



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

August 14, 2013

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

SUBJECT: SUPPLEMENTAL SUBSURFACE SOIL ASSESSMENT—LOADING DOCK AREA
Avtech Wallingford (Building 2)
3400 Wallingford Avenue North
Seattle, Washington
Job Number: 0789-004-09

Dear Mr. Koppelman:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this letter report to present the results of the supplemental subsurface soil assessment conducted for the loading dock area at Building 2 of the Avtech Wallingford property, located at 3400 Wallingford Avenue North in Seattle, Washington (the Property), as shown on Figure 1. The Property covers 2.04 acres of land, spanning portions of two city blocks on the north and south sides of North 34th Street (Figure 2). An avionics manufacturer, Avtech Corporation (Avtech), occupied the Property from 1973 until 2011. Avtech used trichloroethene (TCE) and various other electrical engineering-related chemical compounds typically found in the avionics production process.

Subsurface investigations conducted by SoundEarth at the Property in 2011, 2012, and 2013 identified elevated concentrations of TCE in groundwater and soil near potential source areas on the northern half of the Property (Building 2, north of North 34th Street). The areas include the former chromate process room, the loading dock area, and the soldering room (formerly a machine shop). Elevated levels of TCE have been detected in groundwater sampled immediately downgradient of these areas. Detections of TCE in soil have been limited to the upper 20 feet in the loading dock area of Building 2. TCE was detected in soil at a depth of 20 feet in Boring B14 (2.8 milligrams per kilogram [mg/kg]) and at a depth of 9 feet in boring B104 (0.12 mg/kg). Boring B104 was advanced at a 30-degree angle, extended slightly beneath Building 2.

Lower concentrations of TCE were also detected in saturated-zone soil at depths of 35 feet below grade in borings that have TCE detected in groundwater (Borings B06/MW04 and B18/MW13). These soil detections are likely artifacts of TCE in groundwater.

The purpose of this assessment was to further assess the extent and concentrations of TCE in soil at the loading dock area. This included the use of a limited-access, hollow-stem auger (HSA) drilling rig for drilling inside Building 2 at the shipping and receiving area adjoining the loading dock.

SUBSURFACE SOIL ASSESSMENT FIELD WORK

On July 9, 2013, Geologic Drill Inc., under the direction of SoundEarth, advanced five borings (SB201 through SB205) using a Mini-Track HSA, limited-access drill rig. Borings SB201 through SB204 were advanced inside the shipping and receiving room, and boring SB205 was advanced outside in the loading dock parking area. All borings were advanced to a depth of 20 to 22 feet. However, refusal was encountered at a depth of 8 feet in SB202 (gravelly conditions). Soil samples were collected at approximately 5-foot depth intervals. All samples were screened for volatile organic compounds (VOCs) using a photoionization detector (PID). Samples were collected in accordance with U.S. Environmental Protection Agency (EPA) Method 5035.

Samples were labeled, placed on ice in a cooler, and transported to Friedman & Bruya, Inc. under standard chain-of-custody protocols for laboratory analysis. Sixteen of the 18 samples collected were submitted for analysis of chlorinated VOCs by EPA Method 8260C.

SUBSURFACE CONDITIONS AND ANALYTICAL RESULTS

The Property is mapped by the Pacific Northwest Center for Geologic Mapping Studies as underlain by dense glacial till. The results of drilling confirmed the presence of glacial till underlying the Property. Soil was generally classified as very dense silty sand and sandy silt with occasional gravel. Saturated soil conditions were not encountered to the maximum depth of the borings (21.5 feet).

No solvent odors or elevated PID readings were noted. PID readings were less than 2 parts per million per volume (background levels), with most readings at 0.0 parts per million by volume.

Boring logs are included as Attachment A. Geologic cross sections of the Property are presented on Figures 3, 4, and 5. Analytical results are discussed below.

Soil Results

TCE was detected in the soil samples collected at a depth of 20 feet below grade in boring SB201 and at depths of 15 and 20 feet below grade in boring SB204. The TCE concentrations ranged from 0.031 mg/kg to 0.046 mg/kg and slightly exceeded the Washington State Model Toxics Control Act (MTCA) Method A cleanup level of 0.03 mg/kg. TCE and other VOCs were not detected in any of the other samples that were submitted for analysis from the five borings completed during this investigation.

Soil analytical results for VOCs are summarized on Table 1. The laboratory analytical reports are included as Attachment B.

CONCLUSIONS

Concentrations of TCE slightly exceeding the MTCA Method A cleanup level were detected in soil collected at depths of 15 to 20 feet on the southern half of the shipping and receiving room (Borings SB201 and SB204). Previous soil samples collected from this area that contained detectable TCE were in boring B14 at 20 feet (2.8 mg/kg) and boring B104 at 9 feet (0.12 mg/kg). The TCE concentrations detected thus far are well below the risk-based MTCA Method B cleanup level of 11 mg/kg.

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

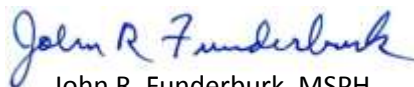
SoundEarth appreciates this opportunity to provide AMLI Residential Partners with environmental consulting services. Please call either of the undersigned at (206) 306-1900 if you have any questions or comments regarding the content of this report.

Respectfully,

SoundEarth Strategies, Inc.



Rob Roberts
Associate Scientist

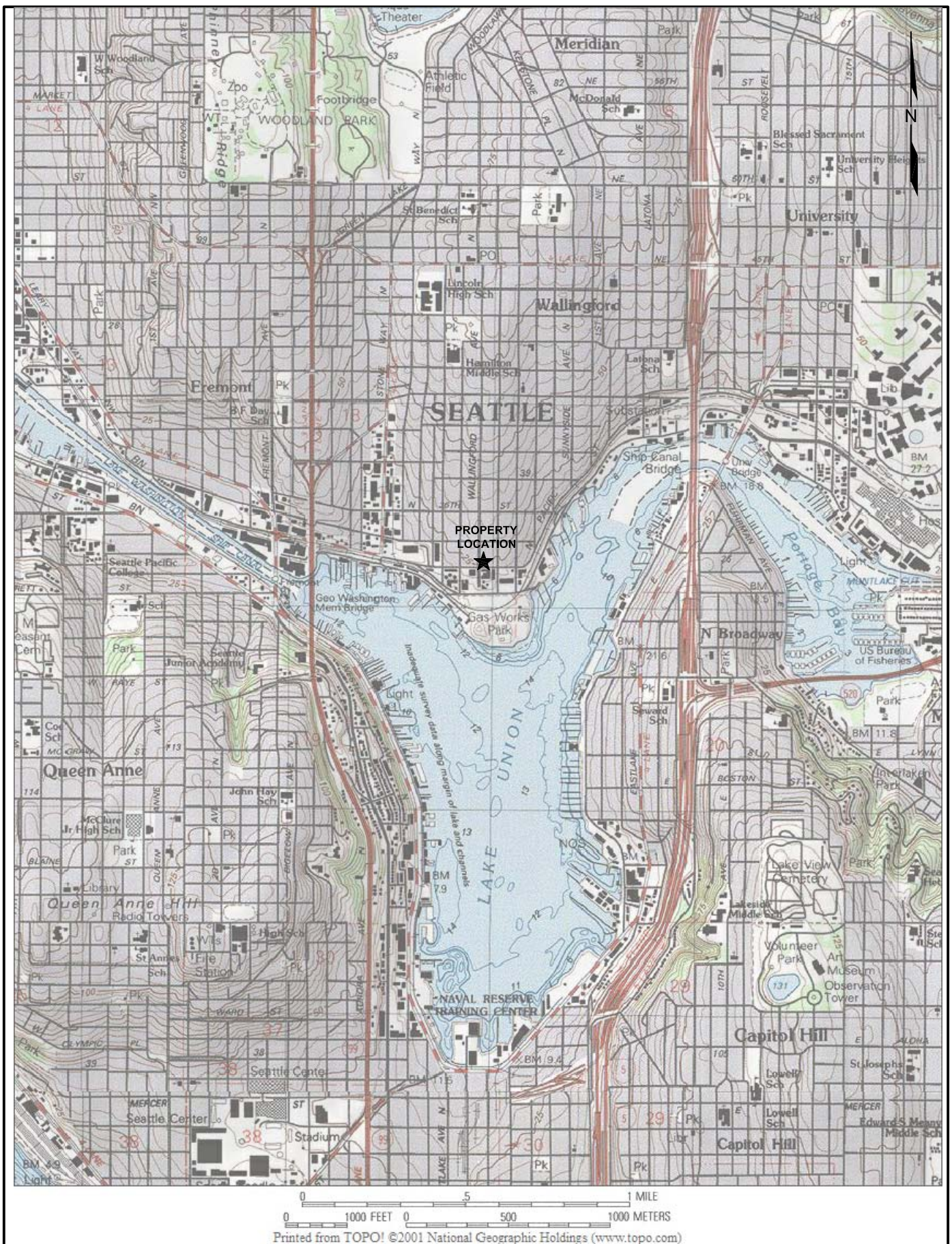


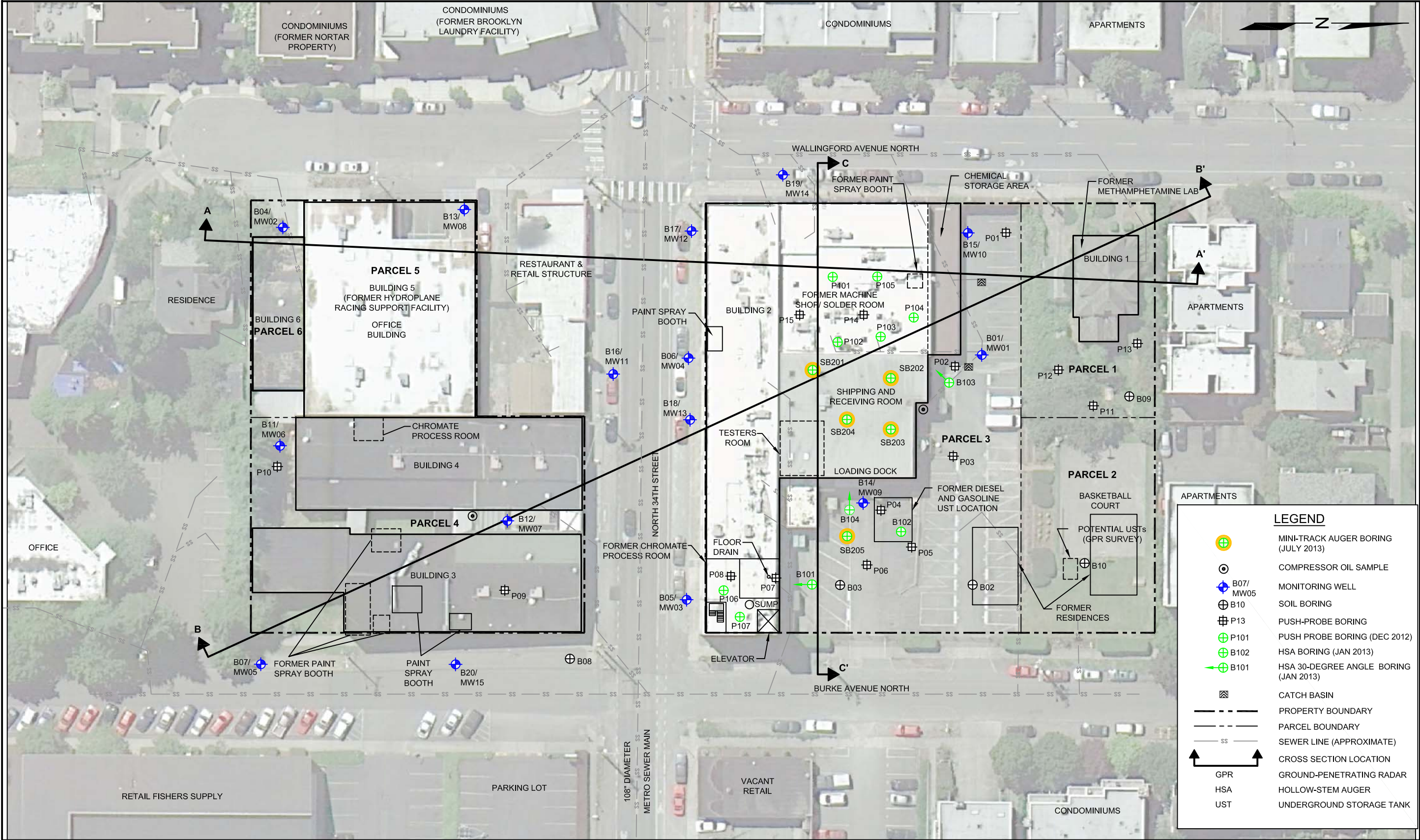
John R. Funderburk, MSPH
Senior Principal

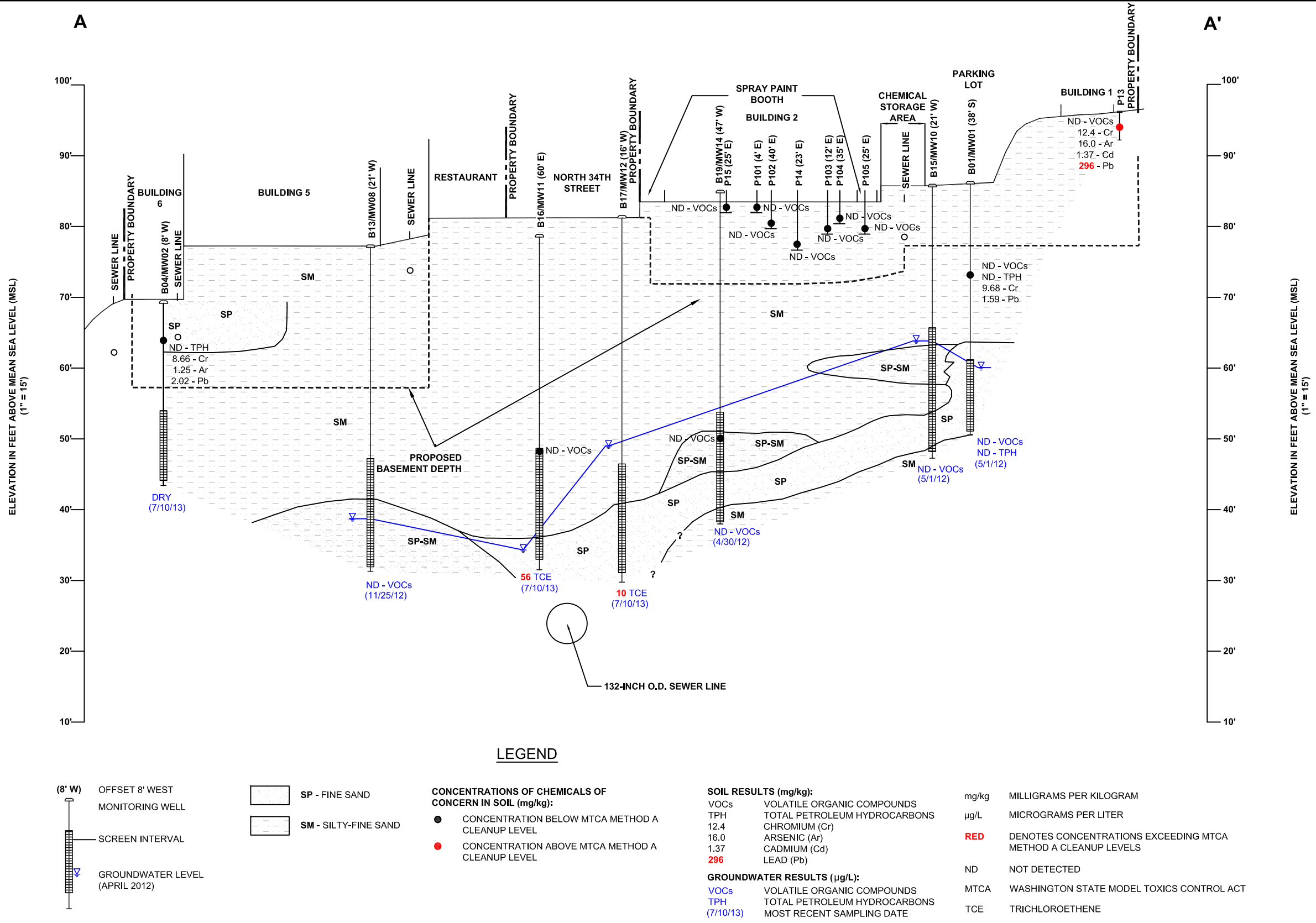
Attachments: Figure 1, Property Location Map
Figure 2, Exploration Location Plan
Figure 3, Geologic Cross Section A-A'
Figure 4, Geologic Cross Section B-B'
Figure 5, Geologic Cross Section C-C'
Table 1, Summary of Soil Analytical Results for VOCs
A, Boring Logs
B, Laboratory Analytical Reports
Friedman & Bruya, Inc. # 307116
Friedman & Bruya, Inc. # 307116 additional

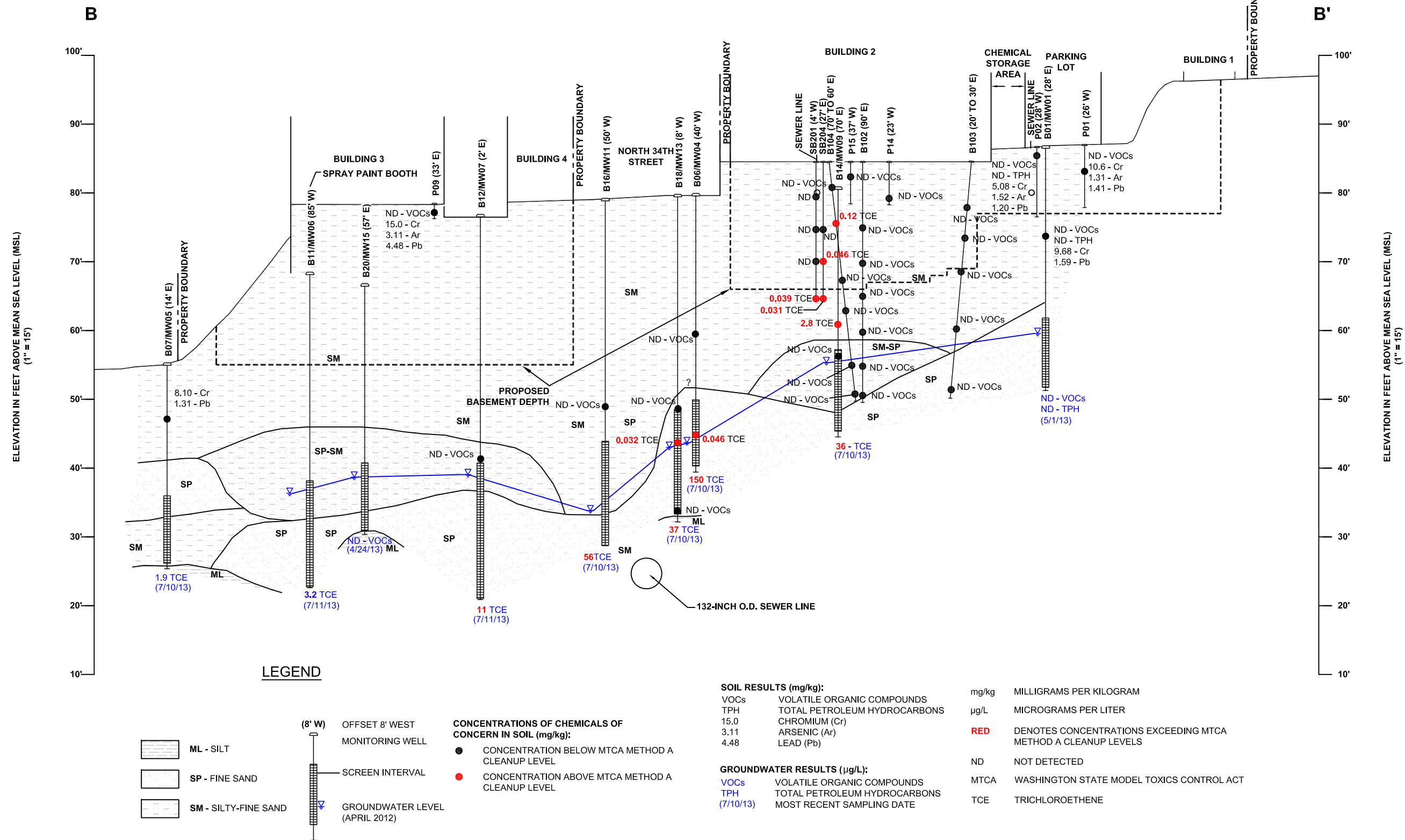
CER/EKR:dnm/amr:srm

FIGURES









DATE: 08/13/13
DRAWN BY: NAC/JQC
CHECKED BY: CER
CAD FILE: 0789-004_2013SSI_XBB

PROJECT NAME: AVTECH PROPERTY
PROJECT NUMBER: 0789-004-09
STREET ADDRESS: 3400 WALLINGFORD AVENUE NORTH
CITY, STATE: SEATTLE, WASHINGTON

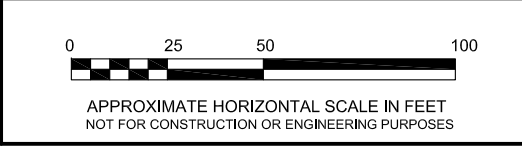
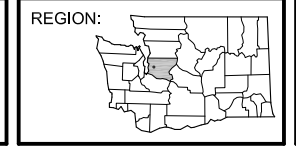
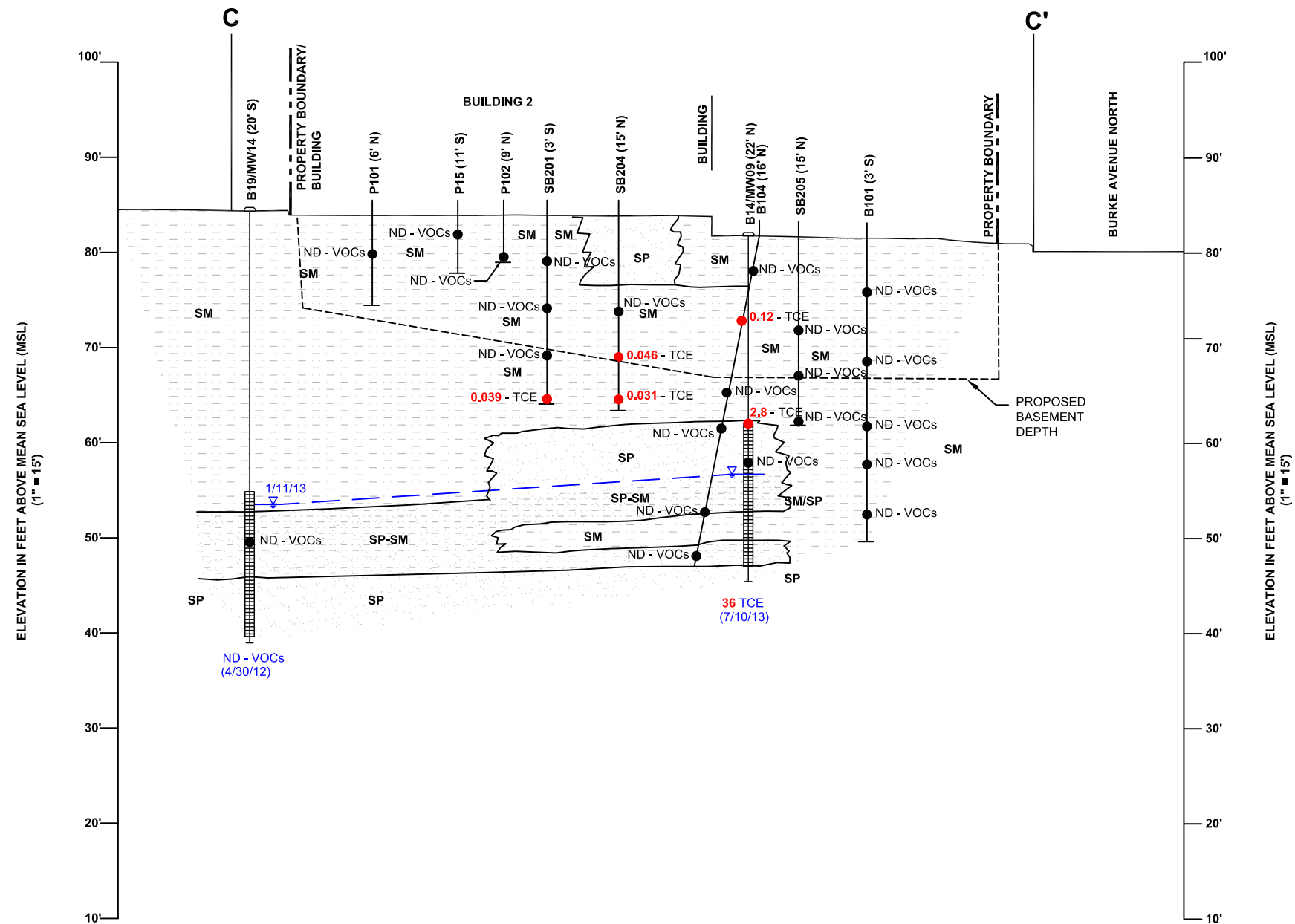


FIGURE 4
GEOLOGIC CROSS SECTION B-B'

P:\0789 AMLI RESIDENTIAL\0789-004 AMLI AVTECH\TECHNICAL\GRAPHICS\2013\2013 LAR SJ\0789-004-2013SSI_XCC_JQC.DWG 8/14/2013



LEGEND

SET 6' NORTH
MONITORING WELL
GREEN INTERVAL
GROUNDWATER LEVEL
(7/10/13)

 **SP - FINE SAND**
 **SM - SILTY-FINE SAND**
 **ML - INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS**

CONCENTRATIONS OF CHEMICALS OF CONCERN IN SOIL (mg/kg):
● CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
● CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

SOIL RESULTS (mg/kg):
VOCs VOLATILE ORGANIC COMPOUNDS
TCE TRICHLOROETHYLENE
GROUNDWATER RESULTS (µg/L):
VOCs VOLATILE ORGANIC COMPOUNDS
TPH TOTAL PETROLEUM HYDROCARBONS
(7/10/13) MOST RECENT SAMPLING DATE

mg/kg MILLIGRAMS PER KILOGRAM
µg/L MICROGRAMS PER LITER
RED DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS
ND NOT DETECTED
MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT
TCE TRICHLOROETHYLENE

TABLES



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

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)										
					Vinyl Chloride ⁽¹⁾	1,1-Dichloroethene ⁽¹⁾	trans-1,2-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene ⁽¹⁾	Carbon tetrachloride ⁽¹⁾	Benzene ⁽¹⁾	Trichloroethene ⁽¹⁾	Toluene ⁽¹⁾	Tetrachloroethene ⁽¹⁾	Ethylbenzene ⁽¹⁾	Total Xylenes ⁽¹⁾
P01	P01-04	01/04/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P02	P02-1.5	01/04/12	SoundEarth	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P04	P04-08	01/04/12	SoundEarth	8	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
	P04-15	01/04/12	SoundEarth	15	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
P05	P05-08	01/04/12	SoundEarth	8	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
P06	P06-08	01/04/12	SoundEarth	8	--	--	--	--	--	<0.02	--	<0.02	--	<0.02	<0.06
P07	P07-02	01/05/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05 ¹	<0.2
P09	P09-02	01/05/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P10	P10-04	01/05/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P11	P11-04	01/05/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P13	P13-02	01/05/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P14	P14-06	04/26/12	SoundEarth	6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
P15	P15-02	04/26/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B01	B01-13	01/10/12	SoundEarth	13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B03	B03-10	01/10/12	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B06	B06-20	01/11/12	SoundEarth	20	<0.05 ^{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}
B06	B06-35	01/11/12	SoundEarth	35	<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	B12-35	04/23/12	SoundEarth	35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B14	B14-20	04/24/12	SoundEarth	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	2.8	<0.05	0.83	<0.05	<0.2
B14	B14-25	04/24/12	SoundEarth	25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B16	B16-30	04/25/12	SoundEarth	30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B18	B18-30	04/26/12	SoundEarth	30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B18	B18-35	04/26/12	SoundEarth	35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	0.032	<0.05	<0.025	<0.05	<0.2
B18	B18-45	04/26/12	SoundEarth	45	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B19	B19-35	04/27/12	SoundEarth	35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.05	<0.025	<0.05	<0.2
B101	B101-07	12/21/12	SoundEarth	7	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B101-15	12/21/12	SoundEarth	15	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B101-23	12/21/12	SoundEarth	23	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B101-28	12/21/12	SoundEarth	28	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B101-34	12/21/12	SoundEarth	34	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
B102	B102-10	12/21/12	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B102-15	12/21/12	SoundEarth	15	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B102-20	12/21/12	SoundEarth	20	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B102-25	12/21/12	SoundEarth	25	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B102-30	12/21/12	SoundEarth	30	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B102-35	12/21/12	SoundEarth	35	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
B103	B103-07	01/02/13	SoundEarth	7	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B103-11	01/02/13	SoundEarth	11	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B103-16	01/02/13	SoundEarth	16	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B103-24	01/02/13	SoundEarth	24	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B103-35	01/02/13	SoundEarth	35	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
B104	B104-04	01/02/13	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B104-09	01/02/13	SoundEarth	9	<0.05	<0.05	<0.05	<0.05	--	--	0.12	--	<0.025	--	--
	B104-17	01/02/13	SoundEarth	17	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B104-22	01/02/13	SoundEarth	22	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
	B104-30	01/02/13	SoundEarth	30	<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 1
Summary of Soil Analytical Results for VOCs
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)										
					Vinyl Chloride ⁽¹⁾	1,1-Dichloroethene ⁽¹⁾	trans-1,2-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene ⁽¹⁾	Carbon tetrachloride ⁽¹⁾	Benzene ⁽¹⁾	Trichloroethene ⁽¹⁾	Toluene ⁽¹⁾	Tetrachloroethene ⁽¹⁾	Ethylbenzene ⁽¹⁾	Total Xylenes ⁽¹⁾
P101	P101-02	12/20/12	SoundEarth	2	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P102	P102-05	12/20/12	SoundEarth	5	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P103	P103-06	12/20/12	SoundEarth	6	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P104	P104-04	12/20/12	SoundEarth	4	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P105	P105-06	12/20/12	SoundEarth	6	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P106	P106-01	12/20/12	SoundEarth	1	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
P107	P107-01	12/20/12	SoundEarth	1	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB201	SB201-05	07/09/13	SoundEarth	5	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB201	SB201-10	07/09/13	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB201	SB201-15	07/09/13	SoundEarth	15	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB201	SB201-20	07/09/13	SoundEarth	20	<0.05	<0.05	<0.05	<0.05	--	--	0.039	--	<0.025	--	--
SB202	SB202-05	07/09/13	SoundEarth	5	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB202	SB202-08	07/09/13	SoundEarth	8	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB203	SB203-10	07/09/13	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB203	SB203-15	07/09/13	SoundEarth	15	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB203	SB203-20	07/09/13	SoundEarth	20	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB204	SB204-10	07/09/13	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB204	SB204-15	07/09/13	SoundEarth	15	<0.05	<0.05	<0.05	<0.05	--	--	0.046	--	<0.025	--	--
SB204	SB204-20	07/09/13	SoundEarth	20	<0.05	<0.05	<0.05	<0.05	--	--	0.031	--	<0.025	--	--
SB203	SB203-05	07/09/13	SoundEarth	5	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB205	SB205-10	07/09/13	SoundEarth	10	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB205	SB205-15	07/09/13	SoundEarth	15	<0.05	<0.05	<0.05	<0.05	--	--	<0.03	--	<0.025	--	--
SB205	SB205-20	07/09/13	SoundEarth	20	<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

NOTES:

Red denotes concentrations exceeding MTCA cleanup level for soil.

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

⁽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 Note:

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

-- = 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

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

SoundEarth = SoundEarth Strategies, Inc.

VOC = volatile organic compound



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

January 2013

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)						
					GRPH ¹	DRPH ²	ORPH ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
P02	P02-1.5	01/04/12	SoundEarth	1.5	--	<50	<250	--	--	--	--
P03	P03-04	01/04/12	SoundEarth	4	--	<50	<250	--	--	--	--
P04	P04-08	01/04/12	SoundEarth	8	<2	--	--	<0.02	<0.02	<0.02	<0.06
	P04-15	01/04/12	SoundEarth	15	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
P05	P05-08	01/04/12	SoundEarth	8	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
P06	P06-08	01/04/12	SoundEarth	8	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
P07	P07-02	01/05/12	SoundEarth	2	--	<50	<250	--	--	--	--
P08	P08-02	01/05/12	SoundEarth	2	--	<50	<250	--	--	--	--
B01	B01-03	01/10/12	SoundEarth	3	--	<50	<250	--	--	--	--
B02	B02-03	01/10/12	SoundEarth	3	--	<50	<250	--	--	--	--
B03	B03-03	01/10/12	SoundEarth	3	--	<50	<250	--	--	--	--
	B03-10	01/10/12	SoundEarth	10	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
B04	B04-05	01/11/12	SoundEarth	5	--	<50	<250	--	--	--	--
B08	B08-08	01/12/12	SoundEarth	8	--	<50	<250	--	--	--	--
B10	B10-0.5	01/13/12	SoundEarth	0.5	--	<50	<250	--	--	--	--
MTCA Method A Cleanup Level for Soil⁴					100/30^a	2,000	2,000	0.03	7	6	9

NOTES:

Red denotes concentrations exceeding MTCA Method A cleanup level for soil.

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

¹Analyzed by Method NWTPH-Gx.

²Analyzed by Method NWTPH-Dx.

³Analyzed by U.S. Environmental Protection Agency Method 8021B.

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

^a30 mg/kg when benzene is present and 100 mg/kg when benzene is not present.

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

-- = not analyzed

bgs = below ground surface

DRPH = diesel-range petroleum hydrocarbon

GRPH = gasoline-range hydrocarbon

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbon

SoundEarth = SoundEarth Strategies, Inc.



Table 3
Summary of Soil Analytical Results for RCRA Metals and Cyanide
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington

January 2013

Sample Location	Sample ID	Sample Date	Sampled By	Sample Depth (feet bgs)	Analytical Results (mg/kg)								
					Chromium ¹	Arsenic ¹	Selenium ¹	Silver ¹	Cadmium ¹	Barium ¹	Lead ¹	Cyanide ²	Mercury ³
P01	P01-04	01/04/12	SoundEarth	4	10.6	1.31	<1	<1	<1	29.7	1.41	--	<0.1
P02	P02-1.5	01/04/12	SoundEarth	1.5	5.08	1.52	<1	<1	<1	13.5	1.20	--	<0.1
P07	P07-02	01/05/12	SoundEarth	2	18.6	1.47	<1	<1	<1	44.3	172	--	<0.1
P08	P08-02	01/05/12	SoundEarth	2	8.75	1.36	<1	<1	<1	30.1	1.51	<0.054	<0.1
P09	P09-02	01/05/12	SoundEarth	2	15.0	3.11	<1	<1	<1	79.4	4.48	<0.053	<0.1
P10	P10-0.5	01/05/12	SoundEarth	0.5	16.7	7.90	<1	<1	<1	191	71.0	--	0.28
	P10-02	01/05/12	SoundEarth	2	--	--	--	--	--	--	--	--	<0.1
P12	P12-02	01/05/12	SoundEarth	2	12.3	12.2	<1	<1	<1	161	193	--	0.12
P13	P13-02	01/05/12	SoundEarth	2	12.4	16.0	<1	<1	1.37	163	296	--	0.18
B01	B01-03	01/10/12	SoundEarth	3	9.68	<1	<1	<1	<1	43.3	1.59	--	<0.1
B02	B02-03	01/10/12	SoundEarth	3	6.54	<1	<1	<1	<1	28.6	1.18	--	<0.1
B03	B03-10	01/10/12	SoundEarth	10	10.6	1.55	<1	<1	<1	29.2	1.61	--	<0.1
B04	B04-05	01/11/12	SoundEarth	5	8.66	1.25	<1	<1	<1	42.3	2.02	--	<0.1
B07	B07-08	01/12/12	SoundEarth	8	8.10	<1	<1	<1	<1	16.4	1.31	--	<0.1
B08	B08-08	01/12/12	SoundEarth	8	11.0	<1	<1	<1	<1	29.7	2.90	--	<0.1
MTCA Method A Cleanup Level for Soil⁴					2,000	20	400	400	2	16,000	250	NE	2

NOTES:

Red denotes concentrations exceeding the MTCA Method A cleanup level for soil.

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

¹Analyzed by EPA Method 200.8.

²Analyzed by Method SW846 9012m.

³Analyzed by EPA Method 1631E.

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

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

-- = not analyzed

EPA = U.S. Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

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

RCRA = Resource Conservation and Recovery Act

SoundEarth = SoundEarth Strategies, Inc.



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

January 2013

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

NOTES:

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

¹Analyzed by U.S. Environmental Protection Agency Method 8082A.

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

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

bgs = below ground surface

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

PCBs = polychlorinated biphenyls

SoundEarth = SoundEarth Strategies, Inc.

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

January 2013

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

NOTES:

Sample results reported in mg/kg.

Red denotes concentration exceeding MTCA Method A Cleanup Level.

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

Analyzed by U.S. Environmental Protection Agency Method 8270D SIM.

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

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

bgs = below ground surface

mg/kg = micrograms per kilogram

MTCA = Washington State Model Toxics Control Act

NC = toxicity equivalency factor not calculated

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

PAH = polycyclic aromatic hydrocarbon

ATTACHMENT A
BORING LOGS

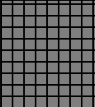
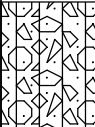
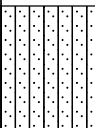


Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 54.' South of NE corner of Building
Well Location E/W: 57.2' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB201**

Site Address: 3400 Wallingford Ave
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								2 concrete slabs cored prior to drilling, approximately 4" and 6" thick	
5	18 20 24		60	0.0	SB201-05	SM-GM		Moist, dense, gravelly fine to coarse SAND with silt, brown, no odor (10, 50, 40).	
10	14 18 20		75	0.0	SB201-10	SM-ML		Moist, dense, well consolidated, silty fine SAND with trace gravel, gray-brown, no odor (45, 55, 0).	
15									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 20.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:



Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 54.1' South of NE corner of Building
Well Location E/W: 57.2' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | SB201

Site Address: 3400 Wallingford Ave
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	90	0.0	SB201-15	SM		Moist, very dense, silty gravelly fine SAND, gray-brown, no odor (30, 50, 0).	
20		50/6	100	0.0	SB201-20	SM		Moist, very dense, silty fine SAND with gravel, gray-brown, no odor (20, 70, 10).	
25								End of boring at 20.5 feet bgs. Backfill with bentonite.	
30									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 20.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:

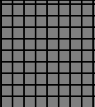


Project: AMLI-Avtech
Project Number: 0789-00
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 13.3' South of NE corner of Building
Well Location E/W: 53' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB202**

Site Address: 3400 Wallingford Ave
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								Two concrete slabs cored prior to drilling.	
5	9 11 20		100	0.0	SB202-05	SP-SM		Moist, dense, fine SAND with silt, gray, no odor (10, 90, 0).	
	50/6		100	0.0	SB202-08	GM		Difficult rocky drilling at approximately 7 feet bgs. Driller added water. Moist, very dense, sandy GRAVEL with silt, gray, no odor (15, 40, 45). Refusal at ~7.5 to 8 feet bgs. Collected a sample into gravel at point of refusal. End of boring at 8 feet bgs. Backfill with bentonite.	
15									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 8 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:

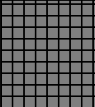
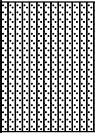
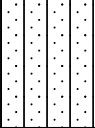


Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 13.3' South of NE corner of Building
Well Location E/W: 25.8' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB203**

Site Address: 3400 Wallingford Ave
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								Two concrete slabs, approximately 6" and 4" thick, cored prior to drilling.	
5	9 6 8		100	0.0	SB203-05	SM-ML		Moist, medium dense, silty fine SAND to sandy SILT with trace gravel, sand-rich layer at 6 to 6.25 feet bgs, brown-gray, some oxidation, no odor (45, 50, 5).	
10	18 19 20		80	0.0	SB203-10	SM		Moist, dense, silty fine SAND with gravel, gray, no odor (30, 60, 10).	
15									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 21.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:



Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 13.3' South of NE corner of Building
Well Location E/W: 25.8' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB203**

Site Address: 3400 Wallingford Ave
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		18 38 50/2	90	0.0	SB203-15	SM-ML		Moist, very dense, silty fine SAND to sandy SILT with gravel, gray, no odor (40, 50, 0).	
20		26 38 50/5	80	0.0	SB203-20	SM			
25								End of boring at 21.5 feet bgs. Backfill with bentonite.	
30									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 21.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:

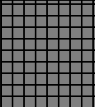
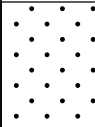
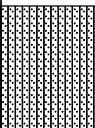


Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 36.5' South of NE corner of Building
Well Location E/W: 31' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB204**

Site Address: 3400 Wallingford Ave
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								Two concrete slabs, approximately 6" and 4" thick, cored prior to drilling.	
5	10 11 12		80	0.0	SB204-05	SP		Moist, medium dense, fine to medium SAND with trace gravel and silt, brown, no odor (5, 90, 5). 1-2 cm thick lense of gray silt with oxidation at 6.4' bgs.	
10	15 18 24		80	1.4	SB204-10	SM-ML		Moist, dense, silty gravelly fine SAND, gray-brown, no odor (40, 45, 15)	
15									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 20.5 feet bgs
Total Well Depth: feet bgs
State Well ID No.: --

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

Notes/Comments:
Notes



Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Concrete
Well Location N/S: 36.5' South of NE corner of Building
Well Location E/W: 31' West of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB204**

Site Address: 3400 Wallingford Ave
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	75	4.4	SB204-15	SM-ML		Moist, very dense, silty fine SAND to sandy SILT with gravel, gray, no odor (45, 50, 5).	
								Gravelly drilling.	
20		50/4	80	0.0	SB204-20	SM		Moist, very dense, silty fine SAND with gravel, gray-brown, no odor (35, 44, 10).	
								End of boring at 20.5 feet bgs. Backfilled with bentonite.	
25									
30									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 20.5 feet bgs
Total Well Depth: feet bgs
State Well ID No.: --

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

Notes/Comments:
Notes

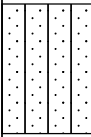


Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Asphalt
Well Location N/S: 36.5' South of NE corner of Building
Well Location E/W: 30.8' East of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | **SB205**

Site Address: 3400 Wallingford Ave
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	
5	10 16 20		90	0.0	SB205-05	SM		Moist, dense, silty fine SAND with trace gravel, gray, no odor (35, 60, 5). Coarsening downward.	
10	50/6		80	0.0	SB205-10	SM		Moist, very dense, silty fine SAND with trace gravel, gray, no odor (30, 65, 5).	
15									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 20.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:



Project: AMLI-Avtech
Project Number: 0789-004
Logged by: EBF
Date Started: 7/9/13
Surface Conditions: Asphalt
Well Location N/S: 36.5' South of NE corner of Building
Well Location E/W: 30.8' East of NE corner of Building
Reviewed by: CER
Date Completed: 7/9/13

BORING LOG | SB205

Site Address: 3400 Wallingford Ave
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		16 44 50/6	90	0.0	SB205-15	SM		Moist, very dense, silty fine SAND with trace gravel, gray, no odor (15, 80, 5).	
20		50/4	50	0.0	SB205-20	SM			
25							End of boring at 20.5 feet bgs. Backfilled with bentonite.		
30									

Drilling Co./Driller: Geologic/Wade
Drilling Equipment: LAR Auger
Sampler Type: Split-spoon
Hammer Type/Weight: 140 lbs
Total Boring Depth: 20.5 feet bgs
Total Well Depth: -- feet bgs
State Well ID No.: --

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

Notes/Comments:

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

Friedman & Bruya, Inc. #307116

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 17, 2013

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 July 9, 2013 from the SOU_0789-004_20130709, F&BI 307116 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
SOU0717R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20130709, F&BI 307116 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
307116-01	SB201-05
307116-02	SB201-10
307116-03	SB201-15
307116-04	SB201-20
307116-05	SB204-05
307116-06	SB204-10
307116-07	SB204-15
307116-08	SB204-20
307116-09	SB203-05
307116-10	SB203-10
307116-11	SB203-15
307116-12	SB203-20
307116-13	SB202-05
307116-14	SB202-08
307116-15	SB205-05
307116-16	SB205-10
307116-17	SB205-15
307116-18	SB205-20

Methylene chloride was detected in the 8260C analysis of sample SB204-15. The data were flagged as due to laboratory contamination.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB201-05	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-01
Date Analyzed:	07/10/13	Data File:	071007.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	102	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB201-10	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-02
Date Analyzed:	07/10/13	Data File:	071008.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	100	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB201-15	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-03
Date Analyzed:	07/10/13	Data File:	071009.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	104	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB201-20	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-04
Date Analyzed:	07/10/13	Data File:	071010.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	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	0.039
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB204-10	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-06
Date Analyzed:	07/10/13	Data File:	071011.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	62	142
Toluene-d8	101	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB204-15	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-07
Date Analyzed:	07/10/13	Data File:	071012.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	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	0.57 lc
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	0.046
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB204-20	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-08
Date Analyzed:	07/10/13	Data File:	071013.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	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	0.031
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB203-05	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-09
Date Analyzed:	07/10/13	Data File:	071014.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB203-10	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-10
Date Analyzed:	07/10/13	Data File:	071015.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	102	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB203-15	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-11
Date Analyzed:	07/10/13	Data File:	071016.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	103	51	121
4-Bromofluorobenzene	100	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB202-05	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-13
Date Analyzed:	07/10/13	Data File:	071017.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	102	51	121
4-Bromofluorobenzene	100	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB202-08	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-14
Date Analyzed:	07/10/13	Data File:	071018.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB205-10	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-16
Date Analyzed:	07/10/13	Data File:	071019.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB205-15	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-17
Date Analyzed:	07/10/13	Data File:	071020.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB205-20	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	307116-18
Date Analyzed:	07/10/13	Data File:	071021.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	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	<0.03
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_20130709, F&BI 307116
Date Extracted:	07/10/13	Lab ID:	03-1283 mb2
Date Analyzed:	07/10/13	Data File:	071004.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/17/13

Date Received: 07/09/13

Project: SOU_0789-004_20130709, F&BI 307116

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

Laboratory Code: 307092-03 (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	42	39	10-138	7
Chloroethane	mg/kg (ppm)	2.5	<0.5	53	52	10-176	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	63	63	10-160	0
Methylene chloride	mg/kg (ppm)	2.5	<0.5	63	68	10-156	8
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	68	14-137	0
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	74	74	25-135	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	72	73	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	67	67	10-156	0
Trichloroethene	mg/kg (ppm)	2.5	<0.03	74	78	21-139	5
Tetrachloroethene	mg/kg (ppm)	2.5	0.067	68	70	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	64	22-139
Chloroethane	mg/kg (ppm)	2.5	73	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	86	47-128
Methylene chloride	mg/kg (ppm)	2.5	86	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	90	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	94	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	91	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	88	62-131
Trichloroethene	mg/kg (ppm)	2.5	93	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	93	72-114

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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.

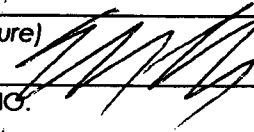
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

BOONING 307116

SAMPLE CHAIN OF CUSTODY

ME 07/09/13

E03/VS

Send Report To Rob RobertsCompany SoundEarth StrategiesAddress 2811 Fairview Avenue EastCity, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907SAMPLERS (signature) Page # 1 of 2

PROJECT NAME/NO.

0789-004

PO #

REMARKS

GEMS Y / N

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

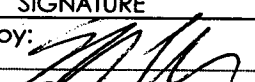
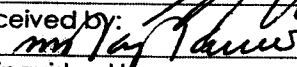
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED										Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	CVOC's				
SB201-05	SB201	5	01A-E	7/9/13	0905	Soil	5							X				HOLD
SB201-10	I	10	02		0910		5							X				
SB201-15	I	15	03		0920		5							X				
SB201-20	I	20	04		0945		5							X				
SB204-05	SB204	5	05		1015		5											
SB204-10	I	10	06		1050		5							X				
SB204-15	I	15	07		1105		5							X				
SB204-20	I	20	08		1135		5							X				
SB209-05	SB203	5	09		1200		5							X				
SB203-10	I	10	10		1215		5							X				
SB203-15	I	15	11		1250		5							X				
SB203-20	I	20	12		1325		5											
SB202-05		5	13		1345		5							X				

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	<u>Rob Roberts</u>	<u>SES</u>	<u>7/9/13</u>	<u>1425</u>
Received by: 	<u>Nhan Phan</u>	<u>FEET</u>	<u>7/9/13</u>	<u>1625</u>
Relinquished by:				
Received by:				

Samples received at 5 °C

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

ME 07/09/13

EO3/vs

5/11/20

0789-004

PO #

REMARKS

GEMS Y / N

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

[illegible]

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Liz Forbes	SES	7/9/13	1625
Received by: 	Nhan Phan	FEB	7/9/13	1625
Relinquished by:				
Received by:				

Samples received at 5 °C

Friedman & Bruya, Inc. #307116 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

July 23, 2013

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 July 9, 2013 from the SOU_0789-004_20130709, F&BI 307116 project. There are 5 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
SOU0723R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 9, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004_20130709, F&BI 307116 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
307116-01	SB201-05
307116-02	SB201-10
307116-03	SB201-15
307116-04	SB201-20
307116-05	SB204-05
307116-06	SB204-10
307116-07	SB204-15
307116-08	SB204-20
307116-09	SB203-05
307116-10	SB203-10
307116-11	SB203-15
307116-12	SB203-20
307116-13	SB202-05
307116-14	SB202-08
307116-15	SB205-05
307116-16	SB205-10
307116-17	SB205-15
307116-18	SB205-20

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB203-20	Client:	SoundEarth Strategies
Date Received:	07/09/13	Project:	SOU_0789-004_20130709, F&BI 307116
Date Extracted:	07/17/13	Lab ID:	307116-12
Date Analyzed:	07/17/13	Data File:	071717.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	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	<0.03
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_20130709, F&BI 307116
Date Extracted:	07/17/13	Lab ID:	03-1318 mb
Date Analyzed:	07/17/13	Data File:	071708.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	62	142
Toluene-d8	98	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	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/23/13

Date Received: 07/09/13

Project: SOU_0789-004_20130709, F&BI 307116

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

Laboratory Code: 307170-02 (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	45	10-138
Chloroethane	mg/kg (ppm)	2.5	<0.5	57	10-176
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	51	10-156
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	76	19-140
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	78	25-135
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	78	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	74	10-156
Trichloroethene	mg/kg (ppm)	2.5	<0.03	74	21-139
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	73	20-133

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	80	76	22-139	5
Chloroethane	mg/kg (ppm)	2.5	86	86	10-163	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	94	100	47-128	6
Methylene chloride	mg/kg (ppm)	2.5	72	72	42-132	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	104	67-127	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	101	102	68-115	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	104	72-113	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	102	102	56-135	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	101	101	62-131	0
Trichloroethene	mg/kg (ppm)	2.5	100	98	64-117	2
Tetrachloroethene	mg/kg (ppm)	2.5	101	103	72-114	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.

BOON 307116

SAMPLE CHAIN OF CUSTODY

ME 07/09/13

E03/VS.

Send Report To Rob PickettCompany SoundEarth StrategiesAddress 2811 Fairview Avenue EastCity, State, ZIP Seattle, WA 98102Phone # 206-306-1900 Fax # 206-306-1907SAMPLERS (signature) [Signature]

PROJECT NAME/NO.

0789-004

PO #

REMARKS

GEMS Y / N

Page # 1 of 2

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED										Notes
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	CVOCS				
SB201-05	SB201	5	01A-E	7/9/13	0905	Soil	5							X				X-per RR 7/10/13
SB201-10		10	02		0910		5							X				Notes
SB201-15		15	03		0920		5							X				X-per RR 7/17/13
SB201-20		20	04		0945		5							X				fold
SB204-05	SB204	5	05		1015		5							X				
SB204-10		10	06		1050		5							X				
SB204-15		15	07		1105		5							X				
SB204-20		20	08		1135		5							X				
SB203-05	SB203	5	09		1200		5							X				
SB203-10		10	10		1215		5							X				
SB203-15		15	11		1250		5							X				
SB203-20		20	12		1325		5							X				
SB202-05		5	13		1345		5							X				

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>L. Pickett</u>	<u>SES</u>	<u>7/9/13</u>	<u>1425</u>
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FRST</u>	<u>7/9/13</u>	<u>1625</u>
Relinquished by:				
Received by:				

(BOGYN 307116)

SAMPLE CHAIN OF CUSTODY

ME 07/09/13

003/15

Send Report To Rob Roberts

Company SoundEarth Strategies

Address 2811 Fairview Avenue East

City, State, ZIP Seattle, WA 98102

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

SAMPLERS (signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>0789-004</u>	PO #
REMARKS	GEMS Y / N

Page # <u>2</u> of <u>2</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
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	C VOCs		
S8202-09	S8202	8	14A-E	7/9/13	1420	SOIL	5							X		HOLD
S8205-05	S8205	5	15		1450		5							X		
S8205-10		10	16		1500		5							X		
S8205-15		15	17		1520		5							X		
S8205-20		20	18		1530		5							X		

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Liz Parker</u>	<u>SES</u>	<u>7/9/13</u>	<u>1425</u>
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>F&B</u>	<u>7/9/13</u>	<u>1625</u>
Relinquished by:				
Received by:				