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

March 31, 2017

Ms. Kim Kuhl
Kane Properties, LLC
19427 136th Place Southeast
Renton, Washington 98058

SUBJECT: SUBSURFACE INVESTIGATION SUMMARY LETTER
Rainier Mall Property
4208 Rainier Avenue South
Seattle, Washington
Project Number: 1276-001

Dear Ms. Kuhl:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this letter report to present the results of the subsurface investigation for the Rainier Mall Property (King County Parcel No. 795030-1480), located at 4208 Rainier Avenue South in Seattle, Washington (the Property; Figure 1). The Property consists of an irregularly shaped tax parcel that covers approximately 101,537 square feet (2.33 acres) of land. The Property is relatively level at an elevation of approximately 32 to 37 feet above mean sea level. The Property is currently developed with a one-story retail building that occupies 36,071 square feet, and the remainder of the Property is covered with an asphalt-paved parking lot. The Property location is shown on Figure 1.

The purpose of the subsurface investigation was to evaluate the extent of identified chlorinated solvent impacts to soil and groundwater beneath the Property associated with historical dry cleaner operations. The second goal of the investigation was to assess whether chlorinated solvents in soil and groundwater have migrated off the Property under adjoining rights-of-way. This information will be used to present a summary of the site conditions to potential buyers of the Property.

The subsurface assessment was conducted in general accordance with the proposal prepared by SoundEarth dated December 1, 2016. This letter report summarizes the Property history and the field activities and results of the subsurface investigation, and provides SoundEarth's conclusions regarding the nature and extent of soil and groundwater impacts beneath the Property.

PROPERTY BACKGROUND

According to historical records, the Property was occupied by a former Safeway, Inc. grocery store that was converted into a mixed-use retail mall in 1998. Prior to construction of the grocery store in 1968, the Property was occupied at various times by several residences, stores, a restaurant, and three dry cleaners. Former dry cleaning operations were located in three separate locations on the southwestern

portion of the Property (Figure 2). All buildings associated with former dry cleaning operations have been removed, and the Property is currently vacant.

SITE GEOLOGY

According to previous reports, soils in the vicinity of the Property are mapped as Vashon till, consisting of a light to dark gray, nonstratified mixture of silt, sand, and gravel from 3 to 80 feet thick. Previous investigations at the Property and other properties in the immediate vicinity have encountered fill material consisting of gravel, sand, and silt to depths ranging from 1 to 14 feet below ground surface (bgs), overlying soft to stiff sandy silt and clay to at least 41 feet bgs. Static groundwater levels in the vicinity of the Property range from approximately 27 to 195 feet bgs, with an inferred groundwater flow direction to the northeast toward Lake Washington.

Soil borings advanced during SoundEarth's subsurface investigation encountered fill material consisting of silty sand to sandy silt with gravel and trace amounts of brick, wood, and glass to depths of approximately 10 feet bgs. The fill material was underlain by soft to medium dense silt and silty clay with variable amounts of sand and thin sand lenses to a depth of approximately 30 to 35 feet bgs. Medium dense to dense silt with varying amounts of clay and trace amounts of fine sand was observed from approximately 35 feet to the maximum depth of exploration (90 feet bgs). Discontinuous intervals of moist soil conditions were encountered in some soil borings at depths ranging from 10 to 35 feet bgs. Below 35 feet bgs, soil was observed to be dry to moist. Regional groundwater was not encountered to the maximum depth explored, 90 feet bgs, during this investigation.

PREVIOUS INVESTIGATIONS

A Phase II Environmental Site Assessment was conducted at the Property by Hahn and Associates, Inc. (Hahn) in June 2000. This assessment was conducted to assess potential impacts to soil and groundwater relating to the former dry cleaning operations at the Property. The field investigation consisted of eight hollow-stem auger borings (B-1 through B-8) in locations as shown on Figure 2. Borings were advanced to a maximum depth of 41 feet bgs. Discontinuous moist soil conditions were encountered in borings B-1, B-3, B-4, B-5, and B-7 at depths ranging from 24.5 to 29.5 feet bgs. Moist soil conditions were not observed in borings B-2, B-6, or B-8.

Select soil samples from borings B-1, B-3, B-6, and B-8 were analyzed for volatile organic compounds (VOCs). A sample collected from boring B-1 at 19.5 feet bgs contained a tetrachloroethene (PCE) concentration of 83.3 milligrams per kilogram (mg/kg), compared to the MTCA Method A cleanup level of 0.05 mg/kg for this compound. Trichloroethene (TCE) was also detected in this sample at a concentration below the applicable MTCA Method A cleanup level (Table 1).

Reconnaissance perched groundwater samples were collected from borings B-1, B-3, B-4, B-5, and B-7 at depths ranging from 27 to 32 feet bgs and analyzed for VOCs. The perched groundwater sample collected from boring B-1 contained concentrations of PCE and TCE above applicable MTCA Method A cleanup levels. The sample collected from B-4 contained concentrations of PCE, TCE, 1,1-dichloroethene, and vinyl chloride above applicable cleanup levels (Table 2).

Soils observed during this investigation as well as SoundEarth's investigation consisted of silt and silty clay with variable amounts of fine sand and thin, discontinuous sand lenses to a depth of approximately 35 feet bgs. Fine-grained soil types such as silt and clay are typically characterized by low water yield, and all moist soil conditions observed in the soil borings advanced by Hahn and SoundEarth were associated with the thin, discontinuous sand lenses interbedded with the silt and clay to a maximum depth of approximately 35 feet bgs. Based on these observations and the lack of moisture in several of the soil borings, moist soil conditions at depths ranging from approximately 10 to 35 feet bgs beneath the Property are interpreted as perched lenses of groundwater limited to discontinuous sand lenses. SoundEarth's investigation did not encounter perched or regional groundwater between approximately 35 to 90 feet bgs, and soils observed at these depths consisted of dense to very dense silt without sand lenses, indicating that the intervals of perched groundwater above 35 feet bgs are not connected to a regional groundwater aquifer.

All reconnaissance groundwater samples collected by Hahn were collected from perched groundwater lenses and are not representative of or connected to a regional groundwater aquifer. Additionally, reconnaissance groundwater samples are typically characterized by high turbidity, which can bias the data and cause artificially high groundwater laboratory analytical results.

PHASE II ENVIRONMENTAL SITE ASSESSMENT FIELD WORK

To further define the extent of chlorinated solvent impacts in soil and groundwater beneath the Property, SoundEarth conducted a subsurface investigation at the Property between January and March 2017. Elements of the subsurface investigation field work included the following:

- Completing public and private utility locates to identify the location of underground utilities.
- Advancing eight direct-push soil borings to depths ranging from 16 to 24.5 feet bgs.
- Advancing four hollow-stem auger borings to depths ranging from 31.5 to 41.5 feet bgs and completing one boring as a groundwater monitoring well.
- Advancing one sonic boring with conductor casing to a depth of 90 feet bgs.
- Collecting soil samples every 2.5 to 5 feet in each direct-push, hollow-stem auger, and sonic boring.
- Submitting select soil samples for laboratory analysis of chlorinated volatile organic compounds (CVOCs) by U.S. Environmental Protection Agency Method 8260C.

A detailed description of field activities is provided in the following sections.

Direct-Push Drilling and Soil Sampling

On January 18, 2017, Holocene Drilling, Inc., under the direction of a SoundEarth geologist, advanced eight direct-push soil borings (SB01 through SB08) at the Property (Figure 2). Borings were advanced in the vicinities of the three former dry cleaning operations and near previous borings where elevated CVOC concentrations and/or photoionization detector (PID) readings were observed.

Direct-push borings were advanced to depths ranging from 16 to 24.5 feet bgs, and discrete soil samples were collected from each boring at 2.5-foot depth intervals. Soil samples were described in accordance

with the Unified Soil Classification System and were screened in the field for potential evidence of contamination using visual observations and notations of odor and by conducting headspace analysis using a PID to detect the presence of volatile organic vapors.

Hollow-Stem Auger Drilling and Soil Sampling

On February 9 and 10, 2017, Holocene Drilling, Inc., under the direction of a SoundEarth geologist, advanced four hollow-stem auger borings (B01 through B04) at the Property. Boring B01 was advanced directly adjacent to boring locations B-1 and SB01, where PCE concentrations above the MTCA Method A cleanup level were previously detected. Borings B02 through B04 were advanced to the north and east of direct-push borings with elevated PCE concentrations to determine the lateral and vertical extents of impacted soil. The hollow-stem auger borings were advanced to depths ranging from 31.5 to 41.5 feet bgs at the locations shown on Figure 2, and discrete soil samples were collected from each boring at 2.5-foot-depth intervals.

Based on boring locations, screening results, sampling depths, and observed soil characteristics, soil samples were selected from the direct-push and hollow-stem auger borings, placed on ice in a cooler, and delivered to Friedman & Bruya, Inc. of Seattle, Washington, under standard chain-of-custody protocol for chemical analysis of CVOCs.

Soil cuttings and decontamination water generated during drilling activities were contained on the Property in labeled 55-gallon drums pending analytical results.

Monitoring Well Installation and Development

Hollow-stem auger boring B01 was completed as a 2-inch-diameter monitoring well (MW01), with 15 feet of 0.010-inch slotted well screen extending from 18 to 33 feet below the top of well casing. The bottom of the well was fitted with a threaded PVC bottom cap, and the top of each well was fitted with a slip cap. The annulus of the monitoring well was filled with 2/12 sand from the bottom of the well to approximately 6 inches above the well screen, and sealed with approximately 2 feet of bentonite and a concrete cap. The well was completed at the surface with a flush-mounted, traffic-rated well box set in concrete. Monitoring well MW01 was developed a minimum of 24 hours following installation by pumping with a submersible development pump until low turbidity was achieved. A total of 55 gallons of water was removed from MW01 during development. Water generated during well development was contained on the Property in labeled 55-gallon drums.

Based on the discontinuous nature of water in the soil borings at the Property and the low productivity observed in monitoring well MW01 during well development, groundwater encountered during the subsurface investigation was interpreted as perched water lenses which are not representative of regional groundwater beneath the Property. As a result, a groundwater sample was not collected from monitoring well MW01, as it is not representative of a continuous groundwater-bearing zone.

Sonic Drilling and Soil Sampling

On March 22, 2017, Cascade Drilling, Inc., under the direction of a SoundEarth geologist, advanced one sonic boring (B05) at the Property. Boring B05 was advanced directly adjacent to hollow-stem auger boring B01 using a track-mounted sonic drill rig in order to determine the depth of regional groundwater

beneath the Property, to confirm vertical impacts near B01, and to evaluate potential groundwater impacts in the area of the Property with the highest observed PCE concentrations in soil.

Conductor casing was used while advancing boring B05 to minimize the risk of cross-contaminating groundwater below the interval of PCE-impacted soil. From 0 to 30 feet bgs, the boring was advanced with 8-inch-diameter casing. A bentonite seal was placed in the boring from 30 to 35 feet bgs, below the interval of highest PCE concentrations in soil. Once the seal was set, drilling continued from 30 feet bgs using 6-inch-diameter casing. Boring B05 was advanced to a total depth of 90 feet bgs, with discrete soil samples collected every 3 to 5 feet between 24 and 40 feet bgs to evaluate the lower vertical limit of PCE impacts in soil.

Boring B05 was intended to be completed as a deep monitoring well to evaluate any potential impacts to the regional groundwater. However, with the exception of perched water lenses observed between 17.5 and 28.5 feet bgs, groundwater was not encountered in the boring to the total depth of exploration, and the boring was not completed as a monitoring well.

Based on screening results, sampling depths, and observed soil characteristics, the soil sample collected from boring B05 at 40 feet bgs was placed on ice in a cooler and delivered to Friedman & Bruya, Inc. under standard chain-of-custody protocol for chemical analysis of CVOCs.

Soil cuttings and decontamination water generated during drilling activities were contained on the Property in labeled 55-gallon drums pending analytical results.

SUBSURFACE CONDITIONS AND ANALYTICAL RESULTS

Direct-push, hollow-stem auger, and sonic soil borings encountered fill and/or reworked native soils consisting of silty sand to sandy silt with gravel and trace amounts of brick, wood, and glass to depths of approximately 10 feet bgs. The fill material was underlain by soft to medium dense silt and silty clay with variable amounts of sand and thin sand lenses to a depth of approximately 30 to 35 feet bgs. In sonic boring B05, medium dense to dense silt with varying amounts of clay and trace amounts of fine sand was observed from approximately 35 feet to the maximum depth of exploration (90 feet bgs).

No petroleum odors or sheens were noted during drilling. Elevated PID readings ranging from 1.5 to 82.8 parts per million were observed in borings SB01, SB02, SB08, B01, B02, and B05 at depths ranging from 10 to 30 feet bgs.

Groundwater was not encountered in direct-push borings SB01 through SB08. Discontinuous intervals of moist soil conditions were encountered at depths ranging from 10 to 35 feet bgs in hollow-stem auger borings B01 through B04 and sonic boring B05. Below 35 feet bgs in boring B05, soil was observed to be dry to moist, with no water-bearing intervals encountered to the maximum depth of exploration. Analytical results for soil samples are presented and discussed in the following section.

Soil Results

A summary of the soil analytical results is provided below (Figures 3, 4, and 5; Table 1):

- Borings SB01, SB02, SB08, B01, B02, B03, and B04 contained concentrations exceeding the applicable MTCA Method A cleanup levels at depths ranging from 12.5 to 32.5 feet bgs of one or more of the following: PCE, TCE, and vinyl chloride.
- CVOCs above applicable MTCA Method A cleanup levels were not detected in borings SB03, SB04, SB05, SB06, or SB07.
- Borings SB01 and B01 contained concentrations of PCE exceeding the Washington State hazardous waste criteria of 14 mg/kg.
- Boring B01 contained concentrations of PCE exceeding the land ban waste criteria of 60 mg/kg.
- Concentrations of CVOCs were below the laboratory detection limit for the sample collected at 40 feet from boring B05.

Laboratory analytical reports are provided in Attachment A.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the subsurface investigation, soil impacts were not observed in the vicinity of the northern former dry cleaner location during both the Hahn and SoundEarth investigations (Figures 2 and 3). In general, soil impacts were not observed from ground surface to an approximate depth of 12.5 feet in any of the soil borings advanced at the Property.

PCE, TCE, and vinyl chloride were detected in soil in the southwestern corner of the Property at concentrations exceeding MTCA Method A cleanup levels at depths ranging from 12.5 to 32.5 feet bgs. PCE concentrations exceeding the Washington State hazardous waste criteria of 14 mg/kg were detected in borings SB01, B01, and B-1 (Hahn) at depths ranging from 17.5 to 22.5 feet bgs. In borings B01 and B-1, PCE concentrations exceeding the land ban waste criteria of 60 mg/kg were detected at depths of 20 and 19.5 feet bgs, respectively. Depending on future land use at the Property, it may be beneficial to treat the areas with significant impacts to decrease the potential for vapor intrusion issues and lower contaminant concentrations in soil in the event that future redevelopment does remove impacted soil at depths greater than 12 feet bgs.

Although the lateral extents of CVOC impacts in soil in the southwestern portion of the Property are not fully defined, PCE and TCE concentrations decrease moving to the north and east from the vicinity of SB01 and B01, where the highest concentrations were detected. Soil impacts do not appear to extend beyond the Property's southern boundary into the adjacent right-of-way. The vertical extent of CVOC impacts above MTCA Method A cleanup levels in boring B01 is approximately 32.5 feet bgs. A sample collected from boring B05 at 40 feet bgs, directly adjacent to boring B01, did not contain detectable concentrations of CVOCs, confirming the vertical extent of CVOC impacts in soil.

Intervals of saturated soil were encountered in the hollow-stem auger and sonic borings advanced at the Property at depths ranging from 10 to 35 feet bgs. Due to the discontinuous nature and low productivity of these intervals, the observed saturated intervals were interpreted as perched groundwater limited to thin sand lenses and are not representative of regional groundwater beneath the Property. Boring B05 was advanced in the area with the highest PCE concentrations in soil to determine vertical impacts, and evaluate the depth to and quality of the regional groundwater-bearing

zone. However, moist soil conditions or regional groundwater was not encountered from approximately 35 feet bgs to the maximum depth explored of 90 feet bgs. Soil observations from 35 to 90 feet bgs consisted of dense to very dense silt without sand lenses. These findings indicate that there are at least 55 feet of vertical separation between the deepest PCE detection in soil and the maximum depth explored beneath the Property. Although regional groundwater was not encountered, it is not likely that the soil to groundwater pathway is complete for the impacts detected in B01 due to the vertical separation of main soil impacts and maximum depth explored. Based on the lack of moist soil conditions observed below 35 feet bgs, the impacts detected by Hahn in reconnaissance perched groundwater samples are likely not connected to or representative of regional groundwater beneath the Property.

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 our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from data gathered by others, and from conditions evaluated when services were performed, and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant and are not responsible for the accuracy or validity of work performed by others, nor from the impacts of changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the use of segregated portions of this report.

CLOSING

SoundEarth appreciates this opportunity to provide Kane Properties, LLC with environmental comments regarding the content of this report.

Respectfully,

SoundEarth Strategies, Inc.

Clare Tochilin, LG
Staff Hydrogeologist

John R. Funderburk, MSPH
Principal

Attachments: Figure 1, Property Location Map
Figure 2, Exploration Location Plan
Figure 3, Soil Analytical Results and Estimated Extent of Soil Impacts
Figure 4, Geologic Cross Section A–A'
Figure 5, Geologic Cross Section B–B'
Table 1, Soil Analytical Results for Chlorinated VOCs
Table 2, Reconnaissance Groundwater Analytical Results for Chlorinated VOCs
A, Laboratory Analytical Reports
Friedman & Bruya, Inc. #701209 and additional

Friedman & Bruya, Inc. #702165 and additional
Friedman & Bruya, Inc. #702170
Friedman & Bruya, Inc. #703403

CJT/CMC:dnm

FIGURES

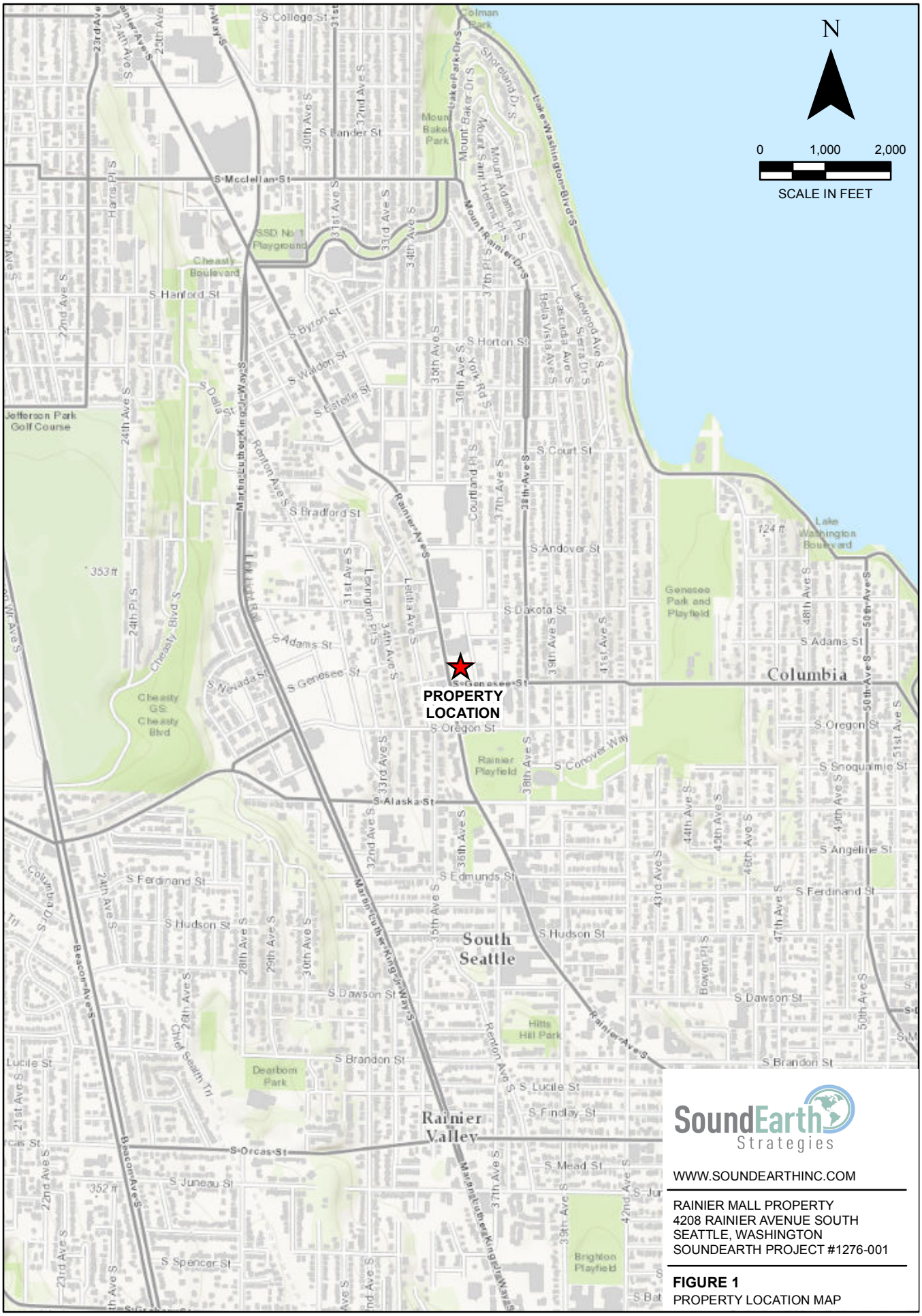

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FIGURE 1
PROPERTY LOCATION MAP

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N

0 15 30

APPROXIMATE SCALE IN FEET

ESTIMATED LOCATION OF FORMER DRY CLEANERS

RAINIER AVENUE SOUTH

36TH AVENUE SOUTH

PARKING LOT

SOUTH GENESEE STREET

A

A'

B

B'

B-7

SB07

SB06

B-8

B-6

B-5

B04

B02

B03

SB08

SB02

SB01

SB03

B01/ MW01

B05

B-1

B-2

B-4

B-3

SB05

SB04

ESTIMATED LOCATION OF FORMER DRY CLEANERS

LEGEND

	PROPERTY BOUNDARY
B01/ MW01	GROUNDWATER MONITORING WELL
SB08	PUSH-PROBE SOIL BORING
B04	HOLLOW-STEM AUGER SOIL BORING
B-8	SOIL BORING (HAHN AND ASSOCIATES, INC, 2000)
B05	SONIC SOIL BORING
	DENOTES CONCENTRATION IN SOIL EXCEEDS MTCA METHOD A CLEANUP LEVELS
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
A A'	CROSS SECTION LOCATION

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FIGURE 2
EXPLORATION LOCATION PLAN

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N

0 15 30

APPROXIMATE SCALE IN FEET

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB07	10.0	<0.025	<0.02
	16.0	<0.025	<0.02

ESTIMATED LOCATION OF FORMER DRY CLEANERS

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB06	10.0	<0.025	<0.02
	24.0	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B-8	4.5	<0.005	<0.005

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B-6	7.0	<0.005	<0.005

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B04	10.0	<0.025	<0.02
	12.5	<0.025	0.10
	17.5	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B02	10.0	<0.025	<0.02
	15.0	0.085	4.9
	20.0	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB08	5.0	<0.025	<0.02
	10.0	<0.025	<0.02
	12.5	<0.025	0.29
	16.0	7.1	8.6

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B03	12.5	<0.025	<0.02
	15.0	<0.025	<0.02
	17.5	0.36	1.5
	20.0	0.67	0.57
	22.5	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB02	5.0	<0.025	<0.02
	10.0	<0.025	<0.02
	12.5	<0.025	<0.02
	16.0	4.1	2.2

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB03	12.5	<0.025	<0.02
	16.0	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB01	5.0	<0.025	<0.02
	10.0	<0.025	<0.02
	20.0	29	0.31
	22.5	1.8	<0.02
	24.5	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB04	5.0	<0.025	<0.02
	12.5	<0.025	<0.02
	16.0	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B01/ MW01	12.5	<0.025	<0.02
	17.5	58	0.45
	20.0	510	0.33
	22.5	20	0.28
	27.5	0.40	0.073
	32.5	0.31	<0.02
	35.0	0.049	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B-3	4.5	<0.005	<0.005

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B05	40.0	<0.025	<0.02

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
B-1	19.5	83.3	0.272

Well/Boring ID	Depth (feet bgs)	Analytical Results (mg/kg) PCE	TCE
SB05	5.0	<0.025	<0.02
	12.5	<0.025	<0.02
	16.0	<0.025	<0.02

B-7 B-6 B-8 B-5 B-2 B-4 B-3 B-1

SB07 SB06 SB08 SB02 SB03 SB01 SB04 SB05

B01/MW01 B02 B03 B04 B05

PARKING LOT

RAINIER AVENUE SOUTH

36TH AVENUE SOUTH

SOUTH GENESEE STREET

ESTIMATED LOCATION OF FORMER DRY CLEANERS

LEGEND

B01/MW01	GROUNDWATER MONITORING WELL
SB08	PUSH-PROBE SOIL BORING
B04	HOLLOW-STEM AUGER SOIL BORING
B-8	SOIL BORING (HAHN AND ASSOCIATES, INC, 2000)
B05	SONIC SOIL BORING
RED	DENOTES CONCENTRATION IN SOIL EXCEEDS MTCA METHOD A CLEANUP LEVELS
BOLD RED	DENOTES PCE CONCENTRATION IN SOIL EXCEEDS HAZARDOUS WASTE LIMITS
	PROPERTY BOUNDARY
	APPROXIMATE EXTENT OF PCE CONCENTRATIONS EXCEEDING HAZARDOUS WASTE OR LAND BAN LIMITS
	APPROXIMATE EXTENT OF PCE-IMPACTED SOIL
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
mg/kg	MILLIGRAMS PER KILOGRAM
bgs	BELOW GROUND SURFACE
--	NOT REPORTED

	Analytical Results (mg/kg) PCE	TCE
MTCA Cleanup Level for Soil	0.05	0.03
Hazardous Waste Limit	14	--
Land Ban Limit	60	--

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FIGURE 3

SOIL ANALYTICAL RESULTS AND ESTIMATED EXTENT OF SOIL IMPACTS

3/31/2017

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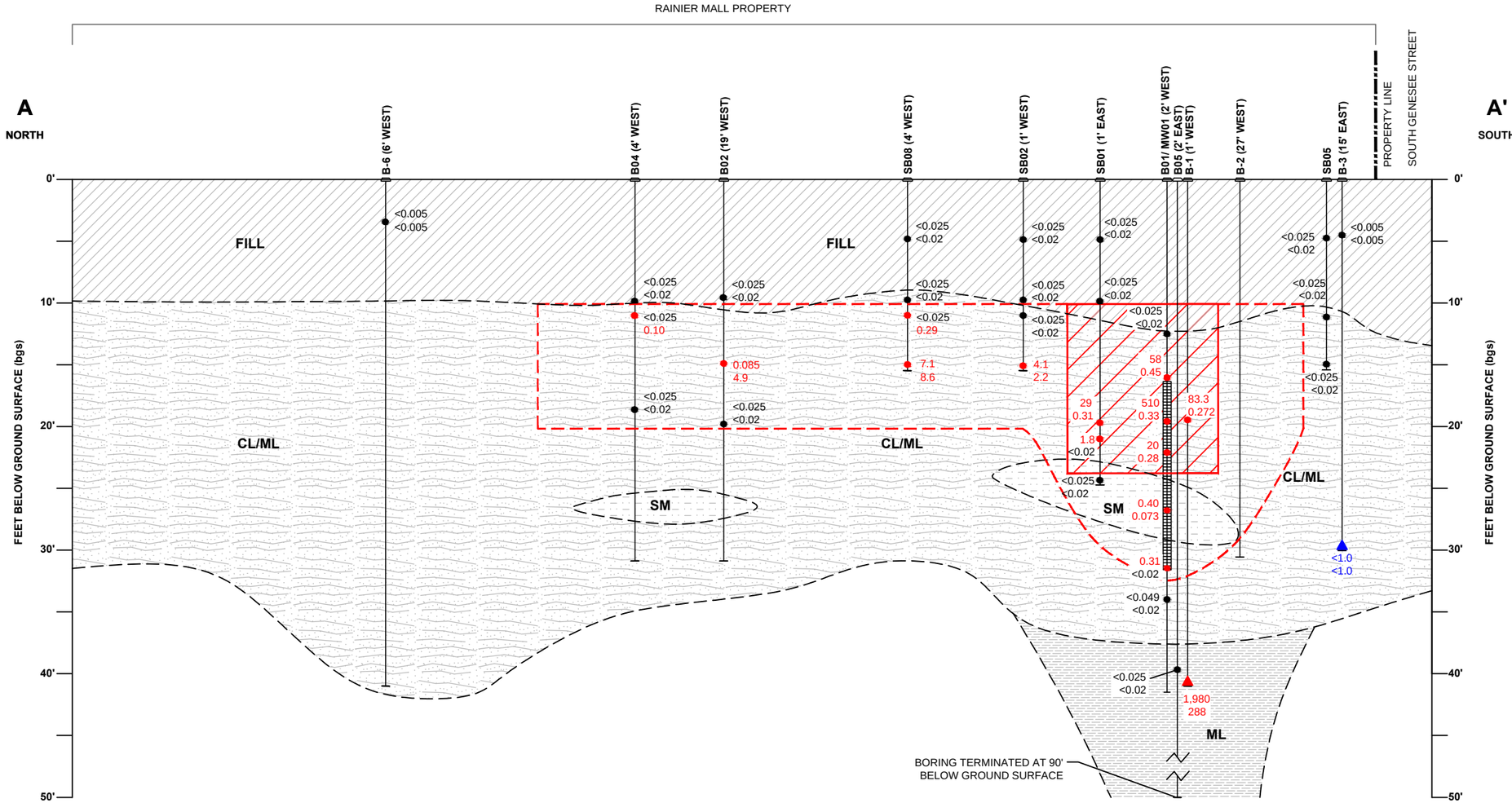
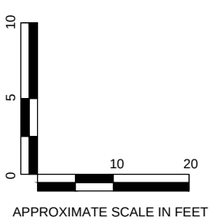
RAINIER MALL PROPERTY





LEGEND

(6' WEST) OFFSET 6' WEST MONITORING WELL

SCREEN INTERVAL

GROUNDWATER LEVEL

FILL - SILTY SAND WITH GRAVEL

CL/ML - CLAY/SILT WITH THIN SAND LENSES

SM - SILTY/ FINE TO COARSE SAND

ML - DENSE SILT

APPROXIMATE EXTENT OF PCE CONCENTRATION EXCEEDING HAZARDOUS WASTE (14 mg/kg) OR LAND BAN LIMITS (60 mg/kg)

APPROXIMATE EXTENT OF PCE-IMPACTED SOIL

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):

<0.025 TCE
<0.02 PCE

CONCENTRATIONS OF CHEMICALS OF CONCERN IN PERCHED RECONNAISSANCE GROUNDWATER SAMPLES (µg/L):

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

PERCHED RECONNAISSANCE GROUNDWATER RESULTS (µg/L):

1,980 TCE
288 PCE

mg/kg	MILLIGRAMS PER KILOGRAM
µg/L	MICROGRAMS PER LITER
RED	DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
bgs	BELOW GROUND SURFACE

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4208 RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1276-001

FIGURE 4
GEOLOGIC CROSS SECTION A-A'

3/31/2017

P:\1276 KANE PROPERTIES, LLC\1276-001 RAINIER MALL\TECHNICAL\CAD\2017\VERSION 2\1276-001_FIG5_XBB.DWG

RAINIER MALL PROPERTY

B NORTHWEST — **B'** SOUTHEAST

PROPERTY LINE

B-7 (19' NORTH) | SB06 (2' SOUTH) | SB07 (19' NORTH) | B-8 (5' SOUTH) | B-5 (2' NORTH) | B04 (8' NORTH) | B02 (15' SOUTH) | SB08 (18' SOUTH) | B03 (10' NORTH) | SB03 (18' SOUTH) | B-4 (20' SOUTH) | SB04 (3' SOUTH)

FEET BELOW GROUND SURFACE (bgs)

0' / 10' / 20' / 30' / 40' / 50'

FILL

CL/ML

SM

CL/ML

SM

CL/ML

FILL

<0.005 <0.005			<0.005 <0.005				<0.025 <0.02				<0.025 <0.02
	<0.025 <0.02	<0.025 <0.02			<0.025 <0.02	<0.025 <0.02	<0.025 <0.02	<0.025 <0.02	<0.025 <0.02		
					<0.005 0.10		<0.025 0.29	<0.025 <0.02			<0.025 <0.02
		<0.025 <0.02				0.085 4.9	7.1 8.6	<0.025 <0.02	0.36 1.5	<0.025 <0.02	
					<0.025 <0.02				0.67 0.57		
						<0.025 <0.02			<0.025 <0.02		
	<0.025 <0.02										
	1.25 <1.0			<1.0 <1.0						3,800 1,100	

LEGEND

(19' NORTH) OFFSET19' NORTH MONITORING WELL

SCREEN INTERVAL

GROUNDWATER LEVEL

FILL - SILTY SAND WITH GRAVEL CONTAINING LENSES OF SANDY SILT OR CLAY

CL/ML - SILT/ CLAY WITH THIN SAND LENSES

SM - SILTY/ FINE TO COARSE SAND

APPROXIMATE EXTENT OF PCE-IMPACTED SOIL

0 5 10 — 10 20

APPROXIMATE SCALE IN FEET

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):

<0.025 TCE
<0.02 PCE

CONCENTRATIONS OF CHEMICALS OF CONCERN IN PERCHED RECONNAISSANCE GROUNDWATER SAMPLES (µg/L):

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

PERCHED RECONNAISSANCE GROUNDWATER RESULTS (µg/L):

1.25 TCE
<1.0 PCE

mg/kg	MILLIGRAMS PER KILOGRAM
µg/L	MICROGRAMS PER LITER
RED	DENOTES CONCENTRATIONS EXCEEDING MTCA METHOD A CLEANUP LEVELS
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
bgs	BELOW GROUND SURFACE

SoundEarth Strategies

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RAINIER MALL
4208 RAINIER AVENUE SOUTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1276-001

FIGURE 5
GEOLOGIC CROSS SECTION B-B'

TABLES

Table 1
Soil Analytical Results for Chlorinated VOCs
Rainier Mall Property
4208 Rainier Avenue South
Seattle, Washington

Well/Boring ID	Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results[1] (milligrams per kilogram)				
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Vinyl Chloride
B-1	5015-000628-005	Hahn	06/28/00	19.5	**83.3**	**0.272**	<0.005	--	<0.01
B-3	5015-000628-018	Hahn	06/28/00	4.5	<0.005	<0.005	<0.005	--	<0.01
B-6	5015-000628-039	Hahn	06/29/00	7.0	<0.005	<0.005	<0.005	--	<0.01
B-8	5015-000628-055	Hahn	06/29/00	4.5	<0.005	<0.005	<0.005	--	<0.01
SB01	SB01-5.0	SoundEarth	01/18/17	5.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB01-10.0			10.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB01-20.0			20.0	**29**	**0.31**	<0.05	<0.05	<0.05
	SB01-22.5			22.5	**1.8**	<0.02	<0.05	<0.05	<0.05
	SB01-24.5			24.5	<0.025	<0.02	<0.05	<0.05	<0.05
SB02	SB02-5.0	SoundEarth	01/18/17	5.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB02-10.0			10.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB02-12.5			12.5	<0.025	<0.02	6.7	0.052	**2.2**
	SB02-16.0			16.0	**4.1**	**2.2**	1.1	<0.05	0.052
SB03	SB03-12.5	SoundEarth	01/18/17	12.5	<0.025	<0.02	<0.05	<0.05	<0.05
	SB03-16.0			16.0	<0.025	<0.02	<0.05	<0.05	<0.05
SB04	SB04-5.0	SoundEarth	01/18/17	5.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB04-12.5			12.5	<0.025	<0.02	<0.05	<0.05	<0.05
	SB04-16.0			16.0	<0.025	<0.02	<0.05	<0.05	<0.05
SB05	SB05-5.0	SoundEarth	01/18/17	5.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB05-12.5			12.5	<0.025	<0.02	<0.05	<0.05	<0.05
	SB05-16.0			16.0	<0.025	<0.02	<0.05	<0.05	<0.05
SB06	SB06-10.0	SoundEarth	01/18/17	10.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB06-24.0			24.0	<0.025	<0.02	<0.05	<0.05	<0.05
SB07	SB07-10.0	SoundEarth	01/18/17	10.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB07-16.0			16.0	<0.025	<0.02	<0.05	<0.05	<0.05
SB08	SB08-5.0	SoundEarth	01/18/17	5.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB08-10			10.0	<0.025	<0.02	<0.05	<0.05	<0.05
	SB08-12.5			12.5	<0.025	**0.29**	1.3	0.086	<0.05
	SB08-16.0			16.0	**7.1**	**8.6**	10	0.056	0.24
B01/MW01	B01-12.5	SoundEarth	02/09/17	12.5	<0.025	<0.02	<0.05	<0.05	<0.05
	B01-17.5			17.5	**58**	**0.45**	<0.05	<0.05	<0.05
	B01-20			20.0	**510**	**0.33**	<0.05	<0.05	<0.05
	B01-22.5			22.5	**20**	**0.28**	<0.05	<0.05	<0.05
	B01-27.5			27.5	**0.40**[ht]	**0.073**[ht]	<0.05[ht]	<0.05[ht]	<0.05[ht]
	B01-32.5			32.5	**0.31**[ht]	<0.02[ht]	<0.05[ht]	<0.05[ht]	<0.05[ht]
	B01-35			35.0	0.049[ht]	<0.02[ht]	<0.05[ht]	<0.05[ht]	<0.05[ht]
B02	B02-10	SoundEarth	02/09/17	10.0	<0.025	<0.02	0.13	<0.05	<0.05
	B02-15			15.0	**0.085**	**4.9**	6.7	0.25	0.097
	B02-20			20.0	<0.025	<0.02	<0.05	<0.05	<0.05
B03	B03-12.5	SoundEarth	02/10/17	12.5	<0.025	<0.02	<0.05	<0.05	<0.05
	B03-15			15.0	<0.025	<0.02	0.082	<0.05	<0.05
	B03-17.5			17.5	**0.36**	**1.5**	1.1	<0.05	<0.05
	B03-20			20.0	**0.67**	**0.57**	0.41	<0.05	<0.05
	B03-22.5			22.5	<0.025	<0.02	<0.05	<0.05	<0.05
B04	B04-10	SoundEarth	02/10/17	10.0	<0.025	<0.02	<0.05	<0.05	<0.05
	B04-12.5			12.5	<0.025	**0.10**	0.79	0.12	<0.05
	B04-17.5			17.5	<0.025	<0.02	0.32	<0.05	<0.05
B05	B05-40	SoundEarth	03/22/17	40.0	<0.025	<0.02	<0.05	<0.05	<0.05
MTCA Cleanup Level for Soil					**0.05**[2]	**0.03**[2]	**160**[3]	**1,600**[3]	**0.67**[4]

NOTES:

SoundEarth samples analyzed by Friedman & Bruya, Inc. in Seattle, Washington

Hahn samples analyzed by Environmental Services Laboratory, Inc. in Portland, Oregon.

Red denotes concentration exceeds MTCA cleanup level for soil.

[1]Samples analyzed by U.S. Environmental Protection Agency Method 8260C.

[2]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Soil, Unrestricted Land Uses, revised November 2007.

[3]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Noncancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

[4]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Cancer, Direct Contact, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

Laboratory Note:

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

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

bgs = below ground surface

CLARC = Cleanup Levels and Risk Calculations

Hahn = Hahn and Associates, Inc.

MTCA = Washington State Model Toxics Control Act

SoundEarth = SoundEarth Strategies, Inc.

VOC = volatile organic compound

WAC = Washington Administrative Code

Table 2
Reconnaissance Groundwater Analytical Results for Chlorinated VOCs
Rainier Mall Property
4208 Rainier Avenue South
Seattle, Washington

Sample Location	Sample ID	Sample Date	Sampled By	Sampling Depth (feet bgs)	Analytical Results (micrograms per liter)				
					PCE[1]	TCE[1]	cis-1,2-DCE[1]	1,1-DCE[1]	Vinyl Chloride[1]
B-1	B-1 (29-32)	06/28/00	Hahn	29 - 32	**1,980**	**288**	**25.7**	<1.0	<1.2
B-3	B-3 (27-30)	06/28/00	Hahn	27 - 30	<1.0	<1.0	1.8	<1.0	<1.2
B-4	B-4 (27-30)	06/28/00	Hahn	27 - 30	**3,800**	**1,100**	**40.8**	2.94	**4.37**
B-5	B-5 (23-36)	06/29/00	Hahn	23 - 26	<1.0	<1.0	<1.0	<1.0	<1.2
B-7	B-7 (23-26)	06/29/00	Hahn	23 - 26	1.25	<1.0	<1.0	<1.0	<1.2
MTCA Cleanup Level					**5**[2]	**5**[2]	**16**[3]	**400**[3]	**0.2**[4]

NOTES:

Samples analyzed by Environmental Services Laboratory, Inc. of Portland, Oregon.

[1]Analyzed by U.S. Environmental Protection Agency Method 8260B.

[2]MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

[3]CLARC, Groundwater, Method B, Non Cancer, CLARC website - <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>. Updated August 2015.

[4]CLARC, Groundwater, Method B, Cancer, CLARC website - <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>. Updated August 2015.

< = not detected at a concentration exceeding laboratory reporting limit

bgs = below ground surface

CLARC = cleanup levels and risk calculations

VOC = volatile organic compound

DCE = dichloroethene

Hahn = Hahn and Associates, Inc.

MTCA = Washington State Model Toxics Control Act

PCE = tetrachloroethene

TCE = trichloroethene

WAC = Washington Administrative Code

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

Friedman & Bruya, Inc. #701209 and additional

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
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January 27, 2017

Courtney Schaumberg, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Schaumberg:

Included are the results from the testing of material submitted on January 19, 2017 from the SOU_1276-001_ 20170119, F&BI 701209 project. There are 28 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU0127R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 19, 2017 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1276-001_ 20170119, F&BI 701209 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
701209 -01	SB01-2.5
701209 -02	SB01-5.0
701209 -03	SB01-7.5
701209 -04	SB01-10.0
701209 -05	SB01-12.5
701209 -06	SB01-15.0
701209 -07	SB01-17.5
701209 -08	SB01-20.0
701209 -09	SB01-22.5
701209 -10	SB01-24.5
701209 -11	SB02-2.5
701209 -12	SB02-5.0
701209 -13	SB02-7.5
701209 -14	SB02-10.0
701209 -15	SB02-12.5
701209 -16	SB02-16.0
701209 -17	SB03-2.5
701209 -18	SB03-5.0
701209 -19	SB03-7.5
701209 -20	SB03-10.0
701209 -21	SB03-12.5
701209 -22	SB03-16.0
701209 -23	SB04-2.5
701209 -24	SB05-5.0
701209 -25	SB04-7.5
701209 -26	SB04-10.0
701209 -27	SB04-12.5
701209 -28	SB04-16.0
701209 -29	SB05-2.5
701209 -30	SB05-5.0
701209 -31	SB05-7.5
701209 -32	SB05-10.0
701209 -33	SB05-12.5
701209 -34	SB05-16.0
701209 -35	SB06-2.5
701209 -36	SB06-5.0

CASE NARRATIVE (CONTINUED)

Laboratory ID	SoundEarth Strategies
701209 -37	SB06-7.5
701209 -38	SB06-10.0
701209 -39	SB06-12.5
701209 -40	SB06-15.0
701209 -41	SB06-17.5
701209 -42	SB06-20.0
701209 -43	SB06-22.5
701209 -44	SB06-24.0
701209 -45	SB07-2.5
701209 -46	SB07-5.0
701209 -47	SB07-7.5
701209 -48	SB07-10.0
701209 -49	SB07-12.5
701209 -50	SB07-16.0
701209 -51	SB08-2.5
701209 -52	SB08-5.0
701209 -53	SB08-7.5
701209 -54	SB08-10.0
701209 -55	SB08-12.5
701209 -56	SB08-16.0

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB01-5.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-02
Date Analyzed:	01/20/17	Data File:	012007.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB01-20.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-08
Date Analyzed:	01/20/17	Data File:	012036.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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	0.31
Tetrachloroethene	29

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB01-22.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/23/17	Lab ID:	701209-09
Date Analyzed:	01/23/17	Data File:	012308.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	1.8

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB01-24.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-10
Date Analyzed:	01/20/17	Data File:	012038.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	103	55	145
4-Bromofluorobenzene	104	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB02-5.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-12
Date Analyzed:	01/20/17	Data File:	012039.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB02-12.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-15
Date Analyzed:	01/20/17	Data File:	012040.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	103	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	2.2
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	0.052
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	6.7
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB02-16.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-16
Date Analyzed:	01/21/17	Data File:	012041.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	104	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	0.052
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	1.1
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	2.2
Tetrachloroethene	4.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB03-12.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-21
Date Analyzed:	01/21/17	Data File:	012042.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB03-16.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-22
Date Analyzed:	01/21/17	Data File:	012043.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	104	55	145
4-Bromofluorobenzene	101	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB05-5.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-24
Date Analyzed:	01/21/17	Data File:	012044.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	100	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB04-12.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-27
Date Analyzed:	01/21/17	Data File:	012045.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB04-16.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-28
Date Analyzed:	01/21/17	Data File:	012046.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB05-5.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-30
Date Analyzed:	01/21/17	Data File:	012047.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	103	55	145
4-Bromofluorobenzene	102	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB05-12.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-33
Date Analyzed:	01/21/17	Data File:	012048.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	62	142
Toluene-d8	103	55	145
4-Bromofluorobenzene	101	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB05-16.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-34
Date Analyzed:	01/21/17	Data File:	012049.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	103	55	145
4-Bromofluorobenzene	102	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB06-10.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-38
Date Analyzed:	01/21/17	Data File:	012050.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB06-24.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-44
Date Analyzed:	01/21/17	Data File:	012051.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB07-10.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-48
Date Analyzed:	01/21/17	Data File:	012052.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB07-16.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-50
Date Analyzed:	01/21/17	Data File:	012053.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB08-12.5	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-55
Date Analyzed:	01/21/17	Data File:	012054.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	100	65	139

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	0.086
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	1.3
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.29
Tetrachloroethene	<0.025

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB08-16.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	701209-56
Date Analyzed:	01/21/17	Data File:	012055.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	0.24
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	0.056
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	10
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	8.6
Tetrachloroethene	7.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	07-082 mb
Date Analyzed:	01/20/17	Data File:	012015.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	99	65	139

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/20/17	Lab ID:	07-081 mb2
Date Analyzed:	01/20/17	Data File:	012005.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	101	55	145
4-Bromofluorobenzene	101	65	139

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

Date of Report: 01/27/17
Date Received: 01/19/17
Project: SOU_1276-001_ 20170119, F&BI 701209

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

Laboratory Code: 701209-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	60	59	10-138	2
Chloroethane	mg/kg (ppm)	2.5	<0.5	69	68	10-176	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	80	79	10-160	1
Methylene chloride	mg/kg (ppm)	2.5	<0.5	100	100	10-156	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	90	91	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	92	93	19-140	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	93	95	25-135	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	100	99	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	98	99	10-156	1
Trichloroethene	mg/kg (ppm)	2.5	<0.02	95	95	21-139	0
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	94	95	20-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	77	22-139
Chloroethane	mg/kg (ppm)	2.5	87	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	98	47-128
Methylene chloride	mg/kg (ppm)	2.5	123	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	104	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	105	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	112	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	112	62-131
Trichloroethene	mg/kg (ppm)	2.5	106	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	106	72-114

Date of Report: 01/27/17
Date Received: 01/19/17
Project: SOU_1276-001_ 20170119, F&BI 701209

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

Laboratory Code: 701209-50 (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	43	43	10-138	0
Chloroethane	mg/kg (ppm)	2.5	<0.5	56	55	10-176	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	61	64	10-160	5
Methylene chloride	mg/kg (ppm)	2.5	<0.5	85	86	10-156	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	76	77	14-137	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	80	82	19-140	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	84	85	25-135	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	88	90	12-160	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	86	88	10-156	2
Trichloroethene	mg/kg (ppm)	2.5	<0.02	84	87	21-139	4
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	84	86	20-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	77	22-139
Chloroethane	mg/kg (ppm)	2.5	85	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	101	47-128
Methylene chloride	mg/kg (ppm)	2.5	122	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	110	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	110	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	110	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	116	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	118	62-131
Trichloroethene	mg/kg (ppm)	2.5	114	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	110	72-114

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

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

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

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

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

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

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

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

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

701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

VS4/A

Page # 1 of 6

AOS

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochilin

PROJECT NAME/NO.: Rainier Mall Property

PO #: 1276-001

REMARKS: PM will determine analyses

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	VOCs by 8260	SVOCs by 8270	HOLD	cVOCs by 8260C		Notes
SB01-2.5	SB01	2.5	01 AE	1/18/17	0830	Soil	5									x per CMS ml 1/19/17
SB01-5.0		5	02		0835									x		
SB01-7.5		7.5	03		0836											
SB01-10.0		10	04		0840											
SB01-12.5		12.5	05		0850											
SB01-15.0		15	06		0855											
SB01-17.5		17.5	07		0900											
SB01-20.0		20	08		0905									x		
SB01-22.5		22.5	09		0915									x		
SB01-24.5		24.5	10		0920									x		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tochilin	Clare Tochilin	SoundEarth	1/19/17	1030
Received by: Nhan Pham	Nhan Pham	FCBT	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3		

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

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701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

VSY/ AOS

Page # 2 of 6

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tachiki

PROJECT NAME/NO.	PO #
Rainier Mall Property	1276-001

REMARKS PM will determine analyses

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	VOCs by 8260	SVOCs by 8270	HOLD	cVOCs by 8260C		Notes
SB02-2.5	SB02	2.5	11	1/18/17	0940	Soil	5									
SB02-5.0		5	12		0945									X		
SB02-7.5		7.5	13		0950											
SB02-10.0		10	14		0955											
SB02-12.5		12.5	15		1000									X		
SB02-16.0		16	16		1005									X		
SB03-2.5	SB03	2.5	17		1025											
SB03-5.0		5	18		1030											
SB03-7.5		7.5	19		1040											
SB03-10.0		10	20		1045											

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tachiki	Clare Tachiki	SoundEarth	1/19/17	1630
Received by: Nhan Phan	Nhan Phan	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3		

701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

Page # 3 of 6

VSY/A05

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS *(signature)* Clare Tochlin

PROJECT NAME/NO.	PO #
Rainier Mall Property	1276-001

REMARKS DM will determine analyses

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 (ND 21 ME)	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	total	cVOCs by 8260		Notes
SB03-12.5	SB03	12.5	22	1/18/17	1050	Soil	5							X		
SB03-16.0	"	16	23	"	1055	"	"							X		
SB04-2.5	SB04	2.5	24	"	1100	"	"									
SB04-5.0	"	5	25	"	1105	"	"							X		
SB04-7.5	"	7.5	26	"	1115	"	"									
SB04-10.0	"	10	27	"	1120	"	"									
SB04-12.5	"	12.5	28	"	1122	"	"							X		
SB04-16.0	"	16	29	"	1125	"	"							X		
SB05-2.5	SB05	2.5	30	"	1146	"	"									
SB05-5.0	"	5	31	"	1145	"	"							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: Clare Tochlin	Clare Tochlin	SoundEarth	1/19/17	1030
Received by: Nham Phan	Nham Phan	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3 °C		

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701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

Page # 4 of 6 VSA/A05

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochlin

PROJECT NAME/NO.: Rainier Mall Property

PO #: 1276-001

REMARKS: PM to determine analyses

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	VOCs by 8260	SVOCs by 8270	HOLD	cVOCs by 8260		Notes
SB05-7.5	SB05	7.5	31	1/18/17	1150	Soil	5									
SB05-10.0		10	32		1152											
SB05-12.5		12.5	33		1155									X		
SB05-16.0		16	34		1200									X		
SB06-2.5	SB06	2.5	35		1215											
SB06-5.0		5	36		1220											
SB06-7.5		7.5	37		1405											
SB06-10.0		10	38		1410									X		
SB06-12.5		12.5	39		1415											
SB06-15.0		15	40		1417											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Clare Tochlin	SoundEarth	1/19/17	1036
Received by:	Nham Pham	FEBT	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3 °C		

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

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SAMPLE CHAIN OF CUSTODY ME 01-19-17

Page # 5 of 6 VSG/ADS

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochilin

PROJECT NAME/NO.	PO #
Rainier Mall Property	1276-001

REMARKS PM will determine analyses

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	VOCs by 8260	SVOCs by 8270	HOLD	CVOCs by 8260		Notes
SB06-17.5	SB06	17.5	41	1/18/17	1420	soil	5									
SB06-20.0		20	42		1425											
SB06-22.5		22.5	43		1430											
SB06-24.0		24	44		1435									X		
SB07-2.5	SB07	2.5	45		1450											
SB07-5.0		5	46		1453											
SB07-7.5		~~10~~ 7.5	47		1455											
SB07-10.0		10	48		1500									X		
SB07-12.5		12.5	49		1505											
SB07-16.0		16	50		1510									X		

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Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tochilin	Clare Tochilin	SoundEarth	1/19/17	1030
Received by: Nhan Phan	Nhan Phan	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3 °C		

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701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

Page # 6 of 6 VSY/AOS

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochiki

PROJECT NAME/NO.	PO #
Rainier Mall Property	1276-001

REMARKS PM will determine analyses

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	VOCs by 8260	SVOCs by 8270	cPAHs	cVOCs by 8260		Notes
SB08-2.5	SB08	2.5	51	1/18/17	1520	Soil	5									
SB08-5.0		5	52		1525											
SB08-7.5		7.5	53		1527											
SB08-10.0		10	54		1530											
SB08-12.5		12.5	55		1535									X		
SB08-16.0		16	56		1540									X		
					GT	1/18/17										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tochiki	Clare Tochiki	SoundEarth	1/19/17	1030
Received by: Nhan Pham	Nhan Pham	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3		°C

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

February 2, 2017

Courtney Schaumberg, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Schaumberg:

Included are the additional results from the testing of material submitted on January 19, 2017 from the SOU_1276-001_ 20170119, F&BI 701209 project. There are 9 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU0202R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 19, 2017 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1276-001_ 20170119, F&BI 701209 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
701209 -01	SB01-2.5
701209 -02	SB01-5.0
701209 -03	SB01-7.5
701209 -04	SB01-10.0
701209 -05	SB01-12.5
701209 -06	SB01-15.0
701209 -07	SB01-17.5
701209 -08	SB01-20.0
701209 -09	SB01-22.5
701209 -10	SB01-24.5
701209 -11	SB02-2.5
701209 -12	SB02-5.0
701209 -13	SB02-7.5
701209 -14	SB02-10.0
701209 -15	SB02-12.5
701209 -16	SB02-16.0
701209 -17	SB03-2.5
701209 -18	SB03-5.0
701209 -19	SB03-7.5
701209 -20	SB03-10.0
701209 -21	SB03-12.5
701209 -22	SB03-16.0
701209 -23	SB04-2.5
701209 -24	SB04-5.0
701209 -25	SB04-7.5
701209 -26	SB04-10.0
701209 -27	SB04-12.5
701209 -28	SB04-16.0
701209 -29	SB05-2.5
701209 -30	SB05-5.0
701209 -31	SB05-7.5
701209 -32	SB05-10.0
701209 -33	SB05-12.5
701209 -34	SB05-16.0
701209 -35	SB06-2.5

CASE NARRATIVE (CONTINUED)

Laboratory ID	SoundEarth Strategies
701209 -36	SB06-5.0
701209 -37	SB06-7.5
701209 -38	SB06-10.0
701209 -39	SB06-12.5
701209 -40	SB06-15.0
701209 -41	SB06-17.5
701209 -42	SB06-20.0
701209 -43	SB06-22.5
701209 -44	SB06-24.0
701209 -45	SB07-2.5
701209 -46	SB07-5.0
701209 -47	SB07-7.5
701209 -48	SB07-10.0
701209 -49	SB07-12.5
701209 -50	SB07-16.0
701209 -51	SB08-2.5
701209 -52	SB08-5.0
701209 -53	SB08-7.5
701209 -54	SB08-10.0
701209 -55	SB08-12.5
701209 -56	SB08-16.0

The 8260C calibration standard for chloroethane did not pass the acceptance criteria for several samples. The data were flagged accordingly.

The 8260C matrix spike and matrix spike duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB01-10.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/31/17	Lab ID:	701209-04
Date Analyzed:	01/31/17	Data File:	013108.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	96	64	137
4-Bromofluorobenzene	99	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB02-10.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/31/17	Lab ID:	701209-14
Date Analyzed:	01/31/17	Data File:	013125.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	93	64	137
4-Bromofluorobenzene	97	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB08-5.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/31/17	Lab ID:	701209-52
Date Analyzed:	01/31/17	Data File:	013110.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	89	113
Toluene-d8	95	64	137
4-Bromofluorobenzene	99	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SB08-10.0	Client:	SoundEarth Strategies
Date Received:	01/19/17	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/31/17	Lab ID:	701209-54
Date Analyzed:	01/31/17	Data File:	013126.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	89	113
Toluene-d8	94	64	137
4-Bromofluorobenzene	98	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170119
Date Extracted:	01/31/17	Lab ID:	07-0185 mb
Date Analyzed:	01/31/17	Data File:	013105.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	93	64	137
4-Bromofluorobenzene	99	81	119

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

Date of Report: 02/02/17
Date Received: 01/19/17
Project: SOU_1276-001_ 20170119, F&BI 701209

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

Laboratory Code: 701359-07 (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	16	12	10-91	29 vo
Chloroethane	mg/kg (ppm)	2.5	<0.5	22	18	10-101	20
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	23	18	11-103	24 vo
Methylene chloride	mg/kg (ppm)	2.5	<0.5	42	35	14-128	18
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	36	30	13-112	18
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	42	35	23-115	18
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	46	40	25-120	14
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	45	41	22-124	9
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	35	28	27-112	22 vo
Trichloroethene	mg/kg (ppm)	2.5	<0.02	39	31	30-112	23 vo
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	36	27	25-114	29 vo

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	67	42-107
Chloroethane	mg/kg (ppm)	2.5	67	47-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	81	65-110
Methylene chloride	mg/kg (ppm)	2.5	76	50-127
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	90	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	89	74-109
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	73-110
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	83	73-111
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	84	72-116
Trichloroethene	mg/kg (ppm)	2.5	89	72-107
Tetrachloroethene	mg/kg (ppm)	2.5	102	73-111

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

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

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

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

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

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

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

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

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

701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

VS4/A 6 AOS

Page # 1 of 6

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochilin

PROJECT NAME/NO.: Rainier Mall Property

PO #: 1276-001

REMARKS
PM will determine analyses
✓ analyte per CMS 1/30/17

TURNAROUND TIME
(X) 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	VOCs by 8260	SVOCs by 8270	Hold	cVOCs by 8260C		Notes
SB01-2.5	SB01	2.5	01 A-E	1/18/17	0830	Soil	5									x per CMS mL 1/19/17
SB01-5.0		5	02		0835									x		
SB01-7.5		7.5	03		0836											
SB01-10.0		10	04		0840									✓		
SB01-12.5		12.5	05		0850											
SB01-15.0		15	06		0855											
SB01-17.5		17.5	07		0900											
SB01-20.0		20	08		0905									x		
SB01-22.5		22.5	09		0915									x		
SB01-24.5		24.5	10	↓	0920	↓	↓							x		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tochilin	Clare Tochilin	SoundEarth	1/19/17	1030
Received by: Nhan Pham	Nhan Pham	FCBT	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3		C

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

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SAMPLE CHAIN OF CUSTODY

ME 01-19-17

1254/ A05

Page # 2 of 6

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clar Tach

PROJECT NAME/NO. Rainier Mall Property

PO # 1276-001

REMARKS PM with determine analytes

√ run per CMS 1/30/17

TURNAROUND TIME
(X) 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	VOCs by 8260	SVOCs by 8270	HOLD	cVOCs by 8260C		Notes
SB02-2.5	SB02	2.5	11	1/18/17	0940	Soil	5									
SB02-5.0		5	12		0945									X		
SB02-7.5		7.5	13		0950											
SB02-10.0		10	14		0955									✓		
SB02-12.5		12.5	15		1000									X		
SB02-16.0		16	16		1005									X		
SB03-2.5	SB03	2.5	17		1025											
SB03-5.0		5	18		1030											
SB03-7.5		7.5	19		1040											
SB03-10.0		10	20		1045											

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clar Tach	Clar Tachiki	SoundEarth	1/19/17	1130
Received by: Nhan Phan	Nhan Phan	FEBT	1/19/17	1050
Relinquished by:				
Received by:		Samples received at 3		

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SAMPLE CHAIN OF CUSTODY

ME 01-19-17

Page # 3 of 6

154/405

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tachlin

PROJECT NAME/NO. Rainier Mall Property

PO # 1276-001

REMARKS PM will determine analyses

✓ run per CMS 1/30/17

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 (ND)	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	cPAHs	cVOCs by 8260		Notes
SB03-12.5	SB03	12.5	22	1/19/17	1050	Soil	5							X		
SB03-16.0	"	16	23		1055									X		
SB04-2.5	SB04	2.5	24		1100											
SB04-5.0		5	25		1105									X		
SB04-7.5		7.5	26		1115											
SB04-10.0		10	27		1120											
SB04-12.5		12.5	28		1122									X		
SB04-16.0	"	16	29		1125									X		
SB05-2.5	SB05	2.5	30		1140											
SB05-5.0	"	5	31		1145	"	"						"	X		

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Seattle, WA 98119-2029
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Fax (206) 283-5044

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tachlin	Clare Tachlin	SoundEarth	1/19/17	1030
Received by: Nham Pham	Nham Pham	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 5 °C		

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SAMPLE CHAIN OF CUSTODY

ME 01-19-17

Page # 4 of 6 1544/1805

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochlin

PROJECT NAME/NO.: Rainier Mall Property

PO#: 1276-001

REMARKS: PM to determine analysis

✓ run per CMS 1/30/17

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	VOCs by 8260	SVOCs by 8270	Hold	cVOCs by 8260		Notes
SB05-7.5	SB05	7.5	31	1/18/17	1150	Soil	5									
SB05-10.0		10	32		1152											
SB05-12.5		12.5	33		1155									X		
SB05-16.0		16	34		1200									X		
SB06-2.5	SB06	2.5	35		1215											
SB06-5.0		5	36		1220											
SB06-7.5		7.5	37		1405											
SB06-10.0		10	38		1410									X		
SB06-12.5		12.5	39		1415											
SB06-15.0		15	40		1417											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Clare Tochlin	SoundEA	1/19/17	1036
Received by:	Nhan Phan	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3 °C		

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Seattle, WA 98119-2029
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SAMPLE CHAIN OF CUSTODY ME 01-19-17

Page # 5 of 6 VSY/AMS

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tobin

PROJECT NAME/NO.	PO #
Rainier Mall Property	1276-001

REMARKS PM will determine analyses

✓ run per CMS 1/30/17

TURNAROUND TIME
(S) 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	VOCs by 8260	SVOCs by 8270	PAHs by 8270	cVOCs by 8260		Notes
SB06-17.5	SB06	17.5	41	1/18/17	1420	soil	5									
SB06-20.0		20	42		1425											
SB06-22.5		22.5	43		1430											
SB06-24.0		24	44		1435									X		
SB07-2.5	SB07	2.5	45		1450											
SB07-5.0		5	46		1453											
SB07-7.5		~~10.5~~ 7.5	47		1455											
SB07-10.0		10	48		1500									X		
SB07-12.5		12.5	49		1505											
SB07-16.0		16	50		1510									X		

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SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tobin	Clare Tobin	SoundEarth	1/19/17	1030
Received by: Nhan Phan	Nhan Phan	FEB_I	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3 °C		

701209

SAMPLE CHAIN OF CUSTODY

ME 01-19-17

Page # 6 of 6 VSY/AOS

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Clare Tochilin

PROJECT NAME/NO. Rainier Mall Property

PO # 1276-001

REMARKS pm will determine analyses

✓ run per CMS 1/30/17

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	VOCs by 8260	SVOCs by 8270	cPAHs	cVOC's by 8260		Notes
SB08-2.5	SB08	2.5	51	1/18/17	1520	Soil	5									
SB08-5.0		5	52		1525									✓		
SB08-7.5		7.5	53		1527											
SB08-10.0		10	54		1530									✓		
SB08-12.5		12.5	55		1535									X		
SB08-16.0		16	56		1540									X		
					GT		1/18/17									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Clare Tochilin	Clare Tochilin	SoundEarth	1/19/17	1030
Received by: Nhan Pham	Nhan Pham	FEBI	1/19/17	1030
Relinquished by:				
Received by:		Samples received at 3		°C

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

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Friedman & Bruya, Inc. #702165 and additional

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

February 28, 2017

Clare Tochilin, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Tochilin:

Included are the results from the testing of material submitted on February 10, 2017 from the SOU_1276-001_ 20170210, F&BI 702165 project. There are 15 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
SOU0228R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 10, 2017 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1276-001_ 20170210, F&BI 702165 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
702165 -01	B01-02.5
702165 -02	B01-05
702165 -03	B01-07.5
702165 -04	B01-10
702165 -05	B01-12.5
702165 -06	B01-17.5
702165 -07	B01-20
702165 -08	B01-22.5
702165 -09	B01-25
702165 -10	B01-27.5
702165 -11	B01-30
702165 -12	B01-32.5
702165 -13	B01-35
702165 -14	B01-37.5
702165 -15	B01-40
702165 -16	B02-02.5
702165 -17	B02-05
702165 -18	B02-07.5
702165 -19	B02-10
702165 -20	B02-12.5
702165 -21	B02-15
702165 -22	B02-17.5
702165 -23	B02-20
702165 -24	B02-22.5
702165 -25	B02-25
702165 -26	B02-27.5
702165 -27	B02-30

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-12.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702165-05
Date Analyzed:	02/15/17	Data File:	021508.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	99	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-17.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702165-06
Date Analyzed:	02/15/17	Data File:	021509.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	95	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.45
Tetrachloroethene	59 ve

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-17.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702165-06 1/10
Date Analyzed:	02/16/17	Data File:	021611.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	95	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.5
Chloroethane	<5
1,1-Dichloroethene	<0.5
Methylene chloride	<5
trans-1,2-Dichloroethene	<0.5
1,1-Dichloroethane	<0.5
cis-1,2-Dichloroethene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,1,1-Trichloroethane	<0.5
Trichloroethene	0.42
Tetrachloroethene	58

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-20	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	702165-07
Date Analyzed:	02/21/17	Data File:	022123.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	89	113
Toluene-d8	103	64	137
4-Bromofluorobenzene	94	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.33
Tetrachloroethene	280 ve

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-20	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	702165-07 1/50
Date Analyzed:	02/23/17	Data File:	022241.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	99	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<2.5
Chloroethane	<25
1,1-Dichloroethene	<2.5
Methylene chloride	<25
trans-1,2-Dichloroethene	<2.5
1,1-Dichloroethane	<2.5
cis-1,2-Dichloroethene	<2.5
1,2-Dichloroethane (EDC)	<2.5
1,1,1-Trichloroethane	<2.5
Trichloroethene	<1
Tetrachloroethene	510

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-22.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	702165-08
Date Analyzed:	02/21/17	Data File:	022137.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	100	64	137
4-Bromofluorobenzene	95	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.28
Tetrachloroethene	20

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B02-10	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702165-19
Date Analyzed:	02/16/17	Data File:	021612.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	95	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.13
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B02-15	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702165-21
Date Analyzed:	02/16/17	Data File:	021613.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	94	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	0.097
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	0.25
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	6.7
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	4.9
Tetrachloroethene	0.085

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B02-20	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702165-23
Date Analyzed:	02/15/17	Data File:	021512.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	102	64	137
4-Bromofluorobenzene	96	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	07-0343 mb
Date Analyzed:	02/21/17	Data File:	022105.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	104	64	137
4-Bromofluorobenzene	97	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	07-0267 mb2
Date Analyzed:	02/15/17	Data File:	021505.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	98	81	119

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

Date of Report: 02/28/17
Date Received: 02/10/17
Project: SOU_1276-001_ 20170210, F&BI 702165

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

Laboratory Code: 702201-01 (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	31	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	39	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	50	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	71	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	67	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	66	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	62	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.02	61	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	46	25-114

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	65	64	42-107	2
Chloroethane	mg/kg (ppm)	2.5	66	69	47-115	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	86	87	65-110	1
Methylene chloride	mg/kg (ppm)	2.5	98	99	50-127	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	100	71-113	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	98	74-109	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	100	102	73-110	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	89	92	73-111	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	100	101	72-116	1
Trichloroethene	mg/kg (ppm)	2.5	97	100	72-107	3
Tetrachloroethene	mg/kg (ppm)	2.5	104	102	73-111	2

Date of Report: 02/28/17
Date Received: 02/10/17
Project: SOU_1276-001_ 20170210, F&BI 702165

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

Laboratory Code: 702280-02 (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	47	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	51	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	88	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	84	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	81	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	87	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	82	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	94	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.02	86	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	96	25-114

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	66	67	42-107	2
Chloroethane	mg/kg (ppm)	2.5	68	70	47-115	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	91	93	65-110	2
Methylene chloride	mg/kg (ppm)	2.5	97	99	50-127	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	100	71-113	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	95	74-109	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	101	73-110	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	93	94	73-111	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	112	112	72-116	0
Trichloroethene	mg/kg (ppm)	2.5	98	99	72-107	1
Tetrachloroethene	mg/kg (ppm)	2.5	109	110	73-111	1

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

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

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

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

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

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

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

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

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

(709165

SAMPLE CHAIN OF CUSTODY ME 02/10/17

(KD/BOS

Send Report to Courtney Schaumburg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (Signature)

PROJECT NAME/NO. 1276-001

PO#

REMARKS Hold PM with detection analytes request. ✓ run per CMS 2/2/17 Q run per CMS 2/14/17

Page # 1 of 3

TURNAROUND TIME
Standard (1 Week)
RUSH Hold
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	VOCs by 8260	SVOCs by 8270	CVOCs by 8260C			Notes
Bol-02.5	Bol	2.5	01	2/9/17	0830	Soil	5									
Bol-05		5	02		0835											
Bol-07.5		7.5	03		0840											
Bol-10		10	04		0845											
Bol-12.5		12.5	05		0850								⊗			
Bol-17.5		17.5	06		0905								⊗			
Bol-20		20	07		0910								✓			
Bol-22.5		22.5	08		0920								✓			
Bol-25		25	09		0925											
Bol-27.5	↓	27.5	10	↓	0935	↓	↓							Samples received at 3 °C		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Schumacher	SES	2/10/17	0750
Received by:	Nhan Phan	FLET	2/10/17	0750
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

702165

SAMPLE CHAIN OF CUSTODY ME 02/10/17

(VS2/1805

Page # 2 of 3

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature): [signature]

PROJECT NAME/NO.: 1276-001

PO #:

REMARKS: Hold

⊗ run per CMS 2/14/17

TURNAROUND TIME
Standard (2 Weeks)
RUSH (HOLD)
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	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	cVOCs by 8260	cVOCs by 8260C			Notes
B01-30	B01	30	11	2/9/17	0940	Soil	5									
B01-32.5		32.5	12		0965											
B01-35		35	13		1010											
B01-37.5		37.5	14		1020											
B01-40		40	15		1035											
B02-02.5	B02	2.5	16		1340											
B02-05		5	17		1345											
B02-07.5		7.5	18		1350											
B02-10		10	19		1355								⊗			
B02-12.5		12.5	20		1400											Samples received at 3°C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Logan Schumacher	SES	2/10/17	0750
Received by: [signature]	Nhan Phan	FEBT	2/10/17	0750
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

(702165

SAMPLE CHAIN OF CUSTODY ME 02/10/17

(VS2/

Page # 3 of 3 / BOS

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1276-001

PO #

REMARKS field

Brun per QHS 2/14/17

TURNAROUND TIME
Standard (2 Weeks)
RUSH 1 Day
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	VOCs by 8260	SVOCs by 8270	cPAHs by 8270SIM			Notes
B02-15	B02	15	21	2/9/17	1410	Soil	5						⊗			
B02-17.5		17.5	22		1415											
B02-20		20	23		1420								⊗			
B02-22.5		22.5	24		1425											
B02-25		25	25		1430											
B02-27.5		27.5	26		1440											
B02-30	↓	30	27	↓	1455	↓	↓									
		BOS 2/9/17														
													Samples received at 3.1°C			

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:	Logan Schumacher	SES	2/10/17	0760
Received by:	Nhan Phan	FB&I	2/10/17	0750
Relinquished by:				
Received by:				

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 9, 2017

Clare Tochilin, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Tochilin:

Included are the additional results from the testing of material submitted on February 10, 2017 from the SOU_1276-001_ 20170210, F&BI 702165 project. There are 7 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU0309R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 10, 2017 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1276-001_ 20170210, F&BI 702165 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
702165 -01	B01-02.5
702165 -02	B01-05
702165 -03	B01-07.5
702165 -04	B01-10
702165 -05	B01-12.5
702165 -06	B01-17.5
702165 -07	B01-20
702165 -08	B01-22.5
702165 -09	B01-25
702165 -10	B01-27.5
702165 -11	B01-30
702165 -12	B01-32.5
702165 -13	B01-35
702165 -14	B01-37.5
702165 -15	B01-40
702165 -16	B02-02.5
702165 -17	B02-05
702165 -18	B02-07.5
702165 -19	B02-10
702165 -20	B02-12.5
702165 -21	B02-15
702165 -22	B02-17.5
702165 -23	B02-20
702165 -24	B02-22.5
702165 -25	B02-25
702165 -26	B02-27.5
702165 -27	B02-30

Samples B01-27.5, B01-32.5 and B01-35 were requested outside of holding time. The data were flagged accordingly.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-27.5 ht	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	03/03/17	Lab ID:	702165-10
Date Analyzed:	03/03/17	Data File:	030324.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	104	55	145
4-Bromofluorobenzene	103	65	139

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	0.073
Tetrachloroethene	0.40

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-32.5 ht	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	03/03/17	Lab ID:	702165-12
Date Analyzed:	03/03/17	Data File:	030325.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	104	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	0.31

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B01-35 ht	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	03/03/17	Lab ID:	702165-13
Date Analyzed:	03/03/17	Data File:	030326.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	104	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	0.049

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170210
Date Extracted:	03/03/17	Lab ID:	07-440 mb
Date Analyzed:	03/03/17	Data File:	030323.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Date of Report: 03/09/17
Date Received: 02/10/17
Project: SOU_1276-001_ 20170210, F&BI 702165

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

Laboratory Code: 702165-10 (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	43	42	10-138	2
Chloroethane	mg/kg (ppm)	2.5	<0.5	57	57	10-176	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	64	62	10-160	3
Methylene chloride	mg/kg (ppm)	2.5	<0.5	74	75	10-156	1
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	70	71	19-140	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	77	78	25-135	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	74	74	12-160	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	73	74	10-156	1
Trichloroethene	mg/kg (ppm)	2.5	0.062	71	70	21-139	1
Tetrachloroethene	mg/kg (ppm)	2.5	0.34	68	69	20-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	75	22-139
Chloroethane	mg/kg (ppm)	2.5	93	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	96	47-128
Methylene chloride	mg/kg (ppm)	2.5	92	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	92	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	93	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	95	62-131
Trichloroethene	mg/kg (ppm)	2.5	90	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	91	72-114

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

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

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

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

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

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

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

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

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

(703165

SAMPLE CHAIN OF CUSTODY ME 02/10/17

(KD/BOS

Send Report to Courtney Schoenherr

Company Sound Earth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (Signature)

PROJECT NAME/NO. 1870-001

PO#

REMARKS Hold PM with dioxin analysis request. ✓ run per CMS 2/21/17 Run per CMS 2/14/17

Page # 1 of 3

TURNAROUND TIME

Standard (2 Weeks)

RUSH 24 hrs

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	NWTPH-HCID	NWTPH-Dx	EPA 8082A by GC/MS	EPA 8260C by GC/MS	EPA 8270D by GC/MS	EPA 8290A by GC/MS				Notes
Bol-02.5	Bol	2.5	01	2/9/17	0830	Soil	5										
Bol-05		5	02		0835												
Bol-07.5		7.5	03		0840												
Bol-10		10	04		0845												
Bol-12.5		12.5	05		0850								⊗				
Bol-17.5		17.5	06		0905								⊗				
Bol-20		20	07		0910								✓				
Bol-22.5		22.5	08		0920								✓				
Bol-25		25	09		0925												
Bol-27.5	↓	27.5	10	↓	0935	↓	↓						X				Samples shipped at 3 °C

X-per CT 3/2/17 MS

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Schoenherr	SES	2/10/17	0750
Received by:	Nhan Phan	Fed Ex	2/10/17	0750
Relinquished by:				
Received by:				

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

(702165 SAMPLE CHAIN OF CUSTODY ME 02/10/17 (VSA/ 1/805

Page 2 of 3

Send Report to Courtney Schaumburg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature): [signature]

PROJECT NAME/NO.: 1276-001

PO #:

REMARKS: Rush

80 cubic yards 2/14/17

TURNAROUND TIME: Standard (2 Weeks) RUSH (1 WK)

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/DX	NWTPH-GX/GX	BTEX by 8260B	VOCs by 8260B	SVOCs by 8270D	cPAHs by 8270D			Notes
B01-30	B01	30	17	2/2/17	0940	Soil	5									
B01-32.5		32.5	12		0965								X			
B01-35		35	13		1010								X			
B01-37.5		37.5	14		1020											
B01-40		40	15		1035											
B02-02.5	B02	2.5	16		1340											
B02-05		5	17		1345											
B02-07.5		7.5	18		1350											
B02-10		10	19		1355								⊗			
B02-12.5		12.5	20		1400											Samples continued on 3 0

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Logan Schumacher	SES	2/10/17	0750
Received by: [signature]	Nhan Phan	F&B	2/10/17	0750
Relinquished by:				
Received by:				

Friedman & Bruya, Inc. #702170

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

February 24, 2017

Courtney Schaumberg, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Schaumberg:

Included are the results from the testing of material submitted on February 10, 2017 from the SOU_1276-001_ 20170210, F&BI 702170 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Clare Tochilin
SOU0224R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 10, 2017 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1276-001_ 20170210, F&BI 702170 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
702170 -01	B03-02.5
702170 -02	B03-05
702170 -03	B03-07.5
702170 -04	B03-10
702170 -05	B03-12.5
702170 -06	B03-15
702170 -07	B03-17.5
702170 -08	B03-20
702170 -09	B03-22.5
702170 -10	B03-25
702170 -11	B03-27.5
702170 -12	B03-30
702170 -13	B03-32.5
702170 -14	B03-35
702170 -15	B04-02.5
702170 -16	B04-05
702170 -17	B04-07.5
702170 -18	B04-10
702170 -19	B04-12.5
702170 -20	B04-15
702170 -21	B04-17.5
702170 -22	B04-20
702170 -23	B04-22.5
702170 -24	B04-25
702170 -25	B04-27.5
702170 -26	B04-30

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B03-12.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702170-05
Date Analyzed:	02/15/17	Data File:	021513.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	100	64	137
4-Bromofluorobenzene	97	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B03-15	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702170-06
Date Analyzed:	02/15/17	Data File:	021514.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	100	64	137
4-Bromofluorobenzene	95	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.082
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B03-17.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702170-07
Date Analyzed:	02/15/17	Data File:	021515.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	94	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	1.1
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	1.5
Tetrachloroethene	0.36

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B03-20	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	702170-08
Date Analyzed:	02/21/17	Data File:	022138.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	89	113
Toluene-d8	99	64	137
4-Bromofluorobenzene	96	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.41
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.57
Tetrachloroethene	0.67

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B03-22.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	702170-09
Date Analyzed:	02/21/17	Data File:	022139.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	89	113
Toluene-d8	100	64	137
4-Bromofluorobenzene	96	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B04-10	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702170-18
Date Analyzed:	02/15/17	Data File:	021516.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	95	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B04-12.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702170-19
Date Analyzed:	02/15/17	Data File:	021517.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	100	64	137
4-Bromofluorobenzene	95	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	0.12
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.79
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.10
Tetrachloroethene	<0.025

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B04-17.5	Client:	SoundEarth Strategies
Date Received:	02/10/17	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	702170-21
Date Analyzed:	02/15/17	Data File:	021518.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	97	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.32
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/21/17	Lab ID:	07-0343 mb
Date Analyzed:	02/21/17	Data File:	022105.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	104	64	137
4-Bromofluorobenzene	97	81	119

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170210
Date Extracted:	02/15/17	Lab ID:	07-0267 mb2
Date Analyzed:	02/15/17	Data File:	021505.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	98	81	119

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

Date of Report: 02/24/17
Date Received: 02/10/17
Project: SOU_1276-001_ 20170210, F&BI 702170

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

Laboratory Code: 702201-01 (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	31	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	39	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	50	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	71	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	67	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	66	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	62	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.02	61	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	46	25-114

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	65	64	42-107	2
Chloroethane	mg/kg (ppm)	2.5	66	69	47-115	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	86	87	65-110	1
Methylene chloride	mg/kg (ppm)	2.5	98	99	50-127	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	100	71-113	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	98	74-109	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	100	102	73-110	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	89	92	73-111	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	100	101	72-116	1
Trichloroethene	mg/kg (ppm)	2.5	97	100	72-107	3
Tetrachloroethene	mg/kg (ppm)	2.5	104	102	73-111	2

Date of Report: 02/24/17
Date Received: 02/10/17
Project: SOU_1276-001_ 20170210, F&BI 702170

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

Laboratory Code: 702280-02 (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	47	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	51	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	71	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	88	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	84	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	81	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	87	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	82	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	94	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.02	86	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	96	25-114

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	66	67	42-107	2
Chloroethane	mg/kg (ppm)	2.5	68	70	47-115	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	91	93	65-110	2
Methylene chloride	mg/kg (ppm)	2.5	97	99	50-127	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	100	71-113	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	95	74-109	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	101	73-110	2
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	93	94	73-111	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	112	112	72-116	0
Trichloroethene	mg/kg (ppm)	2.5	98	99	72-107	1
Tetrachloroethene	mg/kg (ppm)	2.5	109	110	73-111	1

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

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

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

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

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

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

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

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

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

(702170

SAMPLE CHAIN OF CUSTODY ME 02/10/17

(VSY/ BOY

Page # 1 of 3

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1276-001

PO #

REMARKS ~~Hold~~ ✓ run per cms 2/21/17

⊗ run per cms 2/14/17

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	VOCs by 8260	SVOCs by 8270	CVOCs by 8260D			Notes
B03-02.5	B03	2.5	01 AF	2/10/17	0815	Soil	5									
B03-05		5	02		0820											
B03-07.5		7.5	03		0825											
B03-10		10	04		0830											
B03-12.5		12.5	05		0835								⊗			
B03-15		15	06		0840								⊗			
B03-17.5		17.5	07		0845								⊗			
B03-20		20	08		0850								✓			
B03-22.5		22.5	09		0855								✓			
B03-25		25	10		0900											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Courtney Schaumberg	SoundEarth	2/14/17	12:45
Received by:	DA VO	FEBE	2-10-17	12:45
Relinquished by:				
Received by:		Samples received at		4 °C

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

FORMS\COC\COC.DOC

(702170

SAMPLE CHAIN (CUSTODY ME 02/10/17 (B04/B04

Page # 2 of 3

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1276-001

PO #

REMARKS (H.C. D)

⊗ run for CMS 2/14/17

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	VOCs by 8260	SVOCs by 8270	CVOCs by 8260C			Notes
B3-27.5	B03	27.5	11	2/14/17	0105	Soil	5									
B3-30		30	12		0120											
B3-32.5		32.5	13		0125											
B03-35		35	14		0950											
B04-02.5	B04	2.5	15		1045											
B04-05		5	16		1050											
B04-07.5		7.5	17		1055											
B04-10		10	18		1100								⊗			
B04-12.5		12.5	19		1105								⊗			
B04-15		15	20		1110											

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:		Courtney Schaumberg	SoundEarth	2/14/17	12:45
Received by:		DAVID	FEBC	2-14-17	12:45
Relinquished by:					
Received by:			Samples received at 4 °C		

(702170

SAMPLE CHAIN OF CUSTODY ME 02/10/17

(USA/BOA

Page # 3 of 3

Send Report to Courtney Schaumberg

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1276-001

PO #

REMARKS

⊗ run per CMS 2/14/17

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 EPA 8021B	VOCs by EPA 8260C	SVOCs by EPA 8270D	cPAHs by EPA 8270D SIM				
B04-17.5	B04	17.5	21	2/10/17	1115	soil	5						⊗				
B04-20		20	22		1120												
B04-22.5		22.5	23		1125												
B04-25		25	24		1130												
B04-27.5		27.5	25		1135												
B04-30		30	26		1145												

2/10/17

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

FBRMN\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Courtney Schaumberg	SoundEarth	2/10/17	12:45
Received by: DCLO	DCLO	FBI	2-10-17	12:45
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc. #703403

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 30, 2017

Clare Tochilin, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Tochilin:

Included are the results from the testing of material submitted on March 23, 2017 from the SOU_1276-001_ 20170323, F&BI 703403 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
c: Suzy Stumpf, Chris Cass
SOU0330R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 23, 2017 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1276-001_ 20170323, F&BI 703403 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
703403 -01	B05-24
703403 -02	B05-28
703403 -03	B05-31
703403 -04	B05-35
703403 -05	B05-40
703403 -06	B05-90

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B05-40	Client:	SoundEarth Strategies
Date Received:	03/23/17	Project:	SOU_1276-001_ 20170323
Date Extracted:	03/27/17	Lab ID:	703403-05
Date Analyzed:	03/27/17	Data File:	032709.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1276-001_ 20170323
Date Extracted:	03/27/17	Lab ID:	07-551 mb
Date Analyzed:	03/27/17	Data File:	032708.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	102	65	139

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

Date of Report: 03/30/17
Date Received: 03/23/17
Project: SOU_ 1276-001_ 20170323, F&BI 703403

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

Laboratory Code: 703403-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	34	34	10-138	0
Chloroethane	mg/kg (ppm)	2.5	<0.5	46	45	10-176	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	52	50	10-160	4
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	65	10-156	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	63	61	14-137	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	67	66	19-140	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	67	25-135	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	72	71	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	64	10-156	2
Trichloroethene	mg/kg (ppm)	2.5	<0.02	67	66	21-139	2
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	68	67	20-133	1

Date of Report: 03/30/17
Date Received: 03/23/17
Project: SOU_ 1276-001_ 20170323, F&BI 703403

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	83	22-139
Chloroethane	mg/kg (ppm)	2.5	87	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	101	47-128
Methylene chloride	mg/kg (ppm)	2.5	105	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	104	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	104	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	101	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	103	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	103	62-131
Trichloroethene	mg/kg (ppm)	2.5	101	64-117
Tetrachloroethene	mg/kg (ppm)	2.5	101	72-114

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

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

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

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

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

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

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

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

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

) 703403

SAMPLE CHAIN OF CUSTODY ME 03/23/17

Send Report to Courtney Schaumberg CC: Suzy Stumof & Chris Cass

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) [signature]

PROJECT NAME/NO. Rainier Mall Property 1276-001

PO #

REMARKS Hold! - Sample and SIM Selectors to be made by EA

Page # 1 of 1 VS2

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	Chlorinated Hydrocarbons VOCs by 8260	SVOCs by 8270	CVOCs by 8260C			Notes
805																
~~MW03~~ MW02-24	MW02	24	01	03/22/17	1100	Soil	4						X			X - per CT
805 ~~MW02~~ MW02-28		28	02		1105		4									24 hr TAT
805 ~~MW03~~ MW03-31		31	03		1140		4									3/24/17 MS
805 ~~MW03~~ MW03-35		35	04		1145		4									
805 ~~MW03~~ MW03-40		40	05		1340		4						X			
805 ~~MW02~~ MW02-90			06	3/20/17	1555		4									Standard at lab (VP) 3/23/17
				C&L 03/22/17												

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Chris Cass	SoundEarth	03/23/17	1250
Received by: [signature]	HONG NGUYEN	FBI	"	"
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC