ⁽¹⁾ (mg/kg)										
						Vinyl Chloride	1,1-Dichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Carbon tetrachloride	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	Total Xylenes
P01	86	P01-04	01/04/12	4	82	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P02	85	P02-1.5	01/04/12	1.5	83.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P04	81	P04-08	01/04/12	8	73	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
	81	P04-15	01/04/12	15	66	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
P05	81	P05-08	01/04/12	8	73	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
P06	81	P06-08	01/04/12	8	73	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
P07	73	P07-02	01/05/12	2	71	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P09	77	P09-02	01/05/12	2	75	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P10	69	P10-04	01/05/12	4	65	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P11	95	P11-04	01/05/12	4	91	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P13	96	P13-02	01/05/12	2	94	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P14	85	P14-06	04/26/12	6	79	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P15	85	P15-02	04/26/12	2	83	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B01	84	B01-13	01/10/12	13	71	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B03	80	B03-10	01/10/12	10	70	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B06	79	B06-20	01/11/12	20	59	<0.05 ^{ht}	<0.05 ^{ht}	<0.05 ^{ht}	<0.05 ^{ht}	<0.05 ^{ht}	<0.03	<0.05 ^{ht}	<0.05 ^{ht}	<0.025	<0.05 ^{ht}	<0.2 ^{ht}
	79	B06-35	01/11/12	35	44	<0.05 ^{ht}	<0.05 ^{ht}	<0.05 ^{ht}	<0.05 ^{ht}	<0.05 ^{ht}	<0.03	0.046	<0.05	<0.025	<0.05 ^{ht}	<0.2 ^{ht}
B12	77	B12-35	04/23/12	35	42	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B14	81	B14-20	04/24/12	20	61	<0.05	<0.05	<0.05	0.47	<0.05	<0.03	2.8	<0.05	0.83	<0.05	<0.2
	81	B14-25	04/24/12	25	56	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B16	79	B16-30	04/25/12	30	49	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B18	79	B18-30	04/26/12	30	49	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
	79	B18-35	04/26/12	35	44	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	0.032	<0.05	<0.025	<0.05	<0.2
	79	B18-45	04/26/12	45	34	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B19	84	B19-35	04/27/12	35	49	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B101	80	B101-07	12/21/12	7	73	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	80	B101-15	12/21/12	15	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	80	B101-23	12/21/12	23	57	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	80	B101-28	12/21/12	28	52	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	80	B101-34	12/21/12	34	46	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
B102	81	B102-10	12/21/12	10	71	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B102-15	12/21/12	15	66	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B102-20	12/21/12	20	61	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B102-25	12/21/12	25	56	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B102-30	12/21/12	30	51	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B102-35	12/21/12	35	46	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
MTCA Method A Cleanup Level for Soil ⁽²⁾						NE	NE	NE	NE	NE	0.1	0.03	7	0.05	6	9



Table 2
Summary of Soil Analytical Results for VOCs
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample Location	Approx.Surface Elevation (NAVD 88)	Sample ID	Sample Date	Sample Depth (feet bgs)	Approx. Elevation (NAVD88)	Analytical Results ⁽¹⁾ (mg/kg)										
						Vinyl Chloride	1,1-Dichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Carbon tetrachloride	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	Total Xylenes
B103	84	B103-07	01/02/13	7	77	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	84	B103-11	01/02/13	11	73	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	84	B103-16	01/02/13	16	68	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	84	B103-24	01/02/13	24	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	84	B103-35	01/02/13	35	49	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
B104	81	B104-04	01/02/13	4	77	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B104-09	01/02/13	9	72	<0.05	<0.05	<0.05	<0.05	--	--	0.12	--	<0.025	--	--
	81	B104-17	01/02/13	17	64	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B104-22	01/02/13	22	59	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B104-30	01/02/13	30	51	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	B104-35	01/02/13	35	46	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P101	85	P101-02	12/20/12	2	83	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P102	85	P102-05	12/20/12	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P103	85	P103-06	12/20/12	6	79	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P104	85	P104-04	12/20/12	4	81	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P105	85	P105-06	12/20/12	6	79	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P106	73	P106-01	12/20/12	1	72	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P107	73	P107-01	12/20/12	1	72	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB201	85	SB201-05	07/09/13	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB201-10	07/09/13	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB201-15	07/09/13	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB201-20	07/09/13	20	65	<0.05	<0.05	<0.05	<0.05	--	--	0.039	--	<0.025	--	--
SB202	85	SB202-05	07/09/13	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB202-08	07/09/13	8	77	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB203	85	SB203-05	07/09/13	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB203-10	07/09/13	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB203-15	07/09/13	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB203-20	07/09/13	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB204	85	SB204-05	07/09/13	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB204-10	07/09/13	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	85	SB204-15	07/09/13	15	70	<0.05	<0.05	<0.05	<0.05	--	--	0.046	--	<0.025	--	--
	85	SB204-20	07/09/13	20	65	<0.05	<0.05	<0.05	<0.05	--	--	0.031	--	<0.025	--	--
SB205	81	SB205-10	07/09/13	10	71	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	SB205-15	07/09/13	15	66	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	81	SB205-20	07/09/13	20	61	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB206	85	SB206-10	05/21/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB206-12.5	05/21/14	12.5	72.5	<0.05	<0.05	<0.05	<0.05	--	--	0.025	--	<0.025	--	--
	85	SB206-15	05/21/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB206-25	05/21/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
MTCA Method A Cleanup Level for Soil ⁽²⁾						NE	NE	NE	NE	NE	0.1	0.03	7	0.05	6	9



Table 2
Summary of Soil Analytical Results for VOCs
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample Location	Approx.Surface Elevation (NAVD 88)	Sample ID	Sample Date	Sample Depth (feet bgs)	Approx. Elevation (NAVD88)	Analytical Results ⁽¹⁾ (mg/kg)										
						Vinyl Chloride	1,1-Dichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Carbon tetrachloride	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	Total Xylenes
SB207	85	SB207-05	05/21/14	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB207-10	05/21/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB207-12.5	05/21/14	12.5	72.5	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB207-20	05/21/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB207-25	05/21/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB207-30	05/21/14	30	55	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
SB208	85	SB208-10	05/21/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB208-12.5	05/21/14	12.5	72.5	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB208-15	05/21/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB208-20	05/21/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
SB209	85	SB209-12.5	05/21/14	12.5	72.5	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB209-15	05/21/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	0.029	--	<0.025	--	--
	85	SB209-25	05/21/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	0.090	--	<0.025	--	--
	85	SB209-30	05/21/14	30	55	<0.05	<0.05	<0.05	<0.05	--	--	0.025	--	<0.025	--	--
SB210	85	SB210-10	05/22/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB210-15	05/22/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB210-20	05/22/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB210-25	05/22/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
SB211	85	SB211-05	05/22/14	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB211-10	05/22/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB211-12.5	05/22/14	12.5	72.5	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB211-15	05/22/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB211-20	05/22/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB211-30	05/22/14	30	55	<0.05	<0.05	<0.05	<0.05	--	--	0.022	--	<0.025	--	--
SB212	85	SB212-10	05/22/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB212-12.5	05/22/14	12.5	72.5	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB212-15	05/22/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB212-20	05/22/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	SB212-25	05/22/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
MTCA Method A Cleanup Level for Soil ⁽²⁾						NE	NE	NE	NE	NE	0.1	0.03	7	0.05	6	9



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Seattle, Washington

Sample Location	Approx.Surface Elevation (NAVD 88)	Sample ID	Sample Date	Sample Depth (feet bgs)	Approx. Elevation (NAVD88)	Analytical Results ⁽¹⁾ (mg/kg)										
						Vinyl Chloride	1,1-Dichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Carbon tetrachloride	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	Total Xylenes
MW16	85	B-MW16-10	04/02/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-MW16-15	04/02/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	0.034	--	<0.025	--	--
	85	B-MW16-25	04/02/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	0.066	--	<0.025	--	--
	85	B-MW16-30	04/02/14	30	55	<0.05	<0.05	<0.05	<0.05	--	--	0.042	--	<0.025	--	--
IW01	85	B-IW01-05	04/03/14	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW01-10	04/03/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW01-15	04/04/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW01-25	04/04/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
IW02	85	B-IW02-10	04/01/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW02-15	04/01/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW02-20	04/01/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW02-25	04/02/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
IW03	85	B-IW03-10	04/03/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW03-15	04/03/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	0.044	--	<0.025	--	--
	85	B-IW03-25	04/03/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	0.063	--	<0.025	--	--
	85	B-IW03-30	04/03/14	30	55	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
IW04	85	B-IW04-10	04/01/14	10	75	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW04-15	04/01/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW04-20	04/01/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW04-25	04/02/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW04-30	04/01/14	30	55	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
IW05	85	B-IW05-15	04/02/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW05-20	04/02/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW05-25	04/02/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
IW06	85	B-IW06-05	04/02/14	5	80	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW06-15	04/02/14	15	70	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW06-20	04/02/14	20	65	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
	85	B-IW06-25	04/02/14	25	60	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
IW09	77	B-IW09-30	06/24/14	30	47	<0.05	<0.05	<0.05	<0.05	--	--	<0.02	--	<0.025	--	--
MTCA Method A Cleanup Level for Soil ⁽²⁾						NE	NE	NE	NE	NE	0.1	0.03	7	0.05	6	9

NOTES:

Red denotes concentrations exceeding MTCA cleanup level for soil.

Bold denotes trichloroethene detected below MTCA.

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

Sampling performed by SoundEarth Strategies, Inc.

⁽¹⁾Analyzed by U.S. Environmental Protection Agency Method 8260B or 8260C.

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

Laboratory Notes:

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

^{lc}The presence of the compound indicated is likely due to laboratory contamination.

-- = not analyzed

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

bgs = below ground surface

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

NAVD88 = North American Vertical Datum 1988

NE = no MTCA Method A cleanup level established for this chemical

VOC = volatile organic compound

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

Friedman & Bruya, Inc. #403358

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
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March 28, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on March 25, 2014 from the SOU_0789-004_20140325, F&BI 403358 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0328R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 25, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140325, F&BI 403358 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
403358 -01	MW05-20140325
403358 -02	MW11-20140325
403358 -03	MW10-20140325
403358 -04	MW01-20140325
403358 -05	MW09-20140325
403358 -06	MW07-20140325

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW05-20140325	Client:	SoundEarth Strategies
Date Received:	03/25/14	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	403358-01
Date Analyzed:	03/26/14	Data File:	032609.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	2.1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	9.9
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW11-20140325	Client:	SoundEarth Strategies
Date Received:	03/25/14	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	403358-02
Date Analyzed:	03/26/14	Data File:	032611.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	48
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW10-20140325	Client:	SoundEarth Strategies
Date Received:	03/25/14	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	403358-03
Date Analyzed:	03/26/14	Data File:	032614.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW01-20140325	Client:	SoundEarth Strategies
Date Received:	03/25/14	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	403358-04
Date Analyzed:	03/26/14	Data File:	032615.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.3
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW09-20140325	Client:	SoundEarth Strategies
Date Received:	03/25/14	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	403358-05
Date Analyzed:	03/26/14	Data File:	032612.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	2.4
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	51
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW07-20140325	Client:	SoundEarth Strategies
Date Received:	03/25/14	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	403358-06
Date Analyzed:	03/26/14	Data File:	032610.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	6.4
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140325, F&BI 403358
Date Extracted:	03/26/14	Lab ID:	04-0575 mb
Date Analyzed:	03/26/14	Data File:	032608.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/28/14

Date Received: 03/25/14

Project: SOU_0789-004_20140325, F&BI 403358

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

Laboratory Code: 403358-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	99	50-150
Chloroethane	ug/L (ppb)	50	<1	101	50-150
1,1-Dichloroethene	ug/L (ppb)	50	<1	94	50-150
Methylene chloride	ug/L (ppb)	50	<5	107	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	50-150
1,1-Dichloroethane	ug/L (ppb)	50	<1	101	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	112	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	99	50-150
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	108	50-150
Trichloroethene	ug/L (ppb)	50	6.4	99	50-150
Tetrachloroethene	ug/L (ppb)	50	<1	103	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	92	97	70-130	5
Chloroethane	ug/L (ppb)	50	96	102	70-130	6
1,1-Dichloroethene	ug/L (ppb)	50	94	95	70-130	1
Methylene chloride	ug/L (ppb)	50	107	108	70-130	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	101	103	70-130	2
1,1-Dichloroethane	ug/L (ppb)	50	101	103	70-130	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	105	107	70-130	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	96	97	70-130	1
1,1,1-Trichloroethane	ug/L (ppb)	50	98	100	70-130	2
Trichloroethene	ug/L (ppb)	50	94	95	70-130	1
Tetrachloroethene	ug/L (ppb)	50	98	99	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.

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Friedman & Bruya, Inc. #404027

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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April 8, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on April 1, 2014 from the SOU_0789-004_20140401, F&BI 404027 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 1, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140401, F&BI 404027 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
404027 -01	B-IW04-05
404027 -02	B-IW04-10
404027 -03	B-IW04-15
404027 -04	B-IW04-20
404027 -05	B-IW04-25
404027 -06	B-IW04-30
404027 -07	B-IW02-05
404027 -08	B-IW02-10
404027 -09	B-IW02-15
404027 -10	B-IW02-20
404027 -11	B-IW02-25
404027 -12	B-IW02-30

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW04-10	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-02
Date Analyzed:	04/03/14	Data File:	040313.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	99	51	121
4-Bromofluorobenzene	99	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW04-15	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-03
Date Analyzed:	04/03/14	Data File:	040314.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	99	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW04-20	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-04
Date Analyzed:	04/03/14	Data File:	040315.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW04-25	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-05
Date Analyzed:	04/03/14	Data File:	040316.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	99	51	121
4-Bromofluorobenzene	99	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW04-30	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-06
Date Analyzed:	04/03/14	Data File:	040317.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	100	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW02-10	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-08
Date Analyzed:	04/03/14	Data File:	040318.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	98	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW02-15	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-09
Date Analyzed:	04/03/14	Data File:	040319.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW02-20	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-10
Date Analyzed:	04/03/14	Data File:	040320.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	98	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW02-25	Client:	SoundEarth Strategies
Date Received:	04/01/14	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/03/14	Lab ID:	404027-11
Date Analyzed:	04/03/14	Data File:	040321.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	98	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140401, F&BI 404027
Date Extracted:	04/02/14	Lab ID:	04-0649 mb2
Date Analyzed:	04/03/14	Data File:	040310.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	99	51	121
4-Bromofluorobenzene	99	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/08/14

Date Received: 04/01/14

Project: SOU_0789-004_20140401, F&BI 404027

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

Laboratory Code: 404033-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	36	35	10-138	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	53	52	10-176	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	49	48	10-160	2
Methylene chloride	mg/kg (ppm)	2.5	<0.5	58	56	10-156	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	54	53	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	63	62	19-140	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	66	25-135	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	67	66	12-160	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	62	62	10-156	0
Trichloroethene	mg/kg (ppm)	2.5	<0.02	60	60	21-139	0
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	54	55	20-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	69	22-139
Chloroethane	mg/kg (ppm)	2.5	78	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	79	47-128
Methylene chloride	mg/kg (ppm)	2.5	77	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	79	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	88	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	89	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	90	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	88	62-131
Trichloroethene	mg/kg (ppm)	2.5	84	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	85	72-114

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.

404027

SAMPLE CHAIN OF CUSTODY

ME 04/01/14

VS1/
2/92Send Report to Rob RobertsCompany SoundEarth Strategies, Inc.Address 2811 Fairview Avenue E. Suite 2000City, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS

HoldPage # 1 of 1

TURNAROUND TIME

Standard (2 Weeks) 1 week

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
B-IW04-05	B-IW04	05	01 ^A	04/01/14	0935	Soil	3								VOCs Analysis 4/3/14 - 6/25/14
B-IW04-10		10	02		0950		3	X							
B-IW04-15		15	03		0955		3	X							
B-IW04-20		20	04		1000		3	X							
B-IW04-25		25	05		1035		3	X							
B-IW04-30		30	06		1100		3	X							
B-IW02-05	B-IW02	05	07		1415		3								
B-IW02-10		10	08		1420		3	X							
B-IW02-15		15	09		1435		3	X							
B-IW02-20		20	10		1455		1	X							

Samples received at 4 °CFriedman & 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
Relinquished by:	Chris Cass	Sound Earth	04/01/14	1616
Received by:	Thiff Longston	FDEI	4/1/14	1616
Relinquished by:				
Received by:				

Friedman & Bruya, Inc. #404067

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

April 9, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on April 2, 2014 from the SOU_0789-004_20140402, F&BI 404067 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0409R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 2, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140402, F&BI 404067 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
404067 -01	B-IW05-10
404067 -02	B-IW05-15
404067 -03	B-IW05-20
404067 -04	B-IW05-25
404067 -05	B-IW05-31
404067 -06	B-IW06-05
404067 -07	B-IW06-15
404067 -08	B-IW06-20
404067 -09	B-IW06-25
404067 -10	B-IW06-30

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW05-15	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-02
Date Analyzed:	04/04/14	Data File:	040421.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	104	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW05-20	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-03
Date Analyzed:	04/04/14	Data File:	040422.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	105	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW05-25	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-04
Date Analyzed:	04/04/14	Data File:	040423.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	106	51	121
4-Bromofluorobenzene	101	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW06-05	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-06
Date Analyzed:	04/04/14	Data File:	040424.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	106	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW06-15	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-07
Date Analyzed:	04/04/14	Data File:	040425.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	106	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW06-20	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-08
Date Analyzed:	04/04/14	Data File:	040426.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	107	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW06-25	Client:	SoundEarth Strategies
Date Received:	04/02/14	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	404067-09
Date Analyzed:	04/04/14	Data File:	040427.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	107	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789-004_20140402, F&BI 404067
Date Extracted:	04/04/14	Lab ID:	04-0678 mb
Date Analyzed:	04/04/14	Data File:	040408.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/09/14

Date Received: 04/02/14

Project: SOU_0789-004_20140402, F&BI 404067

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

Laboratory Code: 404077-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	39	40	10-138	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	56	53	10-176	6
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	56	58	10-160	4
Methylene chloride	mg/kg (ppm)	2.5	<0.5	61	62	10-156	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	61	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	69	70	19-140	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	70	72	25-135	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	72	74	12-160	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	70	72	10-156	3
Trichloroethene	mg/kg (ppm)	2.5	<0.02	69	71	21-139	3
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	68	69	20-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	61	22-139
Chloroethane	mg/kg (ppm)	2.5	69	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	75	47-128
Methylene chloride	mg/kg (ppm)	2.5	75	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	75	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	84	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	87	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	87	62-131
Trichloroethene	mg/kg (ppm)	2.5	83	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	81	72-114

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.

Send Report to Rob Roberts
 Company SoundEarth Strategies, Inc.
 Address 2811 Fairview Avenue E. Suite 2000
 City, State, ZIP Seattle, WA 98102
 Phone # 206-306-1900 Fax # 206-306-1907

SAMPLE CHA OF CUSTODY

ME
04-02-14

VS2/12

SAMPLERS (signature) <i>Chris Cass</i>	
PROJECT NAME/NO. Avtech Wallingford Property	PO # 0789-004
REMARKS <u>Hold</u>	

Page # <u>1</u> of <u>1</u> TURNAROUND TIME Standard (2 Weeks) RUSH Rush charges authorized by:
SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
B-IW05-10	B-IW05	10	01 ¹¹	04/02/14	0920	Soil	3								X-added by Rob Roberts 4/4/14
B-IW05-15		15	02		0740		3	X							
B-IW05-20		20	03		0950		3	X							
B-IW05-25		25	04		1005		3	X							
B-IW05-31		31	05		1025		3								
B-IW06-05	B-IW06	05	06		1330		3	X							
B-IW06-15		15	07		1355		3	X							
B-IW06-20		20	08		1415		3	X							
B-IW06-25		25	09		1440		3	X							
B-IW06-30		30	10		1455		3								

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
Relinquished by: <i>Chris Cass</i>	Chris Cass	SoundEarth	04/02/14	3:43 PM
Received by: <i>VIN</i>	VIN	FBI	4/02/14	3:43 PM
Relinquished by:				
Received by:				

Samples received at 4:00

Friedman & Bruya, Inc. #404094 and additional

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

April 10, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on April 3, 2014 from the SOU_0789-004_20140403, F&BI 404094 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0410R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 3, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140403, F&BI 404094 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
404094 -01	B-MW16-10
404094 -02	B-MW16-15
404094 -03	B-MW16-20
404094 -04	B-MW16-25
404094 -05	B-MW16-30
404094 -06	B-IW03-10
404094 -07	B-IW03-15
404094 -08	B-IW03-20
404094 -09	B-IW03-25
404094 -10	B-IW03-30
404094 -11	B-IW01-05
404094 -12	B-IW01-10

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-MW16-15	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	404094-02
Date Analyzed:	04/08/14	Data File:	040808.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	97	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.034
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-MW16-25	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	404094-04
Date Analyzed:	04/08/14	Data File:	040813.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	99	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.066
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW03-15	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	404094-07
Date Analyzed:	04/08/14	Data File:	040814.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	95	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.044
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW03-25	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	404094-09
Date Analyzed:	04/08/14	Data File:	040815.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.063
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW01-05	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	404094-11
Date Analyzed:	04/08/14	Data File:	040816.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	94	51	121
4-Bromofluorobenzene	95	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW01-10	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	404094-12
Date Analyzed:	04/08/14	Data File:	040817.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	95	51	121
4-Bromofluorobenzene	95	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/07/14	Lab ID:	04-0651 mb
Date Analyzed:	04/08/14	Data File:	040805.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	94	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/14

Date Received: 04/03/14

Project: SOU_0789-004_20140403, F&BI 404094

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

Laboratory Code: 404094-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	38	35	10-138	8
Chloroethane	mg/kg (ppm)	2.5	<0.5	53	48	10-176	10
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	54	10-160	5
Methylene chloride	mg/kg (ppm)	2.5	<0.5	61	59	10-156	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	58	14-137	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	70	68	19-140	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	72	70	25-135	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	74	73	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	72	70	10-156	3
Trichloroethene	mg/kg (ppm)	2.5	0.031	69	69	21-139	0
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	72	71	20-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	52	22-139
Chloroethane	mg/kg (ppm)	2.5	63	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	69	47-128
Methylene chloride	mg/kg (ppm)	2.5	71	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	72	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	81	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	82	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	82	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	82	62-131
Trichloroethene	mg/kg (ppm)	2.5	78	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	84	72-114

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.

CI2/VS



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

Hotel

Will call with instructions

								will call with instructions									
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes	
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx						
B-MW16-10	B-MW16	10	01	04/02/14	1805	Soil	3										
B-MW16-15		15	02		1825		3	X									
B-MW16-20		20	03		1845		3										
B-MW16-25		25	04		1905		3	X									
B-MW16-30	↓	30	05	↓	1935	↓	3										
B-IW03-10	B-IW03	10	06	04/03/14	1025	Soil	3										
B-IW03-15		15	07		1030		3	X									
B-IW03-20		20	08		1045		3										
B-IW03-25		25	09		1055		3	X									
B-IW03-30	↓	30	10	↓	1135	↓	3										

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Chris Cass	SoundEarth	04/03/14	1633
Received by: 	VINH	FBI	4/13/14	1637
Relinquished by:				
Received by:				

Samples received at 4 PC

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

April 16, 2014

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

Dear Mr. Roberts:

Included are the additional results from the testing of material submitted on April 3, 2014 from the SOU_0789-004_20140403, F&BI 404094 project. There are 8 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0416R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 3, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140403, F&BI 404094 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
404094 -01	B-MW16-10
404094 -02	B-MW16-15
404094 -03	B-MW16-20
404094 -04	B-MW16-25
404094 -05	B-MW16-30
404094 -06	B-IW03-10
404094 -07	B-IW03-15
404094 -08	B-IW03-20
404094 -09	B-IW03-25
404094 -10	B-IW03-30
404094 -11	B-IW01-05
404094 -12	B-IW01-10

Samples B-MW16-15 and B-MW16-25, as well as B-IW03-15 and B-IW03-25, were composited and sent to Fremont for total organic carbon analysis. The report generated by Fremont will be forwarded upon receipt.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-MW16-10	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/14/14	Lab ID:	404094-01
Date Analyzed:	04/14/14	Data File:	041411.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-MW16-30	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/14/14	Lab ID:	404094-05
Date Analyzed:	04/14/14	Data File:	041412.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.042
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW03-10	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/14/14	Lab ID:	404094-06
Date Analyzed:	04/14/14	Data File:	041413.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	98	51	121
4-Bromofluorobenzene	97	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW03-30	Client:	SoundEarth Strategies
Date Received:	04/03/14	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/14/14	Lab ID:	404094-10
Date Analyzed:	04/14/14	Data File:	041414.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	97	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140403, F&BI 404094
Date Extracted:	04/14/14	Lab ID:	04-0734 mb
Date Analyzed:	04/14/14	Data File:	041410.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/16/14

Date Received: 04/03/14

Project: SOU_0789-004_20140403, F&BI 404094

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

Laboratory Code: 404094-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	54	52	10-138	4
Chloroethane	mg/kg (ppm)	2.5	<0.5	71	68	10-176	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	64	10-160	3
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	64	10-156	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	67	14-137	6
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	78	73	19-140	7
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	78	73	25-135	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	83	78	12-160	6
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	68	62	10-156	9
Trichloroethene	mg/kg (ppm)	2.5	<0.02	79	75	21-139	5
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	79	75	20-133	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	70	22-139
Chloroethane	mg/kg (ppm)	2.5	80	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	80	47-128
Methylene chloride	mg/kg (ppm)	2.5	76	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	81	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	88	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	87	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	90	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	78	62-131
Trichloroethene	mg/kg (ppm)	2.5	87	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	87	72-114

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.

Send Report to **Rob Roberts**

Company **SoundEarth Strategies, Inc.**

Address **2811 Fairview Avenue E. Suite 2000**

City, State, ZIP **Seattle, WA 98102**

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

SAMPLE CHA[OF CUSTODY ME 04/03/14

SAMPLERS (signature) <i>[Signature]</i>	
PROJECT NAME/NO. Avtech Wallingford Property	PO # 0789-004
REMARKS <i>[Handwritten]</i>	

Page # 1 of 2

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by: _____

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED										Notes
								Chlorinated Solvents (3200C)	NWTPH-G	NWTPH-G/STEX	TOC							
B-MW16-10	B-MW16	10	01	04/02/14	1805	Soil	3	X										
B-MW16-15		15	02		1825		3	X			*							(X) 20 RR
B-MW16-20		20	03		1845		3				*							4/11/14
B-MW16-25		25	04		1905		3	X			*							MW16 15-25 Comp
B-MW16-30		30	05		1935		3	X			*							Dec 4/13/14
B-IW03-10	B-IW03	10	06	04/03/14	1025	Soil	3	X										AM RR
B-IW03-15		15	07		1030		3	X			*							
B-IW03-20		20	08		1045		3				*							
B-IW03-25		25	09		1055		3	X			*							IW03 15-25 Comp
B-IW03-30		30	10		1135		3	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
Relinquished by: <i>[Signature]</i>		Chris Cass		SoundEarth	04/03/14	1633
Received by: <i>[Signature]</i>		VINH		FBI	4/13/14	1637
Relinquished by:						
Received by:						
				Samples received at Y PC		

404094

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLE CHA OF CUSTODY MS 04/03/14

SAMPLERS (signature) <u>[Signature]</u>	
PROJECT NAME/NO. Avtech Wallingford Property	PO # 0789-004
REMARKS <u>Hold</u>	

Page # 2 of 2

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by: _____

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED										Notes
								Chlorinated Solvents (8260C)	NWTPH-C	NWTPH-GBTEX	NWTPH-Dx							
B-IW01-05	B-IW01	05	412	04/03/14	1545	Soil	3	X										
B-IW01-10	±	10	122	↓	1605	±	3	X										

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-8029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	<u>[Signature]</u>	<u>Chris Cress</u>	<u>SoundEarth</u>	<u>04/03/14</u>	<u>1603</u>
Received by:	<u>[Signature]</u>	<u>VINH</u>	<u>FBI</u>	<u>4/13/14</u>	<u>1623</u>
Relinquished by:					
Received by:					
			Samples received at <u>4 °C</u>		

Friedman & Bruya, Inc. #404097

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

April 9, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on April 4, 2014 from the SOU_0789-004_20140404, F&BI 404097 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0409R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140404, F&BI 404097 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
404097 -01	B-IW01-15
404097 -02	B-IW01-20
404097 -03	B-IW01-25
404097 -04	B-IW01-30

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW01-15	Client:	SoundEarth Strategies
Date Received:	04/04/14	Project:	SOU_0789-004_20140404, F&BI 404097
Date Extracted:	04/04/14	Lab ID:	404097-01
Date Analyzed:	04/04/14	Data File:	040428.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	106	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B-IW01-25	Client:	SoundEarth Strategies
Date Received:	04/04/14	Project:	SOU_0789-004_20140404, F&BI 404097
Date Extracted:	04/04/14	Lab ID:	404097-03
Date Analyzed:	04/05/14	Data File:	040429.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	62	142
Toluene-d8	106	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0789-004_20140404, F&BI 404097
Date Extracted:	04/04/14	Lab ID:	04-0678 mb
Date Analyzed:	04/04/14	Data File:	040408.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/09/14

Date Received: 04/04/14

Project: SOU_0789-004_20140404, F&BI 404097

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

Laboratory Code: 404077-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	39	40	10-138	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	56	53	10-176	6
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	56	58	10-160	4
Methylene chloride	mg/kg (ppm)	2.5	<0.5	61	62	10-156	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	61	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	69	70	19-140	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	70	72	25-135	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	72	74	12-160	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	70	72	10-156	3
Trichloroethene	mg/kg (ppm)	2.5	<0.02	69	71	21-139	3
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	68	69	20-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	61	22-139
Chloroethane	mg/kg (ppm)	2.5	69	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	75	47-128
Methylene chloride	mg/kg (ppm)	2.5	75	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	75	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	84	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	87	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	87	62-131
Trichloroethene	mg/kg (ppm)	2.5	83	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	81	72-114

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.

404097

SAMPLE CHAIN OF CUSTODY ME 04-04-14

VSI/AO:

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature)

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS

Hold

Page # 1 of 1

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Solvents (3280C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
B-IW01-15	B-IW01	15	01A	04/03/14	1630	Soil	3	X							
B-IW01-20		20	02		1650		3								
B-IW01-25		25	03		1715		3	X							
B-IW01-30		30	04		1730		3								

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
Relinquished by:		Chris Cuss		SoundEarth			
Received by:							
Relinquished by:							
Received by:							

5 °C

Friedman & Bruya, Inc. #404323

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

April 23, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on April 17, 2014 from the SOU_0789-004_20140417, F&BI 404323 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0423R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 17, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140417, F&BI 404323 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
404323 -01	IW01-20140416
404323 -02	IW02-20140416
404323 -03	IW03-20140416
404323 -04	IW04-20140416
404323 -05	IW05-20140416
404323 -06	IW06-20140416
404323 -07	MW06-20140416
404323 -08	MW15-20140416
404323 -09	MW16-20140416
404323 -10	MW99-20140416

1,1,1-Trichloroethane in the 8260C laboratory control sample and laboratory control sample duplicate exceeded the acceptance criteria. The analyte was not detected in the sample, therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW01-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-01
Date Analyzed:	04/18/14	Data File:	041810.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	101	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW02-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-02
Date Analyzed:	04/18/14	Data File:	041811.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	102	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW03-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-03
Date Analyzed:	04/18/14	Data File:	041812.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	17
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW04-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-04
Date Analyzed:	04/18/14	Data File:	041813.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	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	44
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW05-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-05
Date Analyzed:	04/18/14	Data File:	041814.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW06-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-06
Date Analyzed:	04/18/14	Data File:	041815.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	104	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW06-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-07
Date Analyzed:	04/18/14	Data File:	041816.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	104	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	3.9
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW15-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-08
Date Analyzed:	04/18/14	Data File:	041817.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	102	63	127
4-Bromofluorobenzene	104	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW16-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-09
Date Analyzed:	04/18/14	Data File:	041820.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	97	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW99-20140416	Client:	SoundEarth Strategies
Date Received:	04/17/14	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	404323-10
Date Analyzed:	04/18/14	Data File:	041821.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140417, F&BI 404323
Date Extracted:	04/18/14	Lab ID:	04-0740 mb
Date Analyzed:	04/18/14	Data File:	041807.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/23/14

Date Received: 04/17/14

Project: SOU_0789-004_20140417, F&BI 404323

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

Laboratory Code: 404323-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	94	36-166
Chloroethane	ug/L (ppb)	50	<1	117	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	92	60-136
Methylene chloride	ug/L (ppb)	50	<5	86	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	92	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	96	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	93	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	97	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	129	60-146
Trichloroethene	ug/L (ppb)	50	<1	96	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	92	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	94	98	50-154	4
Chloroethane	ug/L (ppb)	50	122	125	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	93	94	67-136	1
Methylene chloride	ug/L (ppb)	50	86	86	39-148	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	95	95	68-128	0
1,1-Dichloroethane	ug/L (ppb)	50	97	97	79-121	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	94	94	80-123	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	94	93	73-132	1
1,1,1-Trichloroethane	ug/L (ppb)	50	142 vo	145 vo	83-130	2
Trichloroethene	ug/L (ppb)	50	95	95	80-120	0
Tetrachloroethene	ug/L (ppb)	50	93	92	76-121	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.

404323

SAMPLE CHAIN OF CUSTODY

ME 04-17-14

a 14

Send Report to Rob RobertsCompany SoundEarth Strategies, Inc.Address 2811 Fairview Avenue E, Suite 2000City, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907SAMPLERS (signature) Chris CassPage # 1 of 1

PROJECT NAME/NO.

PO #

Avtech Wallingford Property

0789-004

REMARKS

~~Hold Sample until 2014-07-11~~

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED								Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-DX					
IW01-20140416	IW01	27.5	01A	04/16/14	1630	Water	4	X								
IW02-20140416	IW02	39	02		1310		4	X								
IW03-20140416	IW03	36	03		1425		4	X								
IW04-20140416	IW04	33	04		1330		4	X								
IW05-20140416	IW05	33	05		1730		4	X								
IW06-20140416	IW06	31	06		1530		4	X								
MW06-20140416	MW06	35	07		1615		4	X								
MW15-20140416	MW15	35	08		1125		4	X								
MW16-20140416	MW16	43	09		1145		4	X								
Samples received at 4°C																
MW99-20140416	MW99	-	10	04/16/14	0900	Water	4	X								

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COL JC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Chris Cass</u>	Chris Cass	SoundEarth	04/17/14	1107
Received by: <u>DeW</u>	DeW	F&BI	11	11
Relinquished by:				
Received by:				

Friedman & Bruya, Inc. #404540

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 6, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on April 30, 2014 from the SOU_0789-004_20140430, F&BI 404540 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0506R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 30, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140430, F&BI 404540 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID
404540 -01

SoundEarth Strategies
MW11D-20140430

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW11D-20140430	Client:	SoundEarth Strategies
Date Received:	04/30/14	Project:	SOU_0789-004_20140430, F&BI 404540
Date Extracted:	05/01/14	Lab ID:	404540-01
Date Analyzed:	05/01/14	Data File:	050108.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	94	108
Toluene-d8	105	91	107
4-Bromofluorobenzene	104	91	110

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140430, F&BI 404540
Date Extracted:	05/01/14	Lab ID:	04-0844 mb
Date Analyzed:	05/01/14	Data File:	050107.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	94	108
Toluene-d8	104	91	107
4-Bromofluorobenzene	105	91	110

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/06/14

Date Received: 04/30/14

Project: SOU_0789-004_20140430, F&BI 404540

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

Laboratory Code: 404540-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	91	58-136
Chloroethane	ug/L (ppb)	50	<1	99	61-138
1,1-Dichloroethene	ug/L (ppb)	50	<1	85	75-118
Methylene chloride	ug/L (ppb)	50	<5	93	73-118
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	92	82-111
1,1-Dichloroethane	ug/L (ppb)	50	<1	91	85-110
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	92	84-112
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	81-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	88	83-115
Trichloroethene	ug/L (ppb)	50	<1	85	84-105
Tetrachloroethene	ug/L (ppb)	50	<1	88	72-121

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	95	109	72-124	14
Chloroethane	ug/L (ppb)	50	97	109	69-133	12
1,1-Dichloroethene	ug/L (ppb)	50	90	100	78-119	11
Methylene chloride	ug/L (ppb)	50	96	98	71-119	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	97	100	82-116	3
1,1-Dichloroethane	ug/L (ppb)	50	94	95	81-116	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	96	96	82-116	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	93	92	81-113	1
1,1,1-Trichloroethane	ug/L (ppb)	50	91	93	84-117	2
Trichloroethene	ug/L (ppb)	50	87	88	82-110	1
Tetrachloroethene	ug/L (ppb)	50	90	92	78-117	2

Data Qualifiers & Definitions

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

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

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

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

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

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

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

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

fb - Analyte present in the blank and the sample.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

FORMS\COC\SESGEMSR1.DOC (Revision 1)

Friedman & Bruya, Inc. #405421

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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Michael Erdahl, B.S.
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June 4, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on May 21, 2014 from the SOU_0789-004_20140521, F&BI 405421 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0604R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 21, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140521, F&BI 405421 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
405421-01	SB206-10
405421-02	SB206-12.5
405421-03	SB206-15
405421-04	SB206-25
405421-05	SB206-30
405421-06	SB207-05
405421-07	SB207-10
405421-08	SB207-12.5
405421-09	SB207-15
405421-10	SB207-20
405421-11	SB207-25
405421-12	SB207-30
405421-13	SB208-05
405421-14	SB208-10
405421-15	SB208-12.5
405421-16	SB208-15

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB206-10	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-01
Date Analyzed:	05/23/14	Data File:	052314.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	95	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB206-12.5	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-02
Date Analyzed:	05/23/14	Data File:	052315.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	62	142
Toluene-d8	98	51	121
4-Bromofluorobenzene	95	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.025
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB206-15	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-03
Date Analyzed:	05/23/14	Data File:	052316.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB206-25	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-04
Date Analyzed:	05/23/14	Data File:	052317.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB207-05	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-06
Date Analyzed:	05/23/14	Data File:	052318.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB207-10	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-07
Date Analyzed:	05/23/14	Data File:	052319.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB207-12.5	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-08
Date Analyzed:	05/23/14	Data File:	052320.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	95	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB207-20	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-10
Date Analyzed:	05/23/14	Data File:	052321.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	96	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB207-25	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-11
Date Analyzed:	05/23/14	Data File:	052322.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	95	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB207-30	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	06/02/14	Lab ID:	405421-12
Date Analyzed:	06/02/14	Data File:	060213.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	90	111
Toluene-d8	99	64	137
4-Bromofluorobenzene	102	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB208-10	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-14
Date Analyzed:	05/23/14	Data File:	052323.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB208-12.5	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-15
Date Analyzed:	05/23/14	Data File:	052324.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	100	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB208-15	Client:	SoundEarth Strategies
Date Received:	05/21/14	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	405421-16
Date Analyzed:	05/23/14	Data File:	052325.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	100	51	121
4-Bromofluorobenzene	96	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	05/23/14	Lab ID:	04-1046 mb
Date Analyzed:	05/23/14	Data File:	052308.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	95	51	121
4-Bromofluorobenzene	94	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140521, F&BI 405421
Date Extracted:	06/02/14	Lab ID:	04-1102 mb
Date Analyzed:	06/02/14	Data File:	060207.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/04/14

Date Received: 05/21/14

Project: SOU_0789-004_20140521, F&BI 405421

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

Laboratory Code: 405439-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	35	39	10-138	11
Chloroethane	mg/kg (ppm)	2.5	<0.5	51	59	10-176	15
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	51	58	10-160	13
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	73	10-156	7
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	52	57	14-137	9
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	63	68	19-140	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	64	70	25-135	9
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	70	74	12-160	6
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	60	66	10-156	10
Trichloroethene	mg/kg (ppm)	2.5	<0.02	57	61	21-139	7
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	65	72	20-133	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	71	22-139
Chloroethane	mg/kg (ppm)	2.5	82	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	85	47-128
Methylene chloride	mg/kg (ppm)	2.5	95	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	79	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	91	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	89	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	94	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	89	62-131
Trichloroethene	mg/kg (ppm)	2.5	80	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	94	72-114

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/04/14

Date Received: 05/21/14

Project: SOU_0789-004_20140521, F&BI 405421

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

Laboratory Code: 405573-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	41	38	10-91	8
Chloroethane	mg/kg (ppm)	2.5	<0.5	64	63	10-101	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	54	52	11-103	4
Methylene chloride	mg/kg (ppm)	2.5	<0.5	65	66	14-128	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	61	13-112	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	69	68	23-115	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	69	25-120	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	73	74	22-124	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	66	27-112	2
Trichloroethene	mg/kg (ppm)	2.5	<0.02	71	73	30-112	3
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	71	72	27-110	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	59	42-107
Chloroethane	mg/kg (ppm)	2.5	83	47-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	71	65-110
Methylene chloride	mg/kg (ppm)	2.5	78	62-119
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	78	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	85	76-109
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	81	77-110
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	87	80-109
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	81	72-116
Trichloroethene	mg/kg (ppm)	2.5	83	72-107
Tetrachloroethene	mg/kg (ppm)	2.5	83	77-110

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.

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 the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

j - The analyte concentration is reported below the lowest calibration standard. 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 laboratory control sample(s) percent recovery and/or RPD were 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 analyte 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 with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.

405421
Send Report to Rob Roberts
Company SoundEarth Strategies, Inc.
Address 2811 Fairview Avenue E. Suite 2000
City, State, ZIP Seattle, WA 98102
Phone # 206-306-1900 Fax # 206-306-1907

SAMPLE CHAIN OF CUSTODY ME 05-21-14

SAMPLERS (signature) Chris [Signature]
PROJECT NAME/NO. Avtech Wallingford Property PO # 0789-004
REMARKS Hold

Page # 1 of 2
TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:
SAMPLE DISPOSAL
Dispose after 30 days
Return samples
Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
SB206-10	SB206	10	01A	05/21/14	1010	Soil	4	X							Analysis added 3/22 for BTEX
SB206-12.5		12.5	02T		1015		4	X							
SB206-15		15	03T		1035		4	X							
SB206-20		20	04A	05/21/14											
SB206-25	SB206	25	04A	05/21/14	1055	Soil	4	X							
SB206-30		30	05T		1100		4								
SB207-05	SB207	05	06T	5/21/14	1210		4	X							
SB207-10		10	07T		1225		4	X							
SB207-12.5		12.5	08T		1240		4	X							
SB207-15		15	09T		1250		4								

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
Relinquished by	<u>Chris [Signature]</u>	Chris Cress		SoundEarth	05/21/14	1535
Received by:	<u>[Signature]</u>	Witt Giffen		EPH	5/21/14	1535
Relinquished by						
Received by:						
Samples received at						5 °C

405421

SAMPLE CHAIN OF CUSTODY ME 05-21-14

V82

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature)

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS

Held

Page # 2

of 2

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED										Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx							
SB207-20	SB207	20	10A	05/21/14	1300	Soil	4	X										
SB207-25	↓	25	11	↓	1315	↓	4	X										
SB207-30	↓	30	12	↓	1335	↓	4	X										
SB208-05	SB208	05	13	↓	1455	↓	4	X										Add 5/30/14
SB208-10	↓	10	14	↓	1500	↓	4	X										Roba
SB208-12.5	↓	12.5	15	↓	1510	↓	4	X										
SB208-15	↓	15	16	↓	1525	↓	4	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
Relinquished by:	<i>[Signature]</i>	Chris Cass		SoundEarth	05/21/14	1535
Received by:	<i>[Signature]</i>	Walt Gyko		ERDC	5/21/14	1535
Relinquished by:						
Received by:						

Samples received at 5:00

Friedman & Bruya, Inc. #405463 and additional

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 29, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on May 23, 2014 from the SOU_0789-004_20140523, F&BI 405463 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0529R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 23, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140523, F&BI 405463 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
405463 -01	SB208-20
405463 -02	SB208-25
405463 -03	SB209-05
405463 -04	SB209-10
405463 -05	SB209-12.5
405463 -06	SB209-15
405463 -07	SB209-20
405463 -08	SB209-25
405463 -09	SB209-30
405463 -10	SB210-10
405463 -11	SB210-12.5
405463 -12	SB210-15
405463 -13	SB210-20
405463 -14	SB210-25
405463 -15	SB211-05
405463 -16	SB211-10
405463 -17	SB211-12.5
405463 -18	SB211-15
405463 -19	SB211-20
405463 -20	SB211-25
405463 -21	SB211-30
405463 -22	SB212-10
405463 -23	SB212-12.5
405463 -24	SB212-15
405463 -25	SB212-20
405463 -26	SB212-25
405463 -27	SB212-30

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB208-20	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-01
Date Analyzed:	05/23/14	Data File:	052327.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	111
Toluene-d8	96	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB209-12.5	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-05
Date Analyzed:	05/23/14	Data File:	052328.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	96	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB209-15	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-06
Date Analyzed:	05/23/14	Data File:	052329.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	95	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.029
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB209-25	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-08
Date Analyzed:	05/23/14	Data File:	052330.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	95	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.090
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB210-10	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-10
Date Analyzed:	05/23/14	Data File:	052331.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB210-15	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-12
Date Analyzed:	05/23/14	Data File:	052332.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	96	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB210-20	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-13
Date Analyzed:	05/23/14	Data File:	052333.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB210-25	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-14
Date Analyzed:	05/23/14	Data File:	052334.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	98	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB211-05	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-15
Date Analyzed:	05/23/14	Data File:	052335.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	96	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB211-10	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-16
Date Analyzed:	05/23/14	Data File:	052336.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	111
Toluene-d8	96	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB211-12.5	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-17
Date Analyzed:	05/23/14	Data File:	052337.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB211-15	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-18
Date Analyzed:	05/23/14	Data File:	052338.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	95	64	137
4-Bromofluorobenzene	97	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB211-30	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-21
Date Analyzed:	05/23/14	Data File:	052339.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.022
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB212-10	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-22
Date Analyzed:	05/24/14	Data File:	052340.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB212-12.5	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-23
Date Analyzed:	05/24/14	Data File:	052341.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	96	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB212-15	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-24
Date Analyzed:	05/24/14	Data File:	052342.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	95	64	137
4-Bromofluorobenzene	97	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB212-20	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-25
Date Analyzed:	05/24/14	Data File:	052343.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB212-25	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	405463-26
Date Analyzed:	05/24/14	Data File:	052344.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	111
Toluene-d8	95	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140523
Date Extracted:	05/23/14	Lab ID:	04-1048 mb
Date Analyzed:	05/23/14	Data File:	052326.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	111
Toluene-d8	95	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/29/14

Date Received: 05/23/14

Project: SOU_0789-004_20140523, F&BI 405463

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

Laboratory Code: 405463-22 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	32	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	50	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	46	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	62	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	55	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	65	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	65	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	73	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.02	69	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	68	27-110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/29/14

Date Received: 05/23/14

Project: SOU_0789-004_20140523, F&BI 405463

**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)
Vinyl chloride	mg/kg (ppm)	2.5	61	59	42-107	3
Chloroethane	mg/kg (ppm)	2.5	66	75	47-115	13
1,1-Dichloroethene	mg/kg (ppm)	2.5	73	72	65-110	1
Methylene chloride	mg/kg (ppm)	2.5	82	83	62-119	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	77	77	71-113	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	87	88	76-109	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	85	77-110	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	92	92	80-109	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	87	87	72-116	0
Trichloroethene	mg/kg (ppm)	2.5	87	89	72-107	2
Tetrachloroethene	mg/kg (ppm)	2.5	87	88	77-110	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.

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 the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

j - The analyte concentration is reported below the lowest calibration standard. 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 laboratory control sample(s) percent recovery and/or RPD were 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 analyte 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 with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.

SAMPLE CHAI (OF CUSTODY

ME 05/23/14

V53

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature) Chris Cass

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS

Hold

TURNAROUND TIME

Standard (2 Weeks) 5 days

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
SB208-20	SB208	20	0A2	05/21/14	1540	Soil	4	X							<u>Hold</u> <u>at L&S</u>
SB208-25	↓	25	0A2	↓	1545	Soil	4								
SB209-05	SB209	05	0B		1640		4								
SB209-10	↓	10	0B		1655		4								
SB209-12.5	SB209	12.5	0B		1710		4	X							
SB209-15	↓	15	0B		1725		4	X							
SB209-20	↓	20	0B		1740		4								
SB209-25	↓	25	0B		1755		4	X							
SB209-30	↓	30	0B		1800		4								
Samples received at <u>5</u> °C															

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
Relinquished by: <u>Chris Cass</u>	Chris Cass	SoundEarth	5/23/14	1025
Received by: <u>Nhan Phan</u>	Nhan Phan	FCBT	5/23/14	1025
Relinquished by:				
Received by:				

(405463

SAMPLE CHART OF CUSTODY ME 05/23/14

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature)

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS

Hand

Page # 2 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	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
SB210-10	SB210	10	10A-D	05/23/14	0840	Soil	4	X							field of hers
SB210-12.5		12.5	11		0845		4								
SB210-15		15	12		0905		4	X							
SB210-20		20	13		0920		4	X							
SB210-25		25	14		0930		4	X							
SB211-05	SB211	05	15		1135		4	X							
SB211-10	SB211	10	16		1145		4	X							
SB211-12.5		12.5	17		1155		4	X							
SB211-15		15	18		1210		4	X							
SB211-20		20	19		1225		4								

Samples received at 5 °C

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
Relinquished by:		Chris Cass		SoundEarth	5/23/14	1025
Received by:		Nhan Phan		FeBT	5/23/14	1025
Relinquished by:						
Received by:						

SAMPLE CHAI (OF CUSTODY

ME 05/23/14

VS3

Send Report to 405463
Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature) <u>Chris Cass</u>	
PROJECT NAME/NO. Avtech Wallingford Property	PO # 0789-004
REMARKS <u>Held</u>	

Page # <u>3</u> of <u>3</u>
TURNAROUND TIME Standard (2 Weeks) RUSH Rush charges authorized by:
SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
SB211-25	SB211	25	20	5/22/14	1235	Soil	4								<u>Held</u>
SB211-30	↓	30	21		1245		4	X							
SB212-10	SB212	10	22		1355		4	X							
SB212-12.5		12.5	23		1405		4	X							
SB212-15		15	24		1415		4	X							
SB212-20		20	25		1425		4	X							
SB212-25		25	26		1445		4	X							
SB212-30	↓	30	27		1455		4								
Samples received at <u>5</u> °C															
CGS 05/22/14															

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>Chris Cass</u>	Chris Cass	SoundEarth	5/23/14	1025
Received by: <u>Nhan Phan</u>	Nhan Phan	FEBT	5/23/14	1025
Relinquished by:				
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

June 5, 2014

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

Dear Mr. Roberts:

Included are the additional results from the testing of material submitted on May 23, 2014 from the SOU_0789-004_20140523, F&BI 405463 project. There are 8 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0605R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 23, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140523, F&BI 405463 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
405463 -01	SB208-20
405463 -02	SB208-25
405463 -03	SB209-05
405463 -04	SB209-10
405463 -05	SB209-12.5
405463 -06	SB209-15
405463 -07	SB209-20
405463 -08	SB209-25
405463 -09	SB209-30
405463 -10	SB210-10
405463 -11	SB210-12.5
405463 -12	SB210-15
405463 -13	SB210-20
405463 -14	SB210-25
405463 -15	SB211-05
405463 -16	SB211-10
405463 -17	SB211-12.5
405463 -18	SB211-15
405463 -19	SB211-20
405463 -20	SB211-25
405463 -21	SB211-30
405463 -22	SB212-10
405463 -23	SB212-12.5
405463 -24	SB212-15
405463 -25	SB212-20
405463 -26	SB212-25
405463 -27	SB212-30

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB209-30	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523, F&BI 405463
Date Extracted:	05/30/14	Lab ID:	405463-09
Date Analyzed:	05/30/14	Data File:	053033.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	97	51	121
4-Bromofluorobenzene	91	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.025
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB211-20	Client:	SoundEarth Strategies
Date Received:	05/23/14	Project:	SOU_0789-004_20140523, F&BI 405463
Date Extracted:	06/02/14	Lab ID:	405463-19
Date Analyzed:	06/02/14	Data File:	060214.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	111
Toluene-d8	99	64	137
4-Bromofluorobenzene	103	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140523, F&BI 405463
Date Extracted:	05/30/14	Lab ID:	04-1067 mb
Date Analyzed:	05/30/14	Data File:	053006.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	99	51	121
4-Bromofluorobenzene	93	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140523, F&BI 405463
Date Extracted:	06/02/14	Lab ID:	04-1102 mb
Date Analyzed:	06/02/14	Data File:	060207.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	90	111
Toluene-d8	97	64	137
4-Bromofluorobenzene	98	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/05/14

Date Received: 05/23/14

Project: SOU_0789-004_20140523, F&BI 405463

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

Laboratory Code: 405572-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	56	57	10-138	2
Chloroethane	mg/kg (ppm)	2.5	<0.5	76	77	10-176	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	74	10-160	1
Methylene chloride	mg/kg (ppm)	2.5	<0.5	86	86	10-156	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	71	14-137	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	78	78	19-140	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	80	25-135	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	84	86	12-160	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	77	77	10-156	0
Trichloroethene	mg/kg (ppm)	2.5	<0.02	76	77	21-139	1
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	84	83	20-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	72	22-139
Chloroethane	mg/kg (ppm)	2.5	83	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	88	47-128
Methylene chloride	mg/kg (ppm)	2.5	97	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	80	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	88	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	89	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	86	62-131
Trichloroethene	mg/kg (ppm)	2.5	86	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	95	72-114

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/05/14

Date Received: 05/23/14

Project: SOU_0789-004_20140523, F&BI 405463

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

Laboratory Code: 405573-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	41	38	10-91	8
Chloroethane	mg/kg (ppm)	2.5	<0.5	64	63	10-101	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	54	52	11-103	4
Methylene chloride	mg/kg (ppm)	2.5	<0.5	65	66	14-128	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	61	13-112	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	69	68	23-115	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	69	25-120	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	73	74	22-124	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	66	27-112	2
Trichloroethene	mg/kg (ppm)	2.5	<0.02	71	73	30-112	3
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	71	72	27-110	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	59	42-107
Chloroethane	mg/kg (ppm)	2.5	83	47-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	71	65-110
Methylene chloride	mg/kg (ppm)	2.5	78	62-119
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	78	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	85	76-109
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	81	77-110
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	87	80-109
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	81	72-116
Trichloroethene	mg/kg (ppm)	2.5	83	72-107
Tetrachloroethene	mg/kg (ppm)	2.5	83	77-110

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.

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 the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

j - The analyte concentration is reported below the lowest calibration standard. 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 laboratory control sample(s) percent recovery and/or RPD were 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 analyte 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 with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.

() 405463
 Send Report to Rob Roberts
 Company SoundEarth Strategies, Inc.
 Address 2811 Fairview Avenue E, Suite 2000
 City, State, ZIP Seattle, WA 98102
 Phone # 206-306-1900 Fax # 206-306-1907

SAMPLE CHAIN OF CUSTODY

ME 05/23/14

SAMPLERS (signature) [Signature]
 PROJECT NAME/NO. Avtech Wallingford Property PO # 0789-004
 REMARKS Hold
Q - per ER 05/29 @

TURNAROUND TIME
 Standard (2 Weeks) 5 class
 RUSH
 Rush charges authorized by:
 SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED						Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx			
SB208-20	SB208	20	NA	05/21/14	1540	Soil	4	X						Hold GLX
SB208-25	↓	25	02		1545	Soil	4							
SB209-05	SB209	05	03		1640		4							
SB209-10	↓	10	04		1655		4							
SB209-12.5	SB209	12.5	05		1710		4	X						
SB209-15	↓	15	06		1725		4	X						
SB209-20	↓	20	07		1740		4							
SB209-25	↓	25	08		1755		4	X						
SB209-30	↓	30	09		1800	N	4	✓						Sample received at 5 °C
				05/21/14										

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
Relinquished by:	<u>[Signature]</u>	Charles Cass		SoundEarth	5/23/14	1025
Received by:	<u>[Signature]</u>	Nhan Phan		FCBT	5/23/14	1025
Relinquished by:						
Received by:						

405463

SAMPLE CHAIN OF CUSTODY ME 05/23/14

183

Send Report to Rob RobertsCompany SoundEarth Strategies, Inc.Address 2811 Fairview Avenue E, Suite 2000City, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907SAMPLERS (signature) Chris Cass

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS HoldPage # 2 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	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED						Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/TEX	NWTPH-Dx			
SB210-10	SB210	10	10A-D	05/23/14	0840	Soil	4	X						(Hold) cut lines
SB210-12.5		12.5	11		0845		4	X						
SB210-15		15	12		0905		4	X						
SB210-20		20	13		0920		4	X						
SB210-25		25	14		0930		4	X						
SB211-05	SB211	05	05		1135		4	X						
SB211-10	SB211	10	16		1145		4	X						
SB211-12.5		12.5	17		1155		4	X						
SB211-15		15	18		1210		4	X						
SB211-20		20	19		1225		4	X						

Samples received at 5 °C

ADDED 5/29/14 Rob R

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
Relinquished by:	<u>Chris Cass</u>	Chris Cass				
Received by:	<u>Nhan Phan</u>	Nhan Phan		SoundEarth	5/23/14	1025
Relinquished by:				FBI	5/23/14	1025
Received by:						

SAMPLE CHAIN OF CUSTODY

ME 05/23/14

VS3

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature) [Signature]

PROJECT NAME/NO.

Avtech Wallingford Property

PO #

0789-004

REMARKS

Held

Page # 3 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	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED							Notes
								Chlorinated Solvents (8260C)	NWTPH-G	NWTPH-G/BTEX	NWTPH-Dx				
SB211-25	SB211	25	20	5/23/14	1235	Soil	4								<u>Held</u>
SB211-30	↓	30	21		1245		4	X							
SB212-10	SB212	10	22		1355		4	X							
SB212-12.5	↓	12.5	23		1405		4	X							
SB212-15	↓	15	24		1415		4	X							
SB212-20		20	25		1425		4	X							
SB212-25		25	26		1445		4	X							
SB212-30	↓	30	27		1455		4								
Samples received at <u>5</u> °C															

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
Relinquished by: <u>[Signature]</u>	Chris Cass	SoundEarth	5/23/14	1025
Received by: <u>[Signature]</u>	Nhan Phan	FEBI	5/23/14	1025
Relinquished by:				
Received by:				

Friedman & Bruya, Inc. #406425

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

July 1, 2014

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

Dear Mr. Roberts:

Included is the amended report from the testing of material submitted on June 24, 2014 from the SOU_0789-004_20140624, F&BI 406425 project. The VOC list has been amended from BTEX and naphthalene to cVOCs as requested on the chain of custody.

We apologize for the inconvenience and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0627R.DOC

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

June 27, 2014

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

Dear Mr. Roberts:

Included are the results from the testing of material submitted on June 24, 2014 from the SOU_0789-004_20140624, F&BI 406425 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0627R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 24, 2014 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20140624, F&BI 406425 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
406425-01	IW09-30
406425-02	IW09-35
406425-03	IW09-40
406425-04	IW09-45

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW09-30	Client:	SoundEarth Strategies
Date Received:	06/24/14	Project:	SOU_0789-004_20140624, F&BI 406425
Date Extracted:	06/24/14	Lab ID:	406425-01
Date Analyzed:	06/24/14	Data File:	062427.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	103	51	121
4-Bromofluorobenzene	98	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004_20140624, F&BI 406425
Date Extracted:	06/24/14	Lab ID:	04-1276 mb
Date Analyzed:	06/24/14	Data File:	062409.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	62	142
Toluene-d8	101	51	121
4-Bromofluorobenzene	97	32	146

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/27/14

Date Received: 06/24/14

Project: SOU_0789-004_20140624, F&BI 406425

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

Laboratory Code: 406245-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	44	41	10-138	7
Chloroethane	mg/kg (ppm)	2.5	<0.5	63	63	10-176	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	64	10-160	5
Methylene chloride	mg/kg (ppm)	2.5	<0.5	75	71	10-156	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	77	74	14-137	4
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	84	80	19-140	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	85	82	25-135	4
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	84	80	12-160	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	83	80	10-156	4
Trichloroethene	mg/kg (ppm)	2.5	<0.02	80	76	21-139	5
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	69	67	20-133	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	74	22-139
Chloroethane	mg/kg (ppm)	2.5	80	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	93	47-128
Methylene chloride	mg/kg (ppm)	2.5	89	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	101	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	100	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	100	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	106	62-131
Trichloroethene	mg/kg (ppm)	2.5	98	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	97	72-114

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.

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 the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

j - The analyte concentration is reported below the lowest calibration standard. 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 laboratory control sample(s) percent recovery and/or RPD were 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 analyte 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 with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.



ATTACHMENT B
BORING LOGS



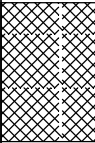
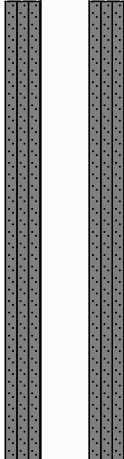

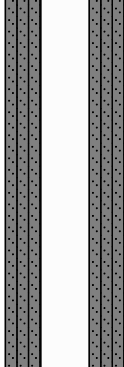


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/03/14
Surface Conditions: Concrete
Well Location N/S: 124 feet North of southwest corner of building.
Well Location E/W: 32 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | B-IW01

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 27 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								5-inch thick concrete floor slab.	
5	16 24 28		100	0.3	B-IW01-05	Fill (SM)		Damp, dense, silty very fine to medium SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (20-65-15). Fill.	
10	50/4"		100	0.3	B-IW01-10	SM		Damp, very dense, silty very fine to fine SAND with subrounded gravel. Light brown. No hydrocarbon or solvent odor (20-65-15).	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 40 feet bgs
Total Well Depth: 40 feet bgs
State Well ID No.: BHZ 967

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 25 -40 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



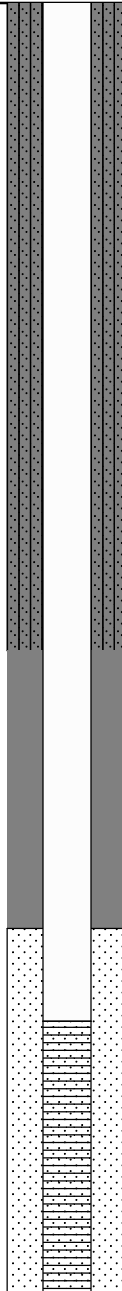



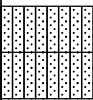



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/03/14
Surface Conditions: Concrete
Well Location N/S: 124 feet North of southwest corner of building.
Well Location E/W: 32 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | **B-IW01**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 27 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15	 50/3"	100	0.1	B-IW01-15	SM		Wet, very dense, silty gravelly fine SAND. Brown. No hydrocarbon or solvent odor (15-70-15).		
20	 50/5"	100	0.3	B-IW01-20	GM-SM		Damp to moist, very dense, gravelly fine SAND with silt. Brown. No hydrocarbon or solvent odor (10-50-40).		
25	 47 40/6"	100	0.0	B-IW01-25	SM SM		Damp, very dense, gravelly fine SAND with trace silt. Brown. No hydrocarbon or solvent odor (5-55-40). Damp, very dense, silty gravelly fine SAND. Brown. No hydrocarbon or solvent odor (15-70-15).		
									

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 40 feet bgs
Total Well Depth: 40 feet bgs
State Well ID No.: BHZ 967

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 25 -40 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:


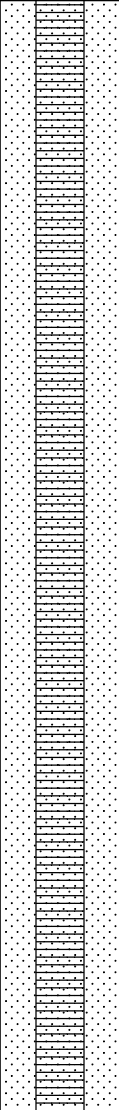


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/03/14
Surface Conditions: Concrete
Well Location N/S: 124 feet North of southwest corner of building.
Well Location E/W: 32 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | **B-IW01**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 27 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30	24 44 43		100	0.0	B-IW01-30	GM-SP		Wet to saturated, very dense, fine to medium gravelly SAND with silt. Brown. No hydrocarbon or solvent odor (10-60-30).	
35									
40								End of boring at 40.0 ft bgs. Injection well IW01 installed to 40 feet bgs.	

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 40 feet bgs
Total Well Depth: 40 feet bgs
State Well ID No.: BHZ 967

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 25 -40 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



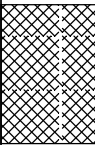
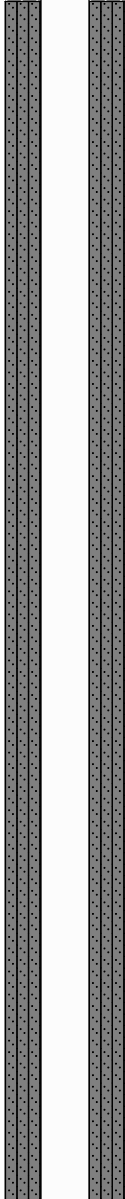



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 70 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | B-IW02

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 37.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								5-inch thick concrete floor slab.	
5	10 10 15		55	0.5	B-IW02-05	Fill (GM)		Damp, medium dense, sandy subrounded GRAVEL with silt. Brown. No hydrocarbon or solvent odor (15-35-60). Fill.	
10	10 9 7		80	0.5	B-IW02-10	GM		Damp, medium dense, sandy subrounded GRAVEL with silt. Brown. No hydrocarbon or solvent odor (10-40-50).	

Drilling Co./Driller: Borettec, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 997

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:


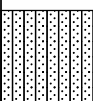
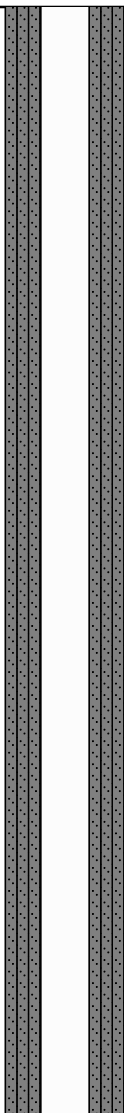
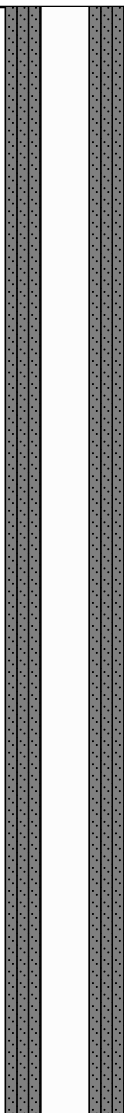
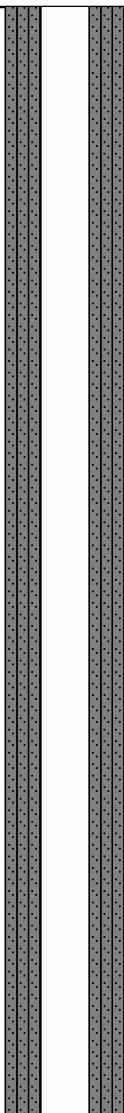






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 70 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | B-IW02

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 37.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail		
15	 21 50/5"	30	0.3	B-IW02-15	SM		Damp, very dense, silty fine SAND with gravel. Brown. No hydrocarbon or solvent odor (30-60-10).				
20	 50/6"	5	0.2	B-IW02-20	GM						
25	 50/5"	20	0.3	B-IW02-25	SM						

Drilling Co./Driller: Boretec, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 997

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:


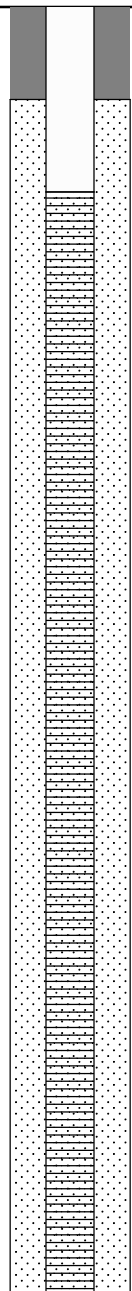


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 70 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | **B-IW02**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 37.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
30	50/3"	10	0.6		B-IW02-30	SM		Moist, very dense, silty fine SAND with gravel. Brown. No hydrocarbon or solvent odor (30-60-10).	
35									
40									

Drilling Co./Driller: Boretec, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 997

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:

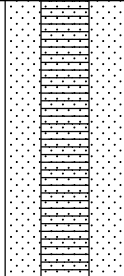


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 70 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | B-IW02

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 37.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
45								End of boring at 45.0 ft bgs. Injection well IW02 installed to 45 feet bgs.	

Drilling Co./Driller: Boretac, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 997

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:


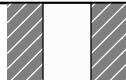

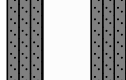

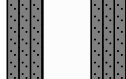


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/03/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 39 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | **B-IW03**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 34.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								2-inch thick concrete floor slab overlying 5-inch thick concrete floor slab.	
10	10 12 16	100	0.6	B-IW03-10	GM-SM		Damp, medium dense, gravelly SAND with trace silt. Brown. No hydrocarbon or solvent odor (5-70-25).		
15	45 28 40	100	0.8	B-IW03-15	SM		Damp, very dense, silty fine SAND with subrounded gravel. Becomes siltier at ~16.2 feet bgs. Brown. No hydrocarbon or solvent odor (20-		

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 966

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/03/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 39 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | **B-IW03**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 34.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
								65-15)/(30-55-15).	
20		50/4"	100	0.4	B-IW03-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (20-70-10).	
25		50/4"	100	0.5	B-IW03-25	SM		Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (20-60-20).	
30		50/3"	100	0.2	B-IW03-30	SM		Damp, very dense, silty very fine to fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (20-65-15).	

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 966

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/03/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 39 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | B-IW03

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 34.4 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
35									
40									
45								End of boring at 45.0 ft bgs. Injection well IW03 installed to 45 feet bgs.	

Drilling Co./Driller: Borettec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 966

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



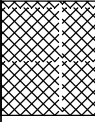

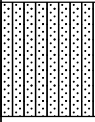






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 43 feet North of southwest corner of building.
Well Location E/W: 47 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | **B-IW04**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 31.0 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		5-inch thick concrete floor slab.	
5	10 10 8		70	0.2	B-IW04-05	Fill (GM)		Damp, medium dense, sandy subrounded GRAVEL with silt. Brown. No hydrocarbon or solvent odor (10-30-60). Fill.	
10	13 19 17		70	0.0	B-IW04-10	SM		Damp, dense, silty fine to coarse SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (25-55-20).	
15	19 30 46		100	0.1	B-IW04-15	GM-SM SM	 	Damp, very dense, gravelly SAND with silt overlying silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (10-50-40)/(30-60-10).	

Drilling Co./Driller: Boretac, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 43 feet bgs
State Well ID No.: BHZ 996

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 28 - 43 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



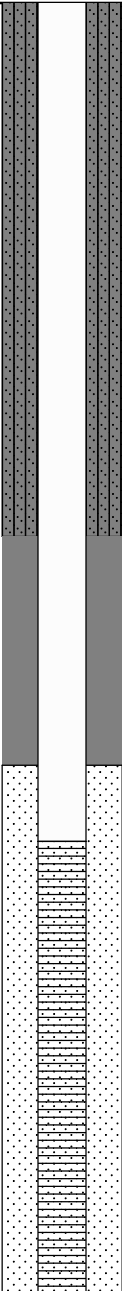







Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 43 feet North of southwest corner of building.
Well Location E/W: 47 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | **B-IW04**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 31.0 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20		50/5"	15	0.2	B-IW04-20	SM		Damp, very dense, silty fine SAND with gravel. Brown. No hydrocarbon or solvent odor (30-60-10).	
25		23 50/5"	100	0.0	B-IW04-25	SM		Damp, very dense, silty fine to medium SAND with subrounded gravel. Becomes siltier with finer sand at ~25.4 feet bgs Brown. No hydrocarbon or solvent odor (20-60-20)/(40-50-10).	
30	 	50/2"	100	0.5	B-IW04-30	SM		Damp, very dense, silty fine to medium SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-60-10).	

Drilling Co./Driller: Boretec, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 43 feet bgs
State Well ID No.: BHZ 996

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 28 - 43 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:

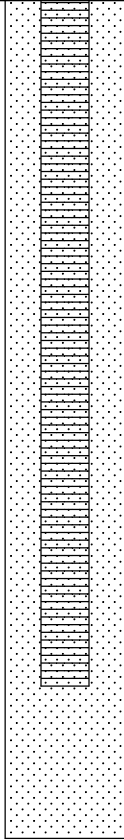


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/01/14
Surface Conditions: Concrete
Well Location N/S: 43 feet North of southwest corner of building.
Well Location E/W: 47 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/01/14

BORING LOG | **B-IW04**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 31.0 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
35									
40									
45								End of boring at 45.0 ft bgs. Injection well IW04 installed to 43 feet bgs.	

Drilling Co./Driller: Boretec, Inc./Bob
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 43 feet bgs
State Well ID No.: BHZ 996

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 28 - 43 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



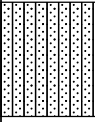
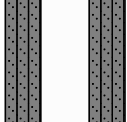
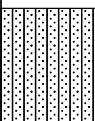
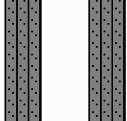


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 65 feet North of southwest corner of building.
Well Location E/W: 4 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/02/14

BORING LOG | B-IW05

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 31 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		5-inch thick concrete floor slab.	
10	23 27 28	60	0.3	B-IW05-10	SM			Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-50-20).	
15	28 40 42	100	0.2	B-IW05-15	SM			Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-55-15).	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 41 feet bgs
Total Well Depth: 40 feet bgs
State Well ID No.: BHZ 998

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 25 - 40 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:



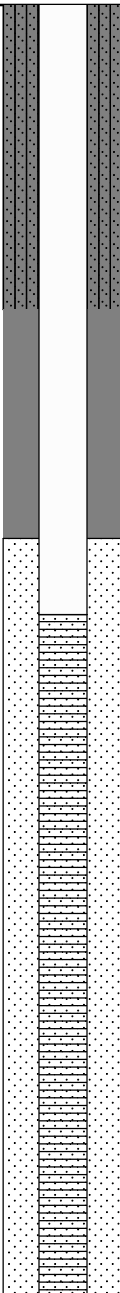







Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 65 feet North of southwest corner of building.
Well Location E/W: 4 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/02/14

BORING LOG | B-IW05

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 31 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20		50/3"	100	0.3	B-IW05-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-60-10).	
25		50/6"	100	0.2	B-IW05-25	SM		Damp, very dense, silty fine to medium SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-55-15).	
30	 	23 40 42	100	0.2	B-IW05-30	SM-SP		Damp, very dense, ~3-inches of silty fine SAND with subrounded gravel overlying fine to medium SAND with subrounded gravel and silt. Brown. No hydrocarbon or solvent odor (30-60-10)/(15-70-15). Becomes wet to saturated at 31 feet bgs.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 41 feet bgs
Total Well Depth: 40 feet bgs
State Well ID No.: BHZ 998

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 25 - 40 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:




Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 65 feet North of southwest corner of building.
Well Location E/W: 4 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/02/14

BORING LOG | B-IW05

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 31 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
35									
40								End of boring at 41.0 ft bgs. Injection well IW05 installed to 40.0 feet bgs.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 41 feet bgs
Total Well Depth: 40 feet bgs
State Well ID No.: BHZ 998

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 25 - 40 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade

Notes/Comments:





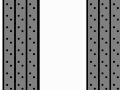










Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 95 feet North of southwest corner of building.
Well Location E/W: 15 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/02/14

BORING LOG | **B-IW06**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

Water Depth At Time of Drilling 29.7 feet bgs
 Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		5-inch thick concrete floor slab.	
5		10 10 10	100	0.5	B-IW05-05	SM SP		Damp, medium dense, ~6 inches of silty fine to medium SAND with subrounded gravel overlying ~6 inches of silty very fine SAND, overlying ~6 inches of fine to medium SAND with trace silt and gravel. Brown. No hydrocarbon or solvent odor (25-55-20)/(30-70-0)/(5-90-5).	
10		50/4"	0					No recovery.	
15		50/4"	100	0.6	B-IW05-15	SM		Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-55-15).	
20		50/4"	100	0.5	B-IW05-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (15-75-10).	

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 40 feet bgs
Total Well Depth: 38 feet bgs
State Well ID No.: BHZ 999

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 23 -38 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:


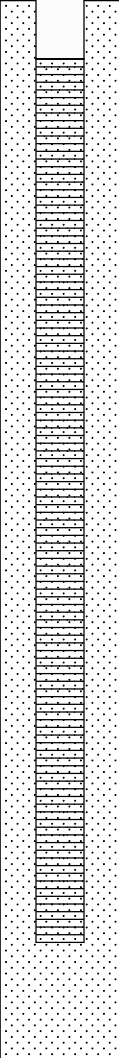




Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 95 feet North of southwest corner of building.
Well Location E/W: 15 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/02/14

BORING LOG | B-IW06

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 29.7 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
25	50/6"		100	0.3	B-IW05-25	SM-SP		Damp, very dense, fine to medium SAND with silt and subrounded gravel. Brown. No hydrocarbon or solvent odor (10-75-15).	
30	29 50/5"		100	0.2	B-IW05-30	SP SM	 	Wet, very dense, ~6 inches of fine to medium SAND with silt and subrounded gravel overlying silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (5-85-10)/(35-50-15).	
35									
40								End of boring at 40.0 ft bgs. Injection well IW06 installed to 38 feet bgs.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 40 feet bgs
Total Well Depth: 38 feet bgs
State Well ID No.: BHZ 999

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 23 -38 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite/Bentonite-Grout Mix
Monument Type: Flush grade



Notes/Comments:








Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 118 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | B-MW16

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 40.7 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		5-inch thick concrete floor slab.	
10	25 23 18		100	0.4	B-MW16-10	SM		Damp, dense, ~6 inches of fine to medium SAND with silt and subrounded gravel overlying silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (15-70-15)/(20-65-15).	
15	50/6"		100	0.5	B-MW16-15	SM		Damp, very dense, silty very fine SAND with trace gravel. Brown. No hydrocarbon or solvent odor (25-70-5).	
20	50/6"		100	0.3	B-MW16-20	SM-SP		Damp, very dense, fine SAND with some silt and gravel. Brown. No hydrocarbon or solvent odor (10-80-10).	

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 965

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:


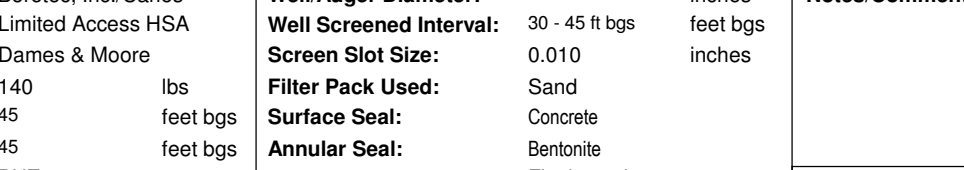



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/02/14
Surface Conditions: Concrete
Well Location N/S: 4 feet North of southwest corner of building.
Well Location E/W: 118 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 04/03/14

BORING LOG | **B-MW16**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 40.7 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
25	50/2"	100	1.1	B-MW16-25	SM			Damp, very dense, fine SAND with silt and trace gravel. Brown. No hydrocarbon or solvent odor (15-80-5).	
30	50/2"	100	0.5	B-MW16-30	SM			Damp, very dense, silty fine SAND with subrounded gravel. Gray. No hydrocarbon or solvent odor (30-50-20).	
35									
40									
45								End of boring at 45.0 ft bgs. Monitoring well MW16 installed to 45 feet bgs.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45 feet bgs
Total Well Depth: 45 feet bgs
State Well ID No.: BHZ 965

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:


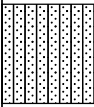




Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 29 feet South of northwest corner of building.
Well Location E/W: 68 feet East of northwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | SB206

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 27.5 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		3.75-inch thick concrete floor slab.	
10	27 43 50/4"	35	0.0	SB206-10	SM		Damp, very dense, silty fine SAND with subrounded gravel. Brown. No hydrocarbon or solvent odor (30-60-10).		
15	50/6"	100	0.0	SB206-12.5	SP-SM		Damp, very dense, fine SAND with silt. Tan. No hydrocarbon or solvent odor (10-90-0).		
15	49 50/3"	100	0.0	SB206-15	SP		Damp, very dense, fine SAND with trace silt and some subrounded gravel. Tan. No hydrocarbon or solvent odor (5-85-10).		

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 31.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --



Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 29 feet South of northwest corner of building.
Well Location E/W: 68 feet East of northwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | SB206

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 27.5 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20	50/1"	0	--	--	--	--		No recovery	
25	50/3"	100	0.0	SB206-25	SM			Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (25-55-20).	
30	21 36 43	100	0.0	SB206-30	GM-SM			Saturated, very dense, gravelly fine to medium SAND with trace silt. Tan. No hydrocarbon or solvent odor (5-65-30).	
								End of boring at 31.5 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 31.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 45 feet South of northwest corner of building.
Well Location E/W: 51 feet East of northwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | **SB207**

Site Address: 3400 Wallingford Avenue North
 Seattle, WA

Water Depth At Time of Drilling 29.1 feet bgs
Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		5-inch thick concrete floor slab.	
5	11 12 14		60	0.0	SB207-05	GP		Damp, medium dense, sandy GRAVEL with trace silt. Tan. No hydrocarbon or solvent odor (5-40-55).	
10	20 30 33		30	0.0	SB207-10	SM		Rock stuck in sampler. Damp, very dense, silty fine SAND with gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	
	22 36 39		95	0.0	SB207-12.5	SM		Damp, very dense, silty fine SAND with gravel. Tan. No hydrocarbon or solvent odor (15-60-25).	
15	50/6"		100	0.0	SB207-15	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-60-25).	

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 31.0 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --



Notes/Comments:
 No hydrocarbon or solvent odors observed in recovered soil samples.









Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 45 feet South of northwest corner of building.
Well Location E/W: 51 feet East of northwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | SB207

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 29.1 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20		45 50/3"	100	0.0	SB207-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-60-25).	
25		50/5"	100	0.0	SB207-25	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-60-20).	
30		35 50/6"	100	0.0	SB207-30	GM-SP		Saturated, very dense, gravelly fine to coarse SAND with silt. Tan. No hydrocarbon or solvent odor (5-65-30).	
								End of boring at 31.0 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 31.0 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 28 feet North of southwest corner of building.
Well Location E/W: 35 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | **SB208**

Site Address: 3400 Wallingford Avenue North
 Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		5-inch thick concrete floor slab.	
5	5 9 11		65	0.0	SB208-05	Fill (SM) GP		~3" of moist, medium dense, silty SAND with gravel and organic debris. Brown-dark brown. No hydrocarbon or solvent odor (30-50-20). Fill. Damp, medium dense, sandy GRAVEL with silt. Tan. No hydrocarbon or solvent odor (10-30-50).	
10	12 14 16		15	0.0	SB208-10	SP		Damp, dense, fine SAND with trace silt and gravel. Tan. No hydrocarbon or solvent odor (5-90-5).	
	50/3"		100	0.0	SB208-12.5	SM-GM		Damp, very dense, gravelly SAND with silt. Tan. No hydrocarbon or solvent odor (10-40-50).	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 25.4 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --



Notes/Comments:
 No hydrocarbon or solvent odors observed in recovered soil samples.









Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 28 feet North of southwest corner of building.
Well Location E/W: 35 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | SB208

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15		50/6"	100	0.0	SB208-15	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	
20		50/6"	100	0.0	SB208-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-65-15).	
25		50/5"	100	0.0	SB208-25	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (25-55-20).	
								End of boring at 25.4 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.	

Drilling Co./Driller: Boretec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 25.4 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 32 feet North of southwest corner of building.
Well Location E/W: 104 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | **SB209**

Site Address: 3400 Wallingford Avenue North
 Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		2.5-inch thick concrete floor slab. 2-inch void. 2-inch thick concrete floor slab. 1-inch thick gravel layer. 3-inch thick concrete slab.	
5	18 24 20		70	0.0	SB209-05	GP		Damp, dense, sandy GRAVEL with silt. Tan. No hydrocarbon or solvent odor (10-40-60).	
10	50/3"		80	0.0	SB209-10	SP-GP		Damp, very dense, gravelly SAND with trace silt. Tan. No hydrocarbon or solvent odor (5-50-45).	
	30 41 50/3"		50	0.0	SB209-12.5	SP SM		Damp, very dense, gravelly SAND with trace silt grading into silty fine to medium SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (5-55-45)/(15-65-20).	
15	50/3"		100	0.0	SB209-15	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	

Drilling Co./Driller: Borettec, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 30.4 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --


Notes/Comments:






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/21/14
Surface Conditions: Concrete
Well Location N/S: 32 feet North of southwest corner of building.
Well Location E/W: 104 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/21/14

BORING LOG | **SB209**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20	X	50/5"	100	0.0	SB209-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	
25	X	50/1"	100	0.0	SB209-25	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan to light gray. No hydrocarbon or solvent odor (20-60-20).	
30	X	50/5"	100	0.0	SB209-30	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	
								End of boring at 30.4 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.	

Drilling Co./Driller: Boretac, Inc./Carlos
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 30.4 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/22/14
Surface Conditions: Plywood-Concrete
Well Location N/S: 6.5 feet North of southwest corner of building.
Well Location E/W: 141 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/22/14

BORING LOG | **SB210**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		0.5-inch thick plywood. 3.5-inch thick void. 1-inch thick hardwood floor. 6-inch thick concrete floor slab.	
5									
10		41 33 50/6"	60	0.0	SB210-10	GP		Damp, very dense, sandy GRAVEL with silt. Tan. No hydrocarbon or solvent odor (10-40-60).	
						SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-60-20).	
		32 32 50/4"	60	0.0	SB210-12.5	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	

Drilling Co./Driller: Boretec, Inc./MacIen
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 25.2 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --


Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.









Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/22/14
Surface Conditions: Plywood-Concrete
Well Location N/S: 6.5 feet North of southwest corner of building.
Well Location E/W: 141 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/22/14

BORING LOG | **SB210**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15	 33 50/3"	100	0.0	SB210-15	SM		<p>Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).</p> <p>Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).</p> <p>Damp, very dense, fine SAND with silt and subrounded gravel. Tan. No hydrocarbon or solvent odor (10-70-20).</p>		
20	 36 50/2"	100	0.0	SB210-20	SM				
25	 50/3"	90	0.0	SB210-25	SM-SP				
							<p>End of boring at 25.2 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.</p>		

Drilling Co./Driller: Boretec, Inc./MacIen
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 25.2 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/22/14
Surface Conditions: Concrete
Well Location N/S: 26.5 feet North of southwest corner of building.
Well Location E/W: 158 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/22/14

BORING LOG | **SB211**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		6-inch thick concrete floor slab.	
5	32 50/6"			0.0	SB211-05	GP		Damp, very dense, silty very fine SAND with subrounded gravel. Tan and light brown. No hydrocarbon or solvent odor (10-70-20).	
10	16 24 30	85		0.0	SB211-10	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-55-25).	
	50/6"	100		0.0	SB211-12.5	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-55-25).	
15	50/6"	100		0.0	SB211-15	SM		Damp, very dense, silty fine SAND with gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	

Drilling Co./Driller: Boretec, Inc./Maclen
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 30.7 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:
No hydrocarbon or solvent odors observed in recovered soil samples.






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/22/14
Surface Conditions: Concrete
Well Location N/S: 26.5 feet North of southwest corner of building.
Well Location E/W: 158 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/22/14

BORING LOG | SB211

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20	50/4"		100	0.0	SB211-20	SM		Damp, very dense, silty fine SAND with gravel. Tan. No hydrocarbon or solvent odor (20-55-25).	
25	50/4"		100	0.0	SB211-25	SM		Damp, very dense, silty fine SAND with gravel. Tan. No hydrocarbon or solvent odor (20-55-25).	
30	43 50/3"		100	0.0	SB211-30	SM SP		Damp, very dense, silty fine SAND with gravel. Tan. No hydrocarbon or solvent odor (20-55-25). Damp, very dense, fine SAND with trace silt and some subrounded gravel. Tan. No hydrocarbon or solvent odor (5-80-15).	
								End of boring at 30.7 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.	

Drilling Co./Driller: Boretac, Inc./MacLen
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 30.7 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --

Notes/Comments:
No hydrocarbon or solvent odors observed
in recovered soil samples.



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/22/14
Surface Conditions: Concrete
Well Location N/S: 3.5 feet North of southwest corner of building.
Well Location E/W: 178 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/22/14

BORING LOG | **SB212**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Concrete		6-inch thick concrete floor slab.	
10	18 23 24	60	0.0		SB212-10	SM		Damp, dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (25-55-20).	
	31 50/3"	100	0.0		SB212-12.5	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (25-55-20).	
15	50/5"	100	0.0		SB212-15	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (25-50-25).	

Drilling Co./Driller: Boretec, Inc./Maclen
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 30.3 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --



Notes/Comments:






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 05/22/14
Surface Conditions: Concrete
Well Location N/S: 3.5 feet North of southwest corner of building.
Well Location E/W: 178 feet East of southwest corner of building.
Reviewed by: CCC
Date Completed: 05/22/14

BORING LOG | **SB212**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20	50/4"		100	0.0	SB212-20	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-55-25).	
25	50/3"		100	0.0	SB212-25	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (20-55-25).	
30	50/4"		100	0.0	SB212-30	SM		Damp to moist, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (15-65-20).	
								End of boring at 30.3 ft bgs. Boring abandoned with hydrated bentonite chips and surface patched with concrete.	

Drilling Co./Driller: Boretec, Inc./MacIen
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 30.3 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

Well/Auger Diameter: 7.25" O.D. inches
Well Screened Interval: -- feet bgs
Screen Slot Size: -- inches
Filter Pack Used: --
Surface Seal: --
Annular Seal: --
Monument Type: --



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/28/14
Surface Conditions: Gravel
Well Location N/S: 12.5 feet North of northwest corner of Varsity Inn building.
Well Location E/W: 86 feet East of northwest corner of Varsity Inn building.
Reviewed by: CCC
Date Completed: 04/29/14

BORING LOG | MW11D

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 42.5/70 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface	
5				0.1				Cuttings: Moist, gravelly fine to medium SAND with silt. No hydrocarbon or solvent odor (10-60-30).	
10								Cuttings: Moist, gravelly fine to medium SAND with silt and cobbles. No hydrocarbon or solvent odor (10-60-30).	
15									

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 76 feet bgs
Total Well Depth: 75 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25"-10.25" I.D. inches
Well Screened Interval: 60 - 75 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/28/14
Surface Conditions: Gravel
Well Location N/S: 12.5 feet North of northwest corner of Varsity Inn building.
Well Location E/W: 86 feet East of northwest corner of Varsity Inn building.
Reviewed by: CCC
Date Completed: 04/29/14

BORING LOG | MW11D

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 42.5/70 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20				0.2				Cuttings: Moist, fine SAND with silt and gravel. Gray. No hydrocarbon or solvent odor (10-80-10).	
25								Cuttings: Moist, gravelly fine SAND with silt. Gray. No hydrocarbon or solvent odor (15-65-20).	
30									
35				0.2				Cuttings: Moist, silty gravelly fine SAND. Gray-brown. No hydrocarbon or solvent odor (15-70-15).	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 76 feet bgs
Total Well Depth: 75 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25"-10.25" I.D. inches
Well Screened Interval: 60 - 75 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/28/14
Surface Conditions: Gravel
Well Location N/S: 12.5 feet North of northwest corner of Varsity Inn building.
Well Location E/W: 86 feet East of northwest corner of Varsity Inn building.
Reviewed by: CCC
Date Completed: 04/29/14

BORING LOG | MW11D

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 42.5/70 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
40								Cuttings: sandy GRAVEL with cobbles. Gray-brown. No hydrocarbon or solvent odor.	
45								Cuttings: Moist to wet silty gravelly SAND (20-60-20).	
50				0.2				Cuttings: Moist to wet, fine sandy SILT to silty SAND. Gray. No hydrocarbon or solvent odor (65-35-0).	
								Bentonite seal placed at 52 to 55 feet bgs at end of conductor casing.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 76 feet bgs
Total Well Depth: 75 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25"-10.25" I.D. inches
Well Screened Interval: 60 - 75 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:




Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/28/14
Surface Conditions: Gravel
Well Location N/S: 12.5 feet North of northwest corner of Varsity Inn building.
Well Location E/W: 86 feet East of northwest corner of Varsity Inn building.
Reviewed by: CCC
Date Completed: 04/29/14

BORING LOG | MW11D

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 42.5/70 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
55									
60									
65									
70								Wet conditions observed in soil cuttings.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 76 feet bgs
Total Well Depth: 75 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25"-10.25" I.D. inches
Well Screened Interval: 60 - 75 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:


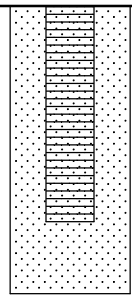


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 04/28/14
Surface Conditions: Gravel
Well Location N/S: 12.5 feet North of northwest corner of Varsity Inn building.
Well Location E/W: 86 feet East of northwest corner of Varsity Inn building.
Reviewed by: CCC
Date Completed: 04/29/14

BORING LOG | MW11D

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 42.5/70 feet bgs
 **Water Depth After Completion** -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
75			25	0.2		GP		Wet, dense, fine to medium sandy GRAVEL to gravelly sand with subrounded gravel. Gray. No hydrocarbon or solvent odor (15-40-45).	
								End of boring at 76 ft bgs. Monitoring well MW11D installed to 75 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 76 feet bgs
Total Well Depth: 75 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25"-10.25" I.D. inches
Well Screened Interval: 60 - 75 ft bgs feet bgs
Screen Slot Size: 0.010 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/23/14
Surface Conditions: Gravel
Well Location N/S: 11.5 feet South of southeast corner of northern Avtech building.
Well Location E/W: 5.5 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/23/14

BORING LOG | IW07

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 35 feet bgs
 **Water Depth After Completion** 33 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5									
10									
15								Cuttings: Damp, silty SAND with gravel. Brown.	
20								Cuttings: Damp, silty SAND with gravel. Brown.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 45.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.: BID 534

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

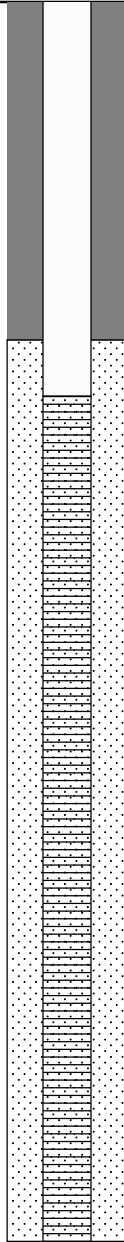


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/23/14
Surface Conditions: Gravel
Well Location N/S: 11.5 feet South of southeast corner of northern Avtech building.
Well Location E/W: 5.5 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/23/14

BORING LOG | IW07

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 35 feet bgs
 **Water Depth After Completion** 33 feet bgs



Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
25								Cuttings: Damp, silty SAND with gravel. Brown.	
30									
35									
40									
45								End of boring at 45.0 ft bgs. Injection well IW07 installed to 45.0 feet bgs.	
Drilling Co./Driller: Cascade/James				Well/Auger Diameter: 2" / 7.25" O.D. inches				Notes/Comments:	
Drilling Equipment: HSA				Well Screened Interval: 30 - 45 ft bgs feet bgs					
Sampler Type: --				Screen Slot Size: 0.020 inches					
Hammer Type/Weight: -- lbs				Filter Pack Used: #2/12 Sand					
Total Boring Depth: 45.0 feet bgs				Surface Seal: Concrete					
Total Well Depth: 45.0 feet bgs				Annular Seal: Bentonite					
State Well ID No.: BID 534				Monument Type: Flush grade				Page: 2 of 2	



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/23/14
Surface Conditions: Gravel
Well Location N/S: 11.8 feet South of southeast corner of northern Avtech building.
Well Location E/W: 29 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/23/14

BORING LOG | IW08

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 35 feet bgs
 **Water Depth After Completion** 35.6 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5									
10									
15								Cuttings: Damp, silty SAND with gravel. Brown.	
20									

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 45.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.: BID 535

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/23/14
Surface Conditions: Gravel
Well Location N/S: 11.8 feet South of southeast corner of northern Avtech building.
Well Location E/W: 29 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/23/14

BORING LOG | IW08

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** 35 feet bgs
 **Water Depth After Completion** 35.6 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
25									
30									
35									
40									
45									

Cuttings: Damp, silty SAND with gravel. Brown.

End of boring at 45.0 ft bgs. Injection well IW07 installed to 45.0 feet bgs.

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 45.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.: BID 535

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade

Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 44.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW09

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 44.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5									
10									
15								Cuttings: Damp, silty SAND with gravel. Brown.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: Dames and Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45.5 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:
Elevated PID readings observed for recovered soil samples.



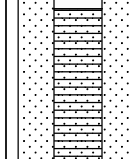


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 44.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW09

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 44.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20									
25									
30		52/6"	100	52.9	IW09-30	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (25-60-15).	

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: Dames and Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45.5 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade

Notes/Comments:
Elevated PID readings observed for recovered soil samples.



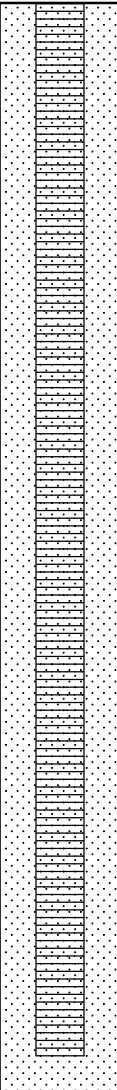






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 44.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW09

Site Address: 3400 Wallingford Avenue North
Seattle, WA

Water Depth At Time of Drilling -- feet bgs
 Water Depth After Completion 44.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
35		80/6"	100	36.1	IW09-35	SM		Damp, very dense, silty fine SAND with subrounded gravel. Tan-medium brown. No hydrocarbon or solvent odor (30-55-15).	
40		31 50/6"	100	53.0	IW09-40	ML		Damp, very dense, clayey SILT. Gray. No hydrocarbon or solvent odor (100-0-0).	
45		50/6"	100	30.4	IW09-45	ML SM-SP		Damp, very dense, clayey SILT with trace gravel. Gray. No hydrocarbon or solvent odor (95-0-5). Underlain by wet SAND with silt and gravel. Gray. No hydrocarbon or solvent odor (10-80-10).	
End of boring at 45.5 ft bgs. Injection well IW09 installed to 45.0 feet bgs.									

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: Dames and Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 45.5 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:
Elevated PID readings observed for recovered soil samples.

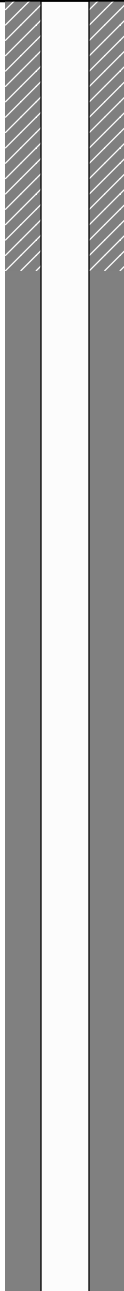


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.5 feet North of southeast corner of northern Avtech building.
Well Location E/W: 64.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW10

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** ~35 feet bgs
 **Water Depth After Completion** Dry feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5									
10									
15									
20									

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 47.0 feet bgs
Total Well Depth: 47.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 32 - 47 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.5 feet North of southeast corner of northern Avtech building.
Well Location E/W: 64.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW10

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** ~35 feet bgs
 **Water Depth After Completion** Dry feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
25									
30									
35								Cuttings: Wet, silty SAND with gravel. Brown.	
40								Cuttings: Wet, SILT. Brown and gray.	
45									
End of boring at 47.0 ft bgs. Injection well IW10 installed to 47.0 feet bgs.									

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 47.0 feet bgs
Total Well Depth: 47.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 32 - 47 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 111.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW11

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** ~35 feet bgs
 **Water Depth After Completion** 39.9 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5									
10								Cuttings: Damp, silty SAND. Brown.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: Dames and Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 46.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 111.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW11

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** ~35 feet bgs
 **Water Depth After Completion** 39.9 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
15									
20									

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: Dames and Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 46.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:


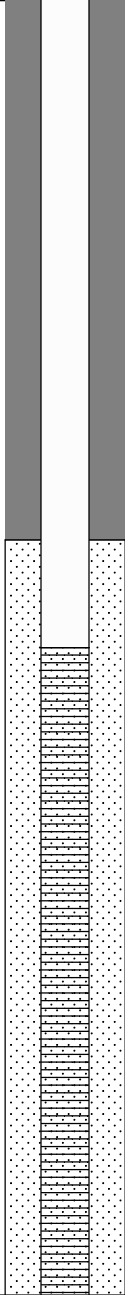






Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 111.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW11

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** ~35 feet bgs
 **Water Depth After Completion** 39.9 feet bgs



Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail		
25											
30		50/6"	100	1.5	IW11-30	GM-SP		Damp, very dense, gravelly fine to medium SAND with trace silt. Tan. No hydrocarbon or solvent odor (5-60-35).			
35		23 50/6"	100	57.0	IW11-35	GM-SP				Wet, dense, fine to medium SAND with subrounded gravel. Tan. No hydrocarbon or solvent odor (5-60-35).	
						SM				Wet, very dense, silty fine SAND with trace gravel. Tan. No hydrocarbon or solvent odor (15-80-5).	
Drilling Co./Driller:				Cascade/James		Well/Auger Diameter:		2" / 7.25" O.D.	inches	Notes/Comments:	
Drilling Equipment:				HSA		Well Screened Interval:		30 - 45 ft bgs	feet bgs		
Sampler Type:				Dames and Moore		Screen Slot Size:		0.020	inches		
Hammer Type/Weight:				140 lbs		Filter Pack Used:		#2/12 Sand			
Total Boring Depth:				46.0 feet bgs		Surface Seal:		Concrete			
Total Well Depth:				45.0 feet bgs		Annular Seal:		Bentonite			
State Well ID No.:						Monument Type:		Flush grade		Page:	3 of 4


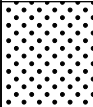


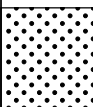


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13.0 feet South of southeast corner of northern Avtech building.
Well Location E/W: 111.0 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | **IW11**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** ~35 feet bgs
 **Water Depth After Completion** 39.9 feet bgs



Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail		
40		39 50/6"	100	1.2	IW11-40	SP		Saturated, very dense, fine to medium SAND with trace silt and gravel. Tan. No hydrocarbon or solvent odor (5-90-5).			
45		40 50/6"	100	1.8	IW11-45	SP		Saturated, very dense, fine to medium SAND with trace silt and gravel. Tan. No hydrocarbon or solvent odor (5-90-5).			
								End of boring at 46.0 ft bgs. Injection well IW11 installed to 45.0 feet bgs.			
Drilling Co./Driller: Cascade/James					Well/Auger Diameter: 2" / 7.25" O.D. inches					Notes/Comments:	
Drilling Equipment: HSA					Well Screened Interval: 30 - 45 ft bgs feet bgs						
Sampler Type: Dames and Moore					Screen Slot Size: 0.020 inches						
Hammer Type/Weight: 140 lbs					Filter Pack Used: #2/12 Sand						
Total Boring Depth: 46.0 feet bgs					Surface Seal: Concrete						
Total Well Depth: 45.0 feet bgs					Annular Seal: Bentonite						
State Well ID No.:					Monument Type: Flush grade						
									Page: 4 of 4		



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13 feet South of southeast corner of northern Avtech building.
Well Location E/W: 135 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW12

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 36.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5									
10									
15									
20									

Drilling Co./Driller: Cascade/James
Drilling Equipment: HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 45.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

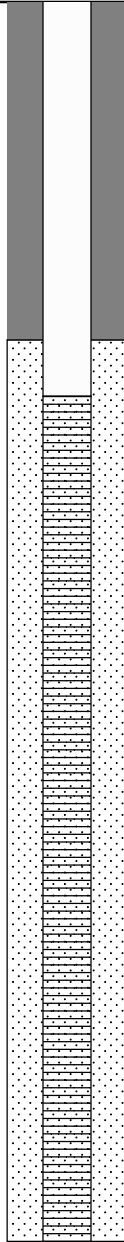


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/24/14
Surface Conditions: Gravel
Well Location N/S: 13 feet South of southeast corner of northern Avtech building.
Well Location E/W: 135 feet West of southeast corner of northern Avtech building.
Reviewed by: CCC
Date Completed: 06/24/14

BORING LOG | IW12

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 36.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail	
25										
30										
35										
40								Cuttings: Wet, silty SAND with gravel. Tan.		
45								End of boring at 45.0 ft bgs. Injection well IW12 installed to 45.0 feet bgs.		
Drilling Co./Driller: Cascade/James						Well/Auger Diameter: 2" / 7.25" O.D. inches		Notes/Comments:		
Drilling Equipment: HSA						Well Screened Interval: 30 - 45 ft bgs feet bgs				
Sampler Type: --						Screen Slot Size: 0.020 inches				
Hammer Type/Weight: -- lbs						Filter Pack Used: #2/12 Sand				
Total Boring Depth: 45.0 feet bgs						Surface Seal: Concrete				
Total Well Depth: 45.0 feet bgs						Annular Seal: Bentonite				
State Well ID No.:						Monument Type: Flush grade				
								Page:	2 of 2	



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/25/14
Surface Conditions: Asphalt
Well Location N/S: 14 feet North of northeast corner of southern Avtech building.
Well Location E/W: 109 feet West of northeast corner of southern Avtech building.
Reviewed by: CCC
Date Completed: 06/25/14

BORING LOG | IW13

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0						Asphalt		2-inch thick asphalt surface.	
5									
10									
15									

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 70.3 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade

Notes/Comments:

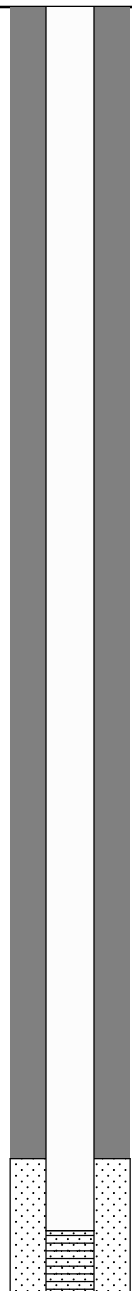


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/25/14
Surface Conditions: Asphalt
Well Location N/S: 14 feet North of northeast corner of southern Avtech building.
Well Location E/W: 109 feet West of northeast corner of southern Avtech building.
Reviewed by: CCC
Date Completed: 06/25/14

BORING LOG | IW13

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
20									
25									
30									
35									

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 70.3 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade

Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/25/14
Surface Conditions: Asphalt
Well Location N/S: 14 feet North of northeast corner of southern Avtech building.
Well Location E/W: 109 feet West of northeast corner of southern Avtech building.
Reviewed by: CCC
Date Completed: 06/25/14

BORING LOG | **IW13**

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
40	50/6"	100	0.7	IW13-40	SP-SM			Wet, very dense, fine to medium SAND with silt and subrounded gravel. Tan. No hydrocarbon or solvent odor (10-80-10). At 40.5 feet bgs: ~2-inch thick layer of wet, very dense, sandy SILT. Tan. No hydrocarbon or solvent odor (70-30-0).	
45									
50	50/6"	100	5.1	IW13-50	ML			Damp, very dense, sandy SILT with trace gravel. Gray. No hydrocarbon or solvent odor (65-30-5).	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 70.3 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:



Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/25/14
Surface Conditions: Asphalt
Well Location N/S: 14 feet North of northeast corner of southern Avtech building.
Well Location E/W: 109 feet West of northeast corner of southern Avtech building.
Reviewed by: CCC
Date Completed: 06/25/14

BORING LOG | IW13

Site Address: 3400 Wallingford Avenue North
Seattle, WA

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

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
55		50/6"	100	3.0	IW13-55	SM		Damp, very dense, silty fine SAND with subrounded gravel. Gray. No hydrocarbon or solvent odor (25-55-20).	
60		50/6"	100	0.5	IW13-60	SM		Moist to wet, very dense, silty fine to medium SAND with subrounded gravel. gray. No hydrocarbon or solvent odor (35-45-20).	
65		--	0	--	--			No recovery.	
70		50/4"	100	0.8	IW13-70	SM		Damp, very dense, silty fine SAND with subrounded gravel. Gray. No hydrocarbon or solvent odor (25-55-20).	
								End of boring at 70.3 ft bgs. Injection well IW13 installed to 50.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: Dames & Moore
Hammer Type/Weight: 140 lbs
Total Boring Depth: 70.3 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

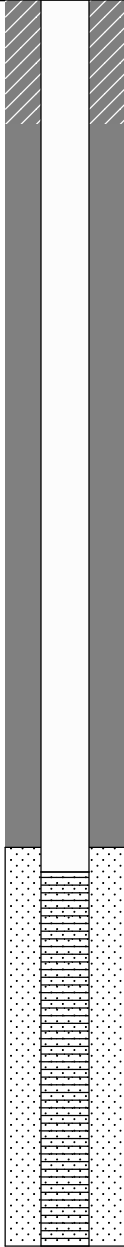


Project: AMLI Avtech
Project Number: 0789-004
Logged by: CGC
Date Started: 06/25/14
Surface Conditions: Asphalt
Well Location N/S: 14 feet North of northeast corner of southern Avtech building.
Well Location E/W: 89 feet West of northeast corner of southern Avtech building.
Reviewed by: CCC
Date Completed: 06/25/14

BORING LOG | IW14

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 43.3 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								2-inch thick asphalt surface.	
5									
10									
15									
20									
25									
30									
35									
40									
45									
50								End of boring at 50.0 bgs. Injection well IW14 installed to 50.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 50.0 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

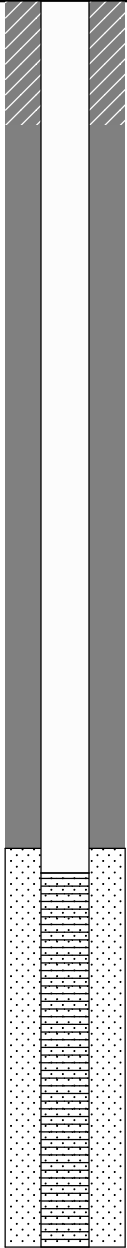
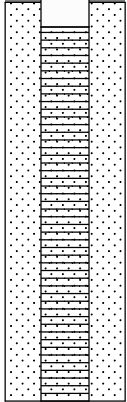


Project: AMLI Avtech
Project Number: 0789-004
Logged by: EAM
Date Started: 06/26/14
Surface Conditions: Gravel
Well Location N/S: 3.3 feet North of power pole near NW corner of south Avtech building.
Well Location E/W: 16.5 feet West of power pole near NW corner of south Avtech building.
Reviewed by: CCC
Date Completed: 06/26/14

BORING LOG | IW15

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 44.5 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5								Cuttings: silty SAND. Tan-brown.	
10									
15								Cuttings: Damp, silty SAND with some gravel. Gray-brown.	
20									
25									
30								Cuttings: Damp, silty SAND with some gravel.	
35								Cuttings: Damp to moist, silty SAND with some gravel.	
40									
45								Cuttings: Wet, sandy SILT. Gray.	
50								End of boring at 50.0 bgs. Injection well IW15 installed to 50.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 50.0 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

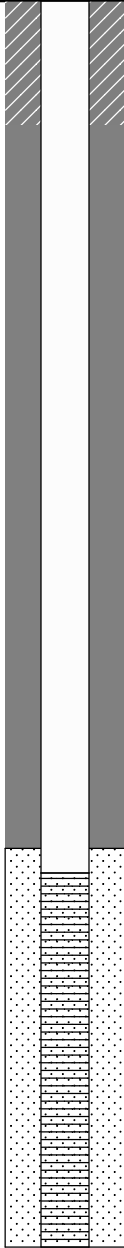
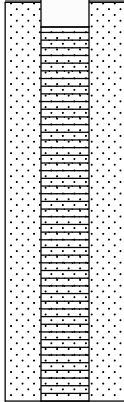


Project: AMLI Avtech
Project Number: 0789-004
Logged by: EAM
Date Started: 06/26/14
Surface Conditions: Gravel
Well Location N/S: 3.3 feet North of power pole near NW corner of south Avtech building.
Well Location E/W: 16.5 feet West of power pole near NW corner of south Avtech building.
Reviewed by: CCC
Date Completed: 06/26/14

BORING LOG | IW16

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 44.5 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5								Cuttings: Damp, silty SAND with some gravel. Brown-tan.	
10									
15									
20									
25								Cuttings: Damp, silty SAND with some gravel. Gray-tan.	
30									
35								Cuttings: Damp, silty SAND with some gravel. Gray-tan.	
40									
45								Cuttings: Wet, silty fine SAND. Gray-tan.	
50								Cuttings: Wet, sandy SILT.	
								End of boring at 50.0 bgs. Injection well IW15 installed to 50.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 50.0 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

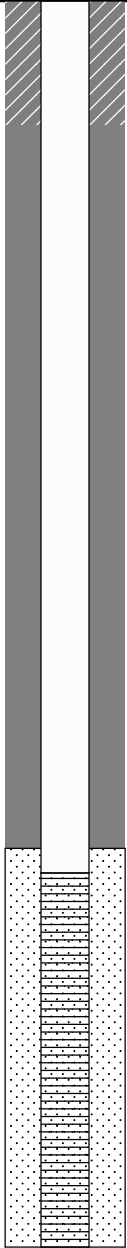


Project: AMLI Avtech
Project Number: 0789-004
Logged by: EAM
Date Started: 06/26/14
Surface Conditions: Gravel
Well Location N/S: 3.2 feet North of power pole near NW corner of south Avtech building.
Well Location E/W: 57.4 feet West of power pole near NW corner of south Avtech building.
Reviewed by: CCC
Date Completed: 06/26/14

BORING LOG | IW17

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 42.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5								Cuttings: silty SAND with some gravel. Tan-brown.	
10									
15									
20									
25									
30									
35									
40									
45									
50								Cuttings: Wet, sandy SILT and silty SAND. Tan-gray. End of boring at 50.0 bgs. Injection well IW17 installed to 50.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 50.0 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.:

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

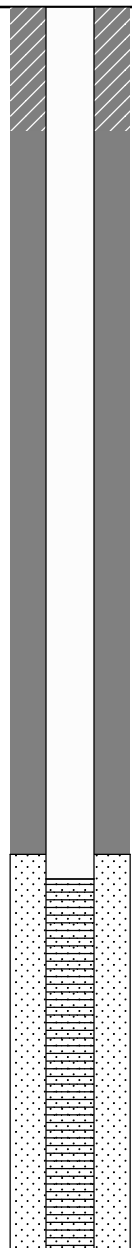
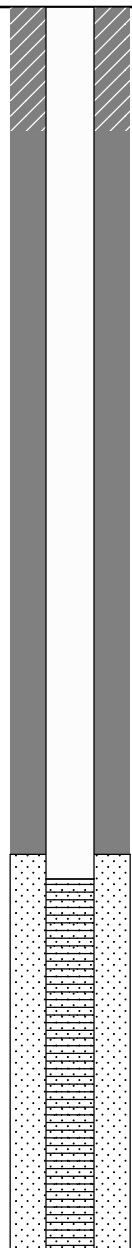


Project: AMLI Avtech
Project Number: 0789-004
Logged by: EAM
Date Started: 06/27/14
Surface Conditions: Gravel
Well Location N/S: 13.1 feet North of NW corner of Varsity Inn building.
Well Location E/W: 28.9 feet East of NW corner of Varsity Inn building.
Reviewed by: CCC
Date Completed: 06/27/14

BORING LOG | IW18

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 49.0 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5								Cuttings: silty SAND with some gravel. Tan-brown.	
10									
15								Cuttings: silty SAND with some gravel. Tan-brown.	
20									
25									
30								Cuttings: silty SAND with some gravel. Gray.	
35									
40									
45									
50								Cuttings: sandy SILT. End of boring at 50.0 bgs. Injection well IW18 installed to 50.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 50.0 feet bgs
Total Well Depth: 50.0 feet bgs
State Well ID No.: BID 545

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 35 - 50 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade



Notes/Comments:

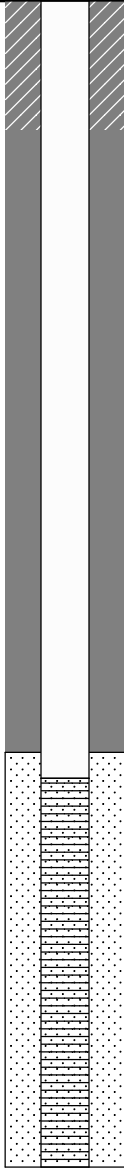
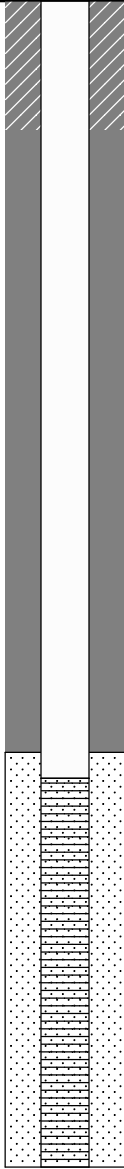


Project: AMLI Avtech
Project Number: 0789-004
Logged by: EAM
Date Started: 06/27/14
Surface Conditions: Gravel
Well Location N/S:
Well Location E/W:
Reviewed by: CCC
Date Completed: 06/27/14

BORING LOG | IW19

Site Address: 3400 Wallingford Avenue North
Seattle, WA

 **Water Depth At Time of Drilling** -- feet bgs
 **Water Depth After Completion** 40.9 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Construction Detail
0								Gravel surface.	
5								Cuttings: Damp, silty SAND with some gravel. Tan-gray.	
10									
15									
20									
25									
30									
35									
40								Cuttings: Damp, silty SAND with some gravel. Tan-gray.	
45									
50								End of boring at 45.0 bgs. Injection well IW19 installed to 45.0 feet bgs.	

Drilling Co./Driller: Cascade/James
Drilling Equipment: Limited Access HSA
Sampler Type: --
Hammer Type/Weight: -- lbs
Total Boring Depth: 45.0 feet bgs
Total Well Depth: 45.0 feet bgs
State Well ID No.: BID 546

Well/Auger Diameter: 2" / 7.25" O.D. inches
Well Screened Interval: 30 - 45 ft bgs feet bgs
Screen Slot Size: 0.020 inches
Filter Pack Used: #2/12 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Monument Type: Flush grade

Notes/Comments: