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

January 8, 2014

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

SUBJECT: GROUNDWATER MONITORING REPORT—FOURTH QUARTER 2013
Avtech Property
3400 Wallingford Avenue North
Seattle, Washington
Project Number: 0789-004-05

Mr. Koppelman:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this report to present the results of the Fourth Quarter 2013 groundwater monitoring event (monitoring event) conducted at the Avtech Wallingford property located at 3400 Wallingford Avenue North in Seattle, Washington (the Property), as shown in Figure 1.

BACKGROUND

The Property covers 2.04 acres and spans portions of two city blocks on the north and south sides of North 34th Street (Figure 2). A two-story cookie factory was present on the northern portion of the Property in the early 1900s. Two furniture workshop buildings were constructed on the southern portion of the Property in the 1930s. Avtech Corporation replaced the cookie factory by 1973, and it occupied all of the remaining structures by the 1980s. During the course of its operations, Avtech used numerous chlorinated solvents (including trichloroethene [TCE]), non-halogenated solvents, petroleum hydrocarbons, paints, and various other electrical engineering-related chemical compounds typically found in the avionics production process.

SoundEarth conducted subsurface investigations at the Property in January and April 2012. The investigations included installing and sampling 15 groundwater monitoring wells (MW01 through MW15). Five of the wells were located along North 34th Street. Groundwater sampled from four of the five wells along North 34th Street (MW03, MW04, MW11, and MW12) contained concentrations of TCE exceeding the Washington State Model Toxics Control Act (MTCA) Method A cleanup level of 5 micrograms per liter (µg/L). The highest concentrations of TCE were detected in well MW04, ranging from 110 µg/L in January to 170 µg/L in April. Groundwater samples collected from wells MW05 and MW06, which are located near the downgradient southeast portion of the Property, contained 1.9 to 3.3 µg/L TCE in 2012. Additional rounds of groundwater monitoring were conducted in January, April, and August 2013. The highest concentrations of TCE have been detected in groundwater collected from well MW04, ranging from 85 to 290 µg/L.

FIELD ACTIVITIES

The monitoring event was conducted on October 10, 11, and 28, 2013, to evaluate the environmental quality, flow direction, and gradient of groundwater beneath the site, and to establish conditions before conducting future remedial activities. The monitoring event included measuring depths to groundwater in monitoring wells MW01 through MW15. On October 10 and 11, groundwater samples were collected from monitoring well MW11, located along North 34th Street; wells MW05, MW06, and MW07, located on the downgradient parcels to the south of North 34th Street; and from MW09 in the Building 2 loading dock area. Monitoring well MW15 was inaccessible for sampling; MW15 was sampled on October 28.

Upon arrival at the Property on October 10, 2013, SoundEarth personnel opened monitoring wells MW01, MW02, MW04 through MW07, and MW09 through MW15. Monitoring wells MW03 and MW08 were inaccessible during sampling activities due to cars parked on the wells. Water levels were permitted to equilibrate with atmospheric pressure for a minimum of 15 minutes before groundwater level measurements were obtained. Groundwater levels were measured relative to the top of well casing to an accuracy of 0.01 feet using an electronic water level meter.

On October 10, 11, and 28, 2013, groundwater samples were collected from monitoring wells MW05 through MW07, MW09, MW11, and MW15 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 46 to 108 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 dissolved oxygen and/or turbidity 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 (VOCs) 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.

RESULTS

Groundwater levels measured on October 10 and 11, 2013, ranged from 24.75 (MW10) to 44.59 (MW11) feet below the top of the monitoring well casings (Table 1). Using these measurements, the groundwater elevations were calculated and contoured, as shown on Figure 2. The groundwater contours indicate groundwater is generally flowing to the south-southeast with an average gradient of 0.07 feet per foot between wells MW10 and MW05.

Groundwater analytical results from the monitoring event are summarized below (also in Figure 3 and Table 1):

- Concentrations of TCE exceeding the MTCA Method A cleanup level of 5 µg/L were detected in groundwater collected from monitoring wells MW05, MW07, MW09, and MW11. The highest concentration of TCE detected was 43 µg/L in MW09.
- Concentrations of TCE in downgradient well MW05 has historically been below the MTCA Method A cleanup level. A TCE concentration of 8.2 µg/L was detected in well MW05. The well was resampled on October 28 to verify the exceedance; the second sample contained a TCE concentration of 8.4 µg/L.
- All other VOCs were below their respective laboratory reporting limits and/or MTCA Method A cleanup levels in the groundwater samples collected during the Third Quarter 2013 groundwater monitoring event.

DATA QUALITY REVIEW

SoundEarth performed a quality assurance/quality control (QA/QC) review of the analytical results, which included a review of accuracy and precision of the data supplied by the laboratory. All QA/QC criteria are acceptable for the groundwater samples, and the analytical results are considered usable to meet the project objectives. Copies of the laboratory analytical reports are provided as Attachment A.

WORK PLANNED

SoundEarth will conduct a monitoring event at the Property in First Quarter 2014, the results of which will be included in a groundwater monitoring 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.

Krista Garrett
Staff Geologist

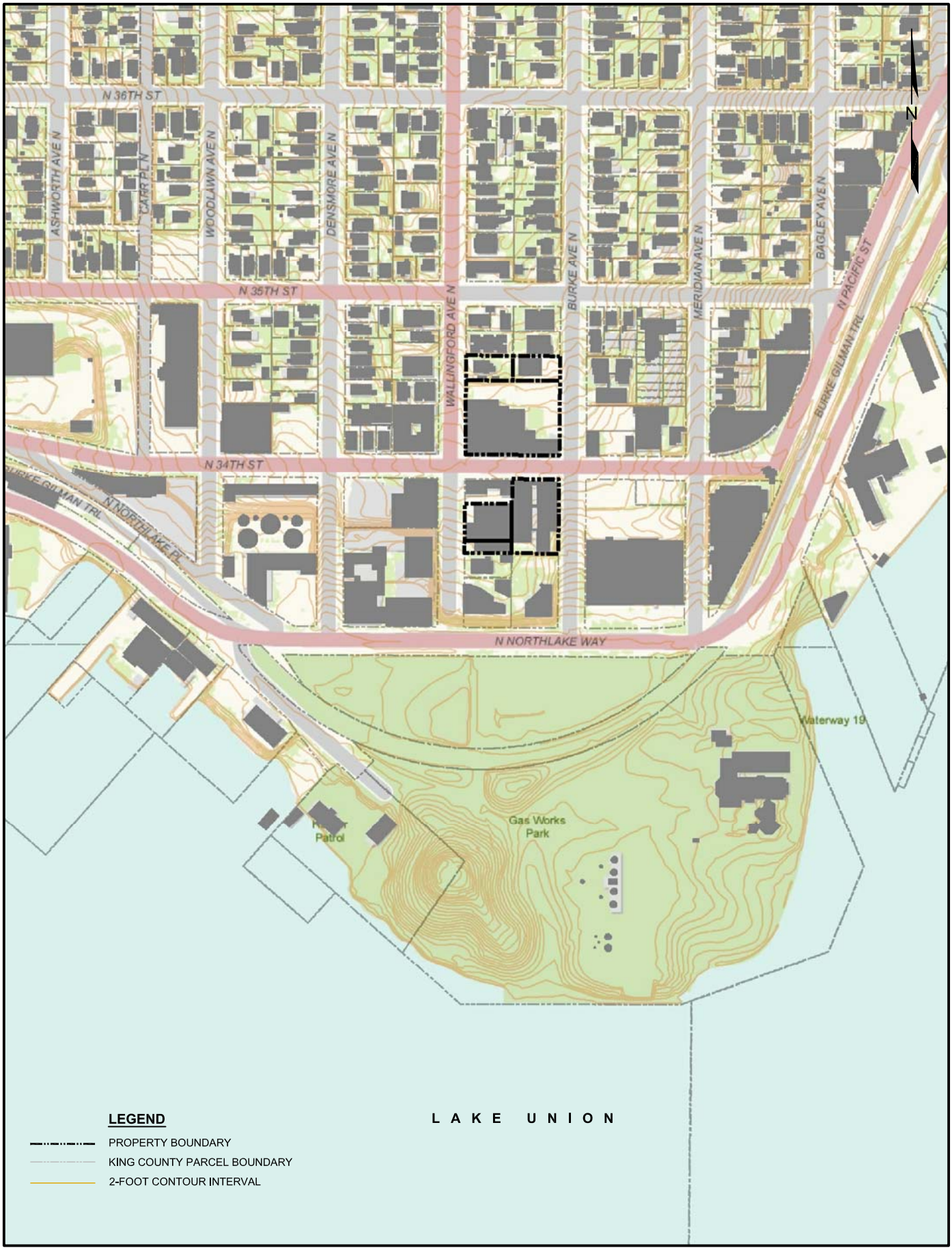
Rob Roberts
Associate Scientist

Attachments: Figure 1, Property Location Map
Figure 2, Groundwater Contour Map (October 10 and 11, 2013)
Figure 3, Groundwater TCE Results
Table 1, Summary of Groundwater Data
A, Laboratory Analytical Reports
Friedman & Bruya, Inc. #310220
Friedman & Bruya, Inc. #310534

KKG:CER/mdb:hsb

FIGURES

8/30/2013



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DATE: 08/30/13
DRAWN BY: BLR
CHECKED BY: CER
CAD FILE: 0789-004_FIG1

PROJECT NAME: AVTECH PROPERTY
PROJECT NUMBER: 0789-004-10
STREET ADDRESS: 3400 WALLINGFORD AVENUE NORTH
CITY, STATE: SEATTLE, WASHINGTON

FIGURE 1
PROPERTY LOCATION MAP

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

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12/26/2013

P:\0789 AMLI RESIDENTIAL\0789-004 AMLI AVTECH\TECHNICAL\GRAPHICS\2013\2013 4Q\GW\0789-004-2013_Q4CM_F.DWG

CONDOMINIUMS (FORMER NORTAR PROPERTY)

CONDOMINIUMS (FORMER BROOKLYN LAUNDRY FACILITY)

CONDOMINIUMS

APARTMENTS

N

WALLINGFORD AVENUE NORTH

RESIDENCE

MW02 (DRY)

MW08 (NM)

PARCEL 5

BUILDING 5 (FORMER HYDROPLANE RACING SUPPORT FACILITY)

OFFICE BUILDING

BUILDING 6 PARCEL 6

RESTAURANT & RETAIL STRUCTURE

45.0'

MW12 (48.88')

MW14 (52.60')

50.0'

55.0'

CHEMICAL STORAGE AREA

FORMER METHAMPHETAMINE LAB

FORMER PAINT SPRAY BOOTH

60.0'

MW10 (60.75')

60.0'

BUILDING 1

APARTMENTS

PAINT SPRAY BOOTH

BUILDING 2

FORMER MACHINE SHOP/SOLDERING AREA

40.0'

MW11 (34.21')

MW04 (42.57')

SHIPPING AND RECEIVING ROOM

MW01 (57.01')

PARCEL 1

MW06 (34.78')

35.0'

CHROMATE PROCESS ROOM

MW13 (43.21')

PARCEL 3

BUILDING 4

LOADING DOCK

NORTH 34TH STREET

MW09 (55.65')

FORMER DIESEL AND GASOLINE UST LOCATION

PARCEL 2

BASKETBALL COURT

PARCEL 4

MW07 (38.81')

POTENTIAL UST (GPR SURVEY)

OFFICE

BUILDING 3

50.0'

FLOOR DRAIN

FORMER CHROMATE PROCESS ROOM

FORMER PAINT SPRAY BOOTH

MW03 (NM)

SUMP

45.0'

FORMER RESIDENCES

ELEVATOR

MW05 (30.04')

35.0'

PAINT SPRAY BOOTH

MW15 (38.07')

40.0'

BURKE AVENUE NORTH

RETAIL FISHERS SUPPLY

PARKING LOT

108" DIAMETER METRO SEWER MAIN

VACANT RETAIL

CONDOMINIUMS

LEGEND

MW05	MONITORING WELL
	CATCH BASIN
(30.04')	GROUNDWATER ELEVATION
	5-FOOT-INTERVAL CONTOUR
	GROUNDWATER FLOW DIRECTION (OCTOBER 10 AND 11, 2013)
	PROPERTY BOUNDARY
	PARCEL BOUNDARY
SS	SEWER LINE (APPROXIMATE)
GPR	GROUND-PENETRATING RADAR
NM	NOT MEASURED
UST	UNDERGROUND STORAGE TANK

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DATE: 12/18/13
DRAWN BY: JQC
CHECKED BY: CER
CAD FILE: 0789-004_2013_Q4CM

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

REGION:

0 25 50 100

APPROXIMATE SCALE IN FEET

FIGURE 2

GROUNDWATER CONTOUR MAP
(OCTOBER 10 AND 11, 2013)

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12/18/2013

P:\0789 AMLI RESIDENTIAL\0789-004 AMLI AVTECT\TECHNICAL\GRAPHICS\2013\2013 4QGW\0789-004-2013_Q4GD_TCE_F.DWG

CONDOMINIUMS (FORMER NORTAR PROPERTY)

CONDOMINIUMS (FORMER BROOKLYN LAUNDRY FACILITY)

CONDOMINIUMS

APARTMENTS

N

WALLINGFORD AVENUE NORTH

Sample ID	Sample Date	TCE
MW14	04/30/12	<1

Sample ID	Sample Date	TCE
MW10	05/01/12	<1

Sample ID	Sample Date	TCE
MW08	04/25/12	<1

MW14

FORMER PAINT SPRAY BOOTH

CHEMICAL STORAGE AREA

FORMER METHAMPHETAMINE LAB

MW08

Sample ID	Sample Date	TCE
MW02	01/17/12	DRY
	04/27/12	DRY
	01/11/13	DRY
	07/10/13	DRY
	10/10/13	DRY

MW02

MW12

Sample ID	Sample Date	TCE
MW12	04/27/12	14
	01/14/13	5.0
	04/25/13	5.7
	07/10/13	10

MW10

BUILDING 1

Sample ID	Sample Date	TCE
MW01	01/17/12	<1
	05/01/12	<1

RESTAURANT & RETAIL STRUCTURE

PARCEL 5

BUILDING 5
(FORMER HYDROPLANE RACING SUPPORT FACILITY)

OFFICE BUILDING

RESIDENCE

BUILDING 6
PARCEL 6

BUILDING 2

FORMER MACHINE SHOP/SOLDERING AREA

PAINT SPRAY BOOTH

APARTMENTS

Sample ID	Sample Date	TCE
MW11	04/30/12	14
	05/08/12	29
	01/11/13	78
	04/25/13	39
	07/10/13	56
	10/10/13	35

MW11

MW04

Sample ID	Sample Date	TCE
MW04	01/17/12	110
	04/27/12	170
	01/11/13	85
	04/24/13	290
	07/10/13	150

MW01

PARCEL 1

Sample ID	Sample Date	TCE
MW06	04/25/12	3.2
	01/14/13	2.4
	04/26/13	4.5
	07/11/13	3.2
	10/11/13	<1

MW06

CHROMATE PROCESS ROOM

Sample ID	Sample Date	TCE
MW07	04/25/12	3.3
	01/11/13	3.5
	04/25/13	6.1
	07/11/13	11
	10/10/13	6.5

MW07

PARCEL 4

MW13

Sample ID	Sample Date	TCE
MW09	05/01/12	2.0
	01/14/13	42
	04/24/13	24
	07/10/13	36
	10/10/13	43

PARCEL 2

Sample ID	Sample Date	TCE
MW13	04/27/12	1.0
	05/07/12	2.0
	04/24/13	2.5
	07/10/13	37

MW09

FORMER DIESEL AND GASOLINE UST LOCATION

BASKETBALL COURT

POTENTIAL UST (GPR SURVEY)

FLOOR DRAIN

FORMER CHROMATE PROCESS ROOM

FORMER RESIDENCES

OFFICE

BUILDING 3

MW03

SUMP

ELEVATOR

Sample ID	Sample Date	TCE
MW03	04/27/12	83
	05/08/12	64
	01/14/13	71
	04/24/13	76

BURKE AVENUE NORTH

MW05

FORMER PAINT SPRAY BOOTH

PAINT SPRAY BOOTH

MW15

Sample ID	Sample Date	TCE
MW05	01/17/12	3.3
	05/01/12	1.9
	01/11/13	3.3
	04/24/13	3.0
	07/11/13	1.9
	10/10/13	8.2
	10/28/13	8.4

RETAIL FISHERS SUPPLY

Sample ID	Sample Date	TCE
MW15	04/30/12	<1
	01/14/13	<1
	04/24/13	<1
	10/28/13	<1

PARKING LOT

NORTH 34TH STREET

108" DIAMETER METRO SEWER MAIN

VACANT RETAIL

CONDOMINIUMS

LEGEND

- COMPRESSOR OIL SAMPLE
- B07/MW05 — MONITORING WELL
- CATCH BASIN
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- SS — SEWER LINE (APPROXIMATE)
- INFERRED GROUNDWATER FLOW DIRECTION
- GPR — GROUND-PENETRATING RADAR
- MTCA — WASHINGTON STATE MODEL TOXICS CONTROL ACT
- TCE — TRICHLOROETHENE
- UST — UNDERGROUND STORAGE TANK
- µg/L — MICROGRAMS PER LITER
- 170 — EXCEEDS MTCA METHOD A CLEANUP LEVEL
- < — RESULT BELOW LABORATORY REPORTING LIMIT
- ALL RESULTS SHOWN IN µg/L

	TCE (µg/L)
MTCA Method A Cleanup level	5

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DATE: 12/18/13
DRAWN BY: JQC
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CAD FILE: 0789-004_2013_Q4GD_TCE

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

REGION:

0 25 50 100
APPROXIMATE SCALE IN FEET

FIGURE 3
GROUNDWATER TCE RESULTS

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TABLE

SoundEarth Strategies

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]	MTBE[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	01/17/12	27.59	56.85	<50	<250	<0.35	<1	<1	<3	<0.2[pr]	<1	<1	<1	<1	<1	1.58	1.43	<1	<1	<1	3.94	<1	<0.1
84.44	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW02	01/17/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
69.73	04/27/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/11/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/10/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW03	01/17/12	DRY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
75.48	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	01/17/12	36.70	42.77	--	--	<0.35	<1	<1	<3	<0.2[pr]	<1	**110**	<1	<1	<1	18.6	<1	<1	<1	<1	4.33	<1	<0.1
79.47	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)	01/17/12	36.70	42.77	--	--	<0.35	<1	<1	<3	<0.2[pr]	<1	**120**	<1	<1	<1	18.6	<1	<1	<1	<1	4.65	<1	<0.1
79.47	04/27/12	36.09	43.38	--	--	--	--	--	--	<0.2	<1	**170**	<1	--	--	--	--	--	--	--	--	--	--
MW05	01/17/12	24.90	30.71	--	--	<0.35	<1	<1	<3	<0.2[pr]	<1	3.3	<1	<1	<1	<1	5.31	3.55	<1	<1	22.6	<1	<0.1
55.61	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	--	--	--	--	--	--	--	--	--	--
MW06	04/25/12	31.84	36.55	--	--	--	--	--	--	<0.2	<1	3.2	<1	--	--	--	--	--	--	--	--	--	--
68.39	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	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater[7]				**500**	**500**	**5**	**1,000**	**700**	**1,000**	**0.2**	**NE**	**5**	**5**	**20**	**160**	**50**	**5**	**NE**	**NE**	**5**	**NE**	**15**	**2**

SoundEarth Strategies

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]	MTBE[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]
MW07	04/25/12	37.43	39.35	--	--	--	--	--	--	<0.2	<1	3.3	<1	--	--	--	--	--	--	--	--	--	--	--
76.78	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	--	--	--	--	--	--	--	--	--	--	--
MW08	04/25/12	37.86	38.75	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--	--	--
76.61	01/11/13	37.34	39.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/25/13	Inaccessible																						
	07/10/13	Inaccessible																						
	10/10/13	Inaccessible																						
MW09	05/01/12	23.19	57.98	--	--	--	--	--	--	<0.2	<1	2.0	<1	--	--	--	--	--	--	--	--	--	--	--
81.17	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	--	--	--	--	--	--	--	--	--	--	--
MW10	05/01/12	21.90	63.60	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--	--	--
85.50	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW11	04/30/12	44.56	34.24	--	--	--	--	--	--	<0.2	<1	**14**	<1	--	--	--	--	--	--	--	--	--	--	--
78.80	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	--	--	--	--	--	--	--	--	--	--	--
MW12	04/27/12	32.81	49.02	--	--	--	--	--	--	<0.2	<1	**14**	<1	--	--	--	--	--	--	--	--	--	--	--
81.83	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	04/27/12	34.97	43.97	--	--	--	--	--	--	<0.2	<1	1.0	<1	--	--	--	--	--	--	--	--	--	--	--
78.94	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	04/30/12	29.99	54.61	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--	--	--
84.60	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater[7]				**500**	**500**	**5**	**1,000**	**700**	**1,000**	**0.2**	**NE**	**5**	**5**	**20**	**160**	**50**	**5**	**NE**	**NE**	**5**	**NE**	**15**	**2**

SoundEarth Strategies

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]	MTBE[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]
MW15	04/30/12	27.37	38.72	--	--	--	--	--	--	<0.2	<1	<1	<1	--	--	--	--	--	--	--	--	--	--	--	--
66.09	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	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level for Groundwater[7]				**500**	**500**	**5**	**1,000**	**700**	**1,000**	**0.2**	**NE**	**5**	**5**	**20**	**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:

[pr]Sample received with incorrect preservation. Results should be considered an estimate.

-- = not analyzed/not measured

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

µg/L = micrograms per liter

1,2-DCE = 1,2-dichloroethene

DRPH = diesel-range petroleum hydrocarbons

EPA = U.S. Environmental Protection Agency

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

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

ORPH = oil-range petroleum hydrocarbons

PCE = tetrachloroethene

TCE = trichloroethene

TOC = top of casing elevation

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

Friedman & Bruya, Inc. #310220

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

October 22, 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 October 11, 2013 from the SOU_0789-003-04_20131011, F&BI 310220 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU1022R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 11, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-003-04_20131011, F&BI 310220 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
310220 -01	MW05-20131010
310220 -02	MW06-20131011
310220 -03	MW07-20131010
310220 -04	MW09-20131010
310220 -05	MW11-20131010

Chloroethane in the 8260C matrix spike, 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.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW05-20131010	Client:	SoundEarth Strategies
Date Received:	10/11/13	Project:	SOU_0789-003-04_20131011, F&BI 310220
Date Extracted:	10/14/13	Lab ID:	310220-01
Date Analyzed:	10/14/13	Data File:	101418.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	105	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
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	8.2
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW06-20131011	Client:	SoundEarth Strategies
Date Received:	10/11/13	Project:	SOU_0789-003-04_20131011, F&BI 310220
Date Extracted:	10/14/13	Lab ID:	310220-02
Date Analyzed:	10/14/13	Data File:	101419.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	106	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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW07-20131010	Client:	SoundEarth Strategies
Date Received:	10/11/13	Project:	SOU_0789-003-04_20131011, F&BI 310220
Date Extracted:	10/14/13	Lab ID:	310220-03
Date Analyzed:	10/14/13	Data File:	101420.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	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	6.5
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW09-20131010	Client:	SoundEarth Strategies
Date Received:	10/11/13	Project:	SOU_0789-003-04_20131011, F&BI 310220
Date Extracted:	10/14/13	Lab ID:	310220-04
Date Analyzed:	10/14/13	Data File:	101421.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	102	63	127
4-Bromofluorobenzene	105	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	1.5
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	43
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW11-20131010	Client:	SoundEarth Strategies
Date Received:	10/11/13	Project:	SOU_0789-003-04_20131011, F&BI 310220
Date Extracted:	10/14/13	Lab ID:	310220-05
Date Analyzed:	10/14/13	Data File:	101422.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	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	35
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-003-04_20131011, F&BI 310220
Date Extracted:	10/14/13	Lab ID:	03-2054 mb
Date Analyzed:	10/14/13	Data File:	101414.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	100	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

Date of Report: 10/22/13
Date Received: 10/11/13
Project: SOU_0789-003-04_20131011, F&BI 310220

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

Laboratory Code: 310220-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	91	36-166
Chloroethane	ug/L (ppb)	50	<1	162 vo	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	83	60-136
Methylene chloride	ug/L (ppb)	50	<5	91	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	84	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	84	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	86	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	77	60-146
Trichloroethene	ug/L (ppb)	50	35	88 b	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	91	50-154	3
Chloroethane	ug/L (ppb)	50	168 vo	164 vo	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	89	87	67-136	2
Methylene chloride	ug/L (ppb)	50	96	94	39-148	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	92	90	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	90	89	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	92	90	80-123	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	96	94	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	87	86	83-130	1
Trichloroethene	ug/L (ppb)	50	96	93	80-120	3
Tetrachloroethene	ug/L (ppb)	50	98	95	76-121	3

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.

310220

SAMPLE CHAIN OF CUSTODY ME10-11-13 V2

Send Report To Rob Roberts
Company Sound Earth Strategies
Address 2811 Fairview Avenue East, Suite 2000
City, State, ZIP Seattle, WA 98102
Phone # 206.306.1900 Fax # 306.1907

SAMPLERS (signature) L. Namba
PROJECT NAME/NO. Avtech Property 0789-003-04
PO #
REMARKS
GEMS Y / N

Page # 1 of 1

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [x] 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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	CVOCs		Notes
mw05-20131010	mw05	28	01A-D	10/10/13	1612	Water	4							✓		
mw06-20131011	mw06	36	02	10/11/13	1153	Water	4							✓		
mw07-20131010	mw07	40	03	10/10/13	1303	Water	4							✓		
mw09-20131010	mw09	28	04	10/10/13	1137	Water	4							✓		
mw11-20131010	mw11	47	05	10/10/13	1455	Water	4							✓		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Larry Namba	SES	10/11/13	1330
Received by:	Nhan Phan	FEBI	10/11/13	1330
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
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FORMS\COC\SESGEMSR1.DOC (Revision 1)

Samples received at 6 °C

Friedman & Bruya, Inc. #310534

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
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November 5, 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 October 28, 2013 from the SOU_0789-004-02_20131028, F&BI 310534 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
SOU1105R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 28, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0789-004-02_20131028, F&BI 310534 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
310534-01	MW05-20131028
310534-02	MW15-20131028

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW05-20131028	Client:	SoundEarth Strategies
Date Received:	10/28/13	Project:	SOU_0789-004-02_20131028, F&BI 310534
Date Extracted:	10/30/13	Lab ID:	310534-01
Date Analyzed:	10/30/13	Data File:	103032.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	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
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	8.4
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW15-20131028	Client:	SoundEarth Strategies
Date Received:	10/28/13	Project:	SOU_0789-004-02_20131028, F&BI 310534
Date Extracted:	10/30/13	Lab ID:	310534-02
Date Analyzed:	10/30/13	Data File:	103033.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0789-004-02_20131028, F&BI 310534
Date Extracted:	10/30/13	Lab ID:	03-2214 mb
Date Analyzed:	10/30/13	Data File:	103010.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

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

Date of Report: 11/05/13
Date Received: 10/28/13
Project: SOU_0789-004-02_20131028, F&BI 310534

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

Laboratory Code: 310566-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	96	50-150
Chloroethane	ug/L (ppb)	50	<1	104	50-150
1,1-Dichloroethene	ug/L (ppb)	50	<1	95	50-150
Methylene chloride	ug/L (ppb)	50	<5	84	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	94	50-150
1,1-Dichloroethane	ug/L (ppb)	50	<1	96	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	94	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	97	50-150
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	96	50-150
Trichloroethene	ug/L (ppb)	50	<1	92	50-150
Tetrachloroethene	ug/L (ppb)	50	<1	88	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	99	99	70-130	0
Chloroethane	ug/L (ppb)	50	111	111	70-130	0
1,1-Dichloroethene	ug/L (ppb)	50	98	98	70-130	0
Methylene chloride	ug/L (ppb)	50	90	89	70-130	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	96	96	70-130	0
1,1-Dichloroethane	ug/L (ppb)	50	96	96	70-130	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	96	96	70-130	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	94	94	70-130	0
1,1,1-Trichloroethane	ug/L (ppb)	50	97	97	70-130	0
Trichloroethene	ug/L (ppb)	50	94	94	70-130	0
Tetrachloroethene	ug/L (ppb)	50	91	91	70-130	0

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.

310534

SAMPLE CHAIN OF CUSTODY

ME 10/28/13 VI

Page # 1 of 1

Send Report To Rob Roberts

Company Sound Earth Strategies

Address 2811 Fairview Avenue East, Suite 2000

City, State, ZIP Seattle, WA 98102

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) L. Namba

PROJECT NAME/NO. Amli - Avtech - Wallingford 0789-004-02

PO # 1

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: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	cVOC		Notes
MW05-20131028	MW05	28	01 A-D	10/28/13	1325	water	4							✓		
MW15-20131028	MW15	31	02 A-D	10/28/13	1205	water	4							✓		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Larry Namba	SES	10/28/13	8:45
Received by:	Michael Eddl	Fedex	↓	↓
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
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Samples received at _____ °C