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

*Draft - Issued for Regulatory Review*

May 10, 2018

Mr. Dean Yasuda
Washington State Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

**SUBJECT: REQUEST FOR CONTAINED-IN DETERMINATION**
**Plastic Sales and Service Site**
**6870 Woodlawn Avenue Northeast**
**Seattle, Washington 98115**
**Project Number: 0651-002-02**

Dear Mr. Yasuda:

On behalf of The Lutheran Retirement Home of Greater Seattle d.b.a. The Hearthstone (Hearthstone), SoundEarth Strategies, Inc. (SouthEarth) has prepared this request for a Contained-In Determination (CID) from the Washington State Department of Ecology (Ecology) for the property at 6870 Woodlawn Avenue Northeast, Seattle, Washington (the Property; Figure 1). Hearthstone advanced 27 direct-push borings into the subsurface soil and collected soil samples from the Property to confirm the concentrations of tetrachloroethene (PCE) in soil previously treated using electrical resistance heating (ERH). Treatment of soil at the Property ended in January 5, 2017. The boring locations are shown on Figure 2. Boring logs are presented in Attachment A. A detailed description of the ERH system is presented in the Engineering Design Report prepared by SoundEarth and dated May 9, 2016.

Soil sampling was performed between April 17 and 19, 2019. The soil temperature at the time of sampling approximately ranged from 14 to 17 degrees Celsius. Soil samples were collected at sample depth interval ranging from 2.5 to 16 feet below ground surface (bgs) and analyzed for the chemicals of concern using U.S. Environmental Protection Agency (EPA) Method 8260C. Sampling and tests were performed in accordance with the Sampling and Analysis Plan prepared by SoundEarth and dated May 9, 2016. One soil sample (B2-5) was also analyzed for leachable chemicals of concern using Toxic Characteristic Leach Test Procedure (TCLP) EPA Method 1311/8260C.

Analytical results for soil samples show that all but one soil sample (B2-5) contained concentrations of PCE less than 14 milligrams per kilogram (mg/kg) and/or were reported below laboratory reporting limits. Excluding the PCE result for sample B2-5, concentrations of PCE in the soil samples ranged from 0.025 mg/kg to 7.4 mg/kg. The concentration PCE in sample B2-5 collected from boring B2 at 5 feet bgs was 27,000 mg/kg. Concentrations of PCE in soil samples collected from boring B2 at 10 feet and 14 feet bgs were 0.77 mg/kg and 0.97 mg/kg. The TCLP concentration of PCE in sample B2-5 was 45 milligrams per liter. Analytical results are presented in Table 1. Field screening results, measured with a handheld gas analyzer equipped with photoionization detector and taken throughout the soil column for each soil

boring, are presented in the boring logs (Attachment A). Laboratory analytical reports are presented in Attachment B.

Soil cuttings from the borings were placed in one 25-gallon drum and one 55-gallon drum. The drums are stored at the Property. Cuttings from soil borings B1 to B6 were placed in the 25-gallon drum and remainder of the soil cuttings from borings B6 to B27 were placed in the 55-gallon drum.

Based on these results, Hearthstone is requesting to excavate and dispose 10,000 tons of soil as F002 listed waste at the Subtitle D Landfills under a CID from Ecology. The area of the Property slated for mass removal of soil containing PCE is shown on Figure 2. The depth of the mass removal excavation will range from 14 to 16 feet bgs. This request excludes soil in an area of approximately 340 square feet proximal to boring B2 and to depth of 8 feet bgs (Figure 2). This excavated soil proximal to boring B2 (estimated at 150 tons) and the soil cuttings in the 25-gallon drum will be profiled for disposal at the Waste Management Subtitle C Landfill in Arlington, Oregon, or the Clean Harbors Subtitle C Landfill in Grantsville, Utah. The F002 listed waste under the CID will be disposed of at the Waste Management Facility in Wenatchee, Washington, or the Republic Roosevelt Landfill in Klickitat County, Washington.

If you have questions or need additional information, please contact the undersigned.

Respectfully,

**SoundEarth Strategies, Inc.**

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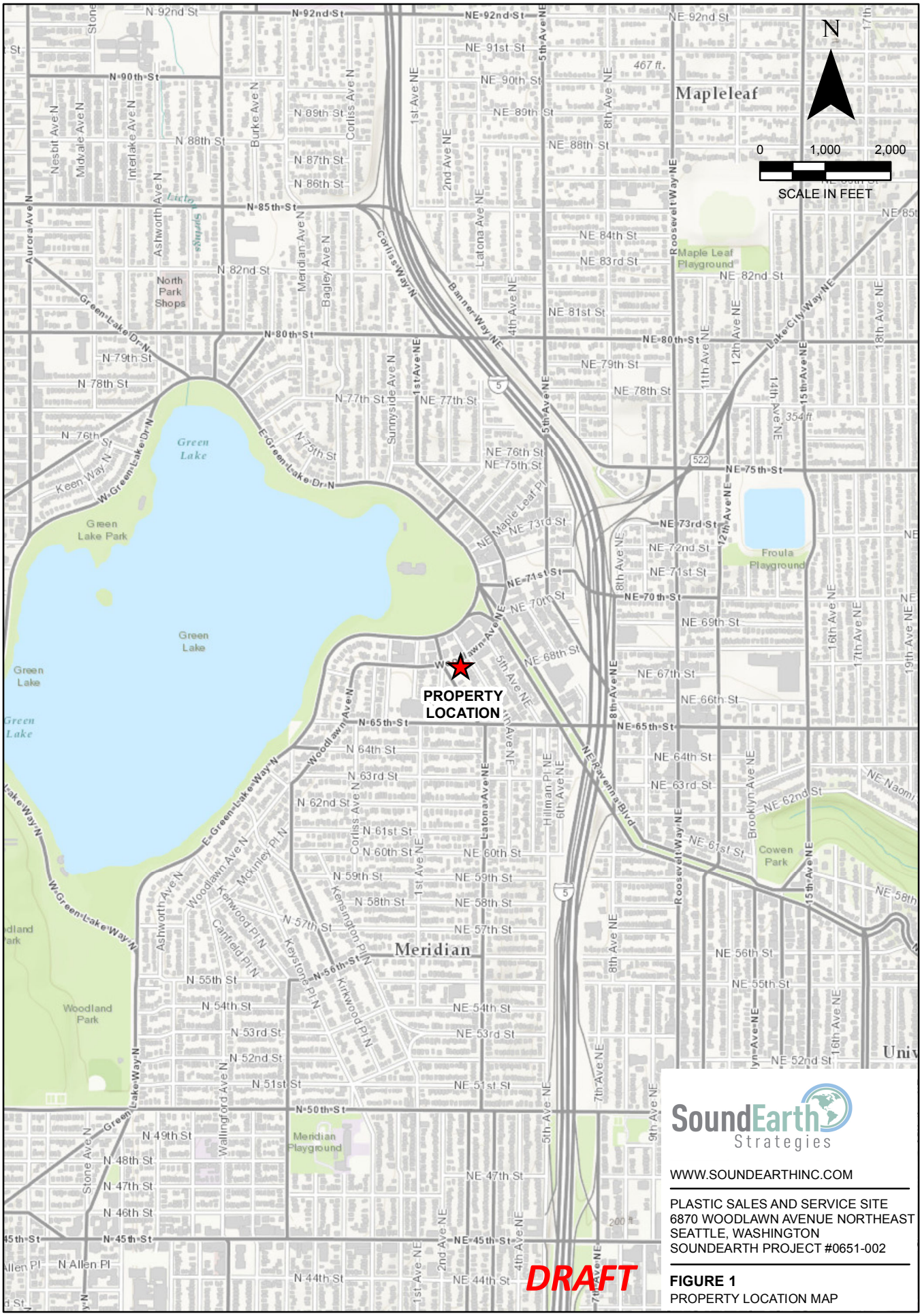
Tom Cammarata, LG, LHG

Attachments: Figure 1, Property Location Map
Figure 2, Post-ERH Boring Locations and Area Planned for Mass Removal
Table 1, Summary of Soil Analytical Results for Soil Borings
A, Soil Boring Logs
B, Laboratory Analytical Reports
*OnSite Environmental, Inc. #1804-197*
*OnSite Environmental, Inc. #1804-215*
*OnSite Environmental, Inc. #1804-226*

TJC:rt

# FIGURES

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PLASTIC SALES AND SERVICE SITE
6870 WOODLAWN AVENUE NORTHEAST
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0651-002

**FIGURE 1**
PROPERTY LOCATION MAP

5/9/2018

P:\0651 HEARTHSTONE\0651-002 HEARTHSTONE - WOODLAWN EAST\TECHNICAL\CAD\2018\0651-002_2018_EL.DWG

## LEGEND

- CATCH BASIN
- MANHOLE
- SHALLOW-ZONE MONITORING WELL
- DEEP-ZONE MONITORING WELL
- DECOMMISSIONED WELL
- DIRECT-PUSH BORING (GEOENGINEERS, 2002/2003)
- DIRECT-PUSH BORING (GEOENGINEERS, 2004)
- DIRECT-PUSH BORING (FARALLON, 2004)
- DIRECT-PUSH BORING (FARALLON, 2006/2007)
- DIRECT-PUSH BORING (FARALLON, 2010)
- DIRECT-PUSH BORING (SOUNDEARTH, 2008)
- HOLLOW-STEM AUGER (SOUNDEARTH, 2009)
- POST-ERH BORING LOCATION
- SW — STORMWATER LINE
- GAS — GAS LINE
- SS — SANITARY SEWER LINE
- W — WATER LINE
- DHP — OVERHEAD POWER LINE
- PROPERTY BOUNDARY LINE
- PARCEL BOUNDARY
- AREA REQUESTING CONTAINED-IN DETERMINATION
- AREA EXCLUDED FROM CONTAINED-IN DETERMINATION
- FD — FLOOR DRAIN

| | |
|---|---|
| ERH | ELECTRICAL RESISTANCE HEATING |
| PCE | TETRACHLORETHENE |
| mg/kg | MILLIGRAM PER KILOGRAM |
| TMP | TEMPERATURE MONITORING POINT |
| UST | UNDERGROUND STORAGE TANK |

FIGURE DERIVED FROM BASEMAP BY FARALLON CONSULTING, 2010

N

0 15 30

APPROXIMATE SCALE IN FEET

6857 WOODLAWN AVENUE NORTHEAST

**NORTH-ADJOINING PROPERTY**
6869 WOODLAWN AVENUE NORTHEAST

6900 WOODLAWN AVENUE NORTHEAST

**DRY CLEANER BUILDING PROPERTY**
6870 WOODLAWN AVENUE NORTHEAST

FORMER LAUNDRY PROPERTY

FORMER YASUKO PROPERTY

**HEARTHSTONE PROPERTY**
6850 WOODLAWN AVENUE NORTHEAST

**SOUTH-ADJOINING PROPERTY**
6565 4TH AVENUE NORTHEAST

APARTMENTS

SINGLE-FAMILY LOT

FORMER STODDARD SOLVENT UST

FORMER DRY CLEANING EQUIPMENT

FORMER DRY CLEANER FUEL OIL UST

WOODLAWN AVENUE NORTHEAST

2ND AVENUE NORTHEAST

4TH AVENUE NORTHEAST

WESTERN ALLEY

LATONA AVENUE NORTHEAST

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 MW-19 MW-20 MW-21 MW-22 MW-23 MW-24 MW-25 MW-26 MW-27

SB-2 SB-3 SB-4 SB-5 SB-6 SB-7 SB-8 SB-9 SB-10 SB-11 SB-12 (20' NORTH) SB-13 (47' NORTH) SB-20 SB-21 SB-22 SB-23 SB-24 SB-25 SB-27 SB-29 SB-30 SB-31 SB-32 SB-33 SB-34 SB-35 SB-36 SB-37 SB-38 SB-39

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-9 GP-10 GP-13

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27

P11

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PLASTIC SALES & SERVICE SITE
6870 WOODLAWN AVENUE
NORTHEAST
SEATTLE, WASHINGTON
0651-002

**FIGURE 2**
POST-ERH BORING LOCATIONS AND AREA PLANNED FOR MASS REMOVAL

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# TABLE

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**Table 1**
**Summary of Soil Analytical Results for Soil Borings**
**Plastic Sales and Service Site**
**6870 Woodlawn Avenue Northeast**
**Seattle, Washington**

| Well/Boring ID | Feet bgs | Sample ID | Date Sampled | Analytical Results[1] (mg/kg) | | | | | Analytical Results[2] (mg/L) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tetrachloroethene | Trichloroethene | Cis-1,2-Dichloroethene | Trans-1,2-Dichloroethene | Vinyl Chloride | Tetrachloroethene | Trichloroethene | Vinyl Chloride |
| **B1** | 6 | B1-6 | 04/17/18 | **0.17** | <0.025 | **0.033** | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B1-14 | 04/17/18 | **0.40** | <0.025 | **0.15** | <0.025 | <0.025 | NA | NA | NA |
| **B2** | 5 | B2-5 | 04/17/18 | **27,000** | **28** | **1.8** | <0.92 | <0.92 | **45** | <1 | <1 |
| | 10 | B2-10 | 04/17/18 | **0.77** | <0.037 | **0.16** | <0.037 | <0.037 | NA | NA | NA |
| | 14 | B2-14 | 04/17/18 | **0.97** | <0.034 | **0.19** | <0.034 | <0.034 | NA | NA | NA |
| **B3** | 7 | B3-7 | 04/17/18 | **0.78** | <0.038 | <0.038 | <0.038 | <0.038 | NA | NA | NA |
| | 15 | B3-15 | 04/17/18 | **0.19** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B4** | 6 | B4-6 | 04/17/18 | <0.025 | <0.025 | **0.033** | <0.025 | <0.025 | NA | NA | NA |
| | 9.5 | B4-9.5 | 04/17/18 | <0.025 | <0.025 | **0.049** | <0.025 | <0.025 | NA | NA | NA |
| | 16 | B4-16 | 04/17/18 | <0.025 | <0.025 | **0.059** | <0.025 | <0.025 | NA | NA | NA |
| **B5** | 6 | B5-6 | 04/17/18 | **0.11** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B5-10 | 04/17/18 | **7.4** | **0.19** | <0.050 | <0.050 | <0.050 | NA | NA | NA |
| | 14 | B5-14 | 04/17/18 | **0.52** | **0.066** | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B6** | 2.5 | B6-2.5 | 04/17/18 | **0.77** | <0.046 | <0.046 | <0.046 | <0.046 | NA | NA | NA |
| | 7.5 | B6-7.5 | 04/17/18 | **0.90** | **0.096** | <0.054 | <0.054 | <0.054 | NA | NA | NA |
| | 12 | B6-12 | 04/17/18 | **0.17** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B7** | 6 | B7-6 | 04/17/18 | **1.9** | <0.050 | <0.050 | <0.050 | <0.050 | NA | NA | NA |
| | 10 | B7-10 | 04/17/18 | **3.5** | <0.048 | <0.048 | <0.048 | <0.048 | NA | NA | NA |
| | 14 | B7-14 | 04/17/18 | **0.32** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B8** | 6 | B8-6 | 04/17/18 | **0.55** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B8-10 | 04/17/18 | **0.23** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B8-14 | 04/17/18 | **0.11** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B9** | 6 | B9-6 | 04/17/18 | **4.0** | <0.053 | <0.053 | <0.053 | <0.053 | NA | NA | NA |
| | 10 | B9-10 | 04/17/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B9-14 | 04/17/18 | **0.063** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B10** | 6 | B10-6 | 04/17/18 | **0.88** | <0.060 | <0.060 | <0.060 | <0.060 | NA | NA | NA |
| | 10 | B10-10 | 04/17/18 | **2.2** | <0.053 | <0.053 | <0.053 | <0.053 | NA | NA | NA |
| | 14 | B10-14 | 04/17/18 | **0.22** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **B11** | 2.5 | B11-2.5 | 04/18/18 | **0.59** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 6 | B11-6 | 04/18/18 | **0.59** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B11-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B11-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **Toxicity Characteristic (20x rule for soil)** | | | | **14** | **10** | **NE** | **NE** | **4** | | | |
| **Toxicity Characteristic TCLP Regulatory Threshold (mg/L)** | | | | | | | | | **0.7** | **0.5** | **0.2** |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tetrachloroethene | Trichloroethene | Cis-1,2-Dichloroethene | Trans-1,2-Dichloroethene | Vinyl Chloride | Tetrachloroethene | Trichloroethene | Vinyl Chloride |
| B12 | 6 | B12-6 | 04/18/18 | **1.1** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B12-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B12-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B13 | 6 | B13-6 | 04/18/18 | **2.1** | <0.054 | <0.054 | <0.054 | <0.054 | NA | NA | NA |
| | 10 | B13-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B13-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B14 | 2.5 | B14-2.5 | 04/18/18 | **2.1** | <0.079 | <0.079 | <0.079 | <0.079 | NA | NA | NA |
| | 6 | B14-6 | 04/18/18 | **0.67** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B14-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B14-14 | 04/18/18 | 0.83 | <0.043 | 0.097 | <0.043 | <0.043 | NA | NA | NA |
| | 16 | B14-16 | 04/18/18 | **1.1** | <0.044 | <0.048 | <0.044 | <0.044 | NA | NA | NA |
| B15 | 6 | B15-6 | 04/18/18 | **0.84** | **0.075** | <0.052 | <0.052 | <0.052 | NA | NA | NA |
| | 10 | B15-10 | 04/18/18 | <0.054 | <0.054 | **1.1** | <0.054 | <0.054 | NA | NA | NA |
| | 14 | B15-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B16 | 6 | B16-6 | 04/18/18 | **0.90** | **0.46** | **0.18** | <0.047 | <0.047 | NA | NA | NA |
| | 10 | B16-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B16-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B17 | 6 | B17-6 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B17-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B17-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B18 | 6 | B18-6 | 04/18/18 | **0.74** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B18-10 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B18-14 | 04/18/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B19 | 6 | B19-6 | 04/19/18 | **0.24** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B19-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B19-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B20 | 6 | B20-6 | 04/19/18 | **0.40** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B20-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B20-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B21 | 6 | B21-6 | 04/19/18 | **0.15** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B21-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B21-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B22 | 2.5 | B22-2.5 | 04/19/18 | **0.041** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 6 | B22-6 | 04/19/18 | **0.025** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B22-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B22-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **Toxicity Characteristic (20x rule for soil)** | | | | **14** | **10** | **NE** | **NE** | **4** | | | |
| **Toxicity Characteristic TCLP Regulatory Threshold (mg/L)** | | | | | | | | | **0.7** | **0.5** | **0.2** |

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**Plastic Sales and Service Site**
**6870 Woodlawn Avenue Northeast**
**Seattle, Washington**

| Well/Boring ID | Feet bgs | Sample ID | Date Sampled | Analytical Results[1] (mg/kg) | | | | | Analytical Results[2] (mg/L) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tetrachloroethene | Trichloroethene | Cis-1,2-Dichloroethene | Trans-1,2-Dichloroethene | Vinyl Chloride | Tetrachloroethene | Trichloroethene | Vinyl Chloride |
| B23 | 6 | B23-6 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B23-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B23-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B24 | 6 | B24-6 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B24-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B24-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B25 | 2.5 | B25-2.5 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 6 | B25-6 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B25-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B25-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B26 | 2.5 | B26-2.5 | 04/19/18 | **0.085** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 6 | B26-6 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B26-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B26-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 16 | B26-16 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| B27 | 2.5 | B27-2.5 | 04/19/18 | **0.10** | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 6 | B27-6 | 04/19/18 | <0.041 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 10 | B27-10 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 14 | B27-14 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| | 16 | B27-16 | 04/19/18 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | NA | NA | NA |
| **Toxicity Characteristic (20x rule for soil)** | | | | **14** | **10** | **NE** | **NE** | **4** | | | |
| **Toxicity Characteristic TCLP Regulatory Threshold (mg/L)** | | | | | | | | | **0.7** | **0.5** | **0.2** |

NOTES:

Samples analyzed by OnSite Environmental, Inc. in Redmond, Washington.

**Bold** denotes detected concentration equal or above laboratory limit.

**Red** denotes concentration above value exceed 14 mg/kg tetrachloroethene and/or TCLP exceeds 0.7 mg/L.

[1]Samples analyzed by EPA Method 8260C.

[2]Samples analyzed for TCLP by EPA Method 1131/8260C and is below Toxicity Characteristic.

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

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

NA = not applicable

NE = not established

TCLP = Toxicity Characteristic Leaching Procedure

# ATTACHMENT A
# SOIL BORING LOGS

SoundEarth Strategies

# BORING LOG B1

**Project:** Hearthstone
**Project Number:** 0651-002
**Logged by:** SNW
**Date Started:** 4/17/18
**Surface Conditions:** Concrete
**Well Location N/S:** 5 ft south of NW property corner
**Well Location E/W:** 23 ft east of NW property corner
**Reviewed by:** TSB/TJC
**Date Completed:** 4/17/18

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs
**Water Depth After Completion:** -- feet bgs

**DRAFT**

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 80 | | | | | | |
| 5 | | | | 0.0 | B1-6 | | | | |
| | | | 100 | 0.0 | | | | | |
| 10 | | | | | | | | | |
| | | | | 0.0 | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B1-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.0 | | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

**Drilling Co./Driller:** Holocene/ Mitch
**Drilling Equipment:** Geoprobe 7822DT
**Sampler Type:** 2.25in/5ft macro and liner
**Hammer Type/Weight:** Not Applicable lbs
**Total Boring Depth:** 16 feet bgs
**Total Well Depth:** Not Applicable feet bgs
**State Well ID No.:** Not Applicable

**Well/Auger Diamter:** Not Applicable inches
**Well Screened Interval:** Not Applicable feet bgs
**Screen Slot Size:** Not Applicable inches
**Filter Pack Used:** Not Applicable
**Surface Seal:** Concrete
**Annular Seal:** Bentonite
**Monument Type:** Not Applicable

**Notes/Comments:**

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 5 ft south of NW property corner |
| **Well Location E/W:** | 10 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

# BORING LOG | B2

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | | | | | | |
| 5 | | | | >15000 | B2-6 | | | | |
| | | | 95 | | | | | | |
| | | | | 6.9 | B2-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 3.0 | B2-14 | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

**DRAFT**

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 22.5 ft south of NW property corner |
| **Well Location E/W:** | 17 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

# BORING LOG | B3

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | 1.4 | | | | | |
| 5 | | | | 76.8 | | | | | |
| | | | | 1.1 | B3-7 | | | | |
| | | | 100 | | | | | | |
| 10 | | | | 0.0 | | | | | |
| | | | 100 | | | | | | |
| 15 | | | | 0.1 | B3-15 | | | | |
| | | | 100 | | | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

**DRAFT**

# BORING LOG B4

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 13 ft south of NW property corner |
| **Well Location E/W:** | 27 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

**Site Address:** 6870 woodlawn Ave NE, Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 80 | 0.3 | | | | | |
| 5 | | | | 1.1 | B4-6 | | | | |
| | | | 90 | | | | | | |
| | | | | 0.2 | B4-9.5 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| 15 | | | | 1.8 | B4-16 | | | | |
| | | | 100 | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

**DRAFT**

# BORING LOG B5

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 4 ft south of NW property corner |
| **Well Location E/W:** | 47 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

| | | |
|---|---|---|
| **Water Depth At Time of Drilling:** | 6 | feet bgs |
| **Water Depth After Completion:** | -- | feet bgs |

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 70 | | | | | | |
| 5 | | | | 0.0 | B5-6 | | | | |
| | | | 65 | | | | | | |
| | | | | 0.0 | B5-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B5-14 | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

**DRAFT**

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 20 ft south of NW property corner |
| **Well Location E/W:** | 47 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

# BORING LOG | B6

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 5 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 60 | 0.8 | B6-2.5 | | | | |
| 5 | | | | | | | | | |
| | | | 100 | 2.0 | B6-7.5 | | | | |
| 10 | | | | | | | | | |
| | | | | 1.8 | B6-12 | | | | |
| | | | 100 | | | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

DRAFT

# BORING LOG B7

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 30 ft south of NW property corner |
| **Well Location E/W:** | 21 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

**Site Address:** 6870 woodlawn Ave NE, Seattle, Washington

**Water Depth At Time of Drilling:** 8 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 80 | | | | | | |
| 5 | | | | 0.4 | B7-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.3 | B7-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B7-14 | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 30 ft south of NW property corner |
| **Well Location E/W:** | 49 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

# BORING LOG | B8

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 8 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 50 | | | | | | |
| 5 | | | | 0.3 | B8-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B8-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B8-14 | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

**DRAFT**

# BORING LOG B9

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 13 ft south of NW property corner |
| **Well Location E/W:** | 75 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

**Site Address:** 6870 woodlawn Ave NE, Seattle, Washington

**Water Depth At Time of Drilling:** 8 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | 0.2 | | | | | |
| 5 | | | | 1.6 | B9-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B9-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B9-14 | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

**DRAFT**

# BORING LOG B10

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/17/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 13 ft south of NW property corner |
| **Well Location E/W:** | 90 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/17/18 |

**Site Address:** 6870 woodlawn Ave NE, Seattle, Washington

**Water Depth At Time of Drilling:** 8 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 80 | 0.0 | | | | | |
| 5 | | | | 0.2 | B10-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 1.1 | B10-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.3 | B10-14 | | | | |
| 15 | | | | | | | | **Boring terminated at 15 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 15 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/18/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 32 ft south of NW property corner |
| **Well Location E/W:** | 92 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/18/18 |

# BORING LOG B11

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 4 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 100 | 12 | B11-2.5 | | | | |
| 5 | | | | 1.1 | B11-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B11-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B11-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.1 | B11-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

**DRAFT**

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/18/18 |
| **Surface Conditions:** | Concrete |
| **Well Location N/S:** | 32 ft south of NW property corner |
| **Well Location E/W:** | 74 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/18/18 |

# BORING LOG B12

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 50 | 0.1 | B12-2.5 | | | | |
| 5 | | | | 0.0 | B12-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B12-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B12-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.1 | B12-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and sealed with concrete.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

**Project:** Hearthstone
**Project Number:** 0651-002
**Logged by:** SNW
**Date Started:** 4/18/18
**Surface Conditions:** Gravel
**Well Location N/S:** 33 ft south of NW property corner
**Well Location E/W:** 50 ft east of NW property corner
**Reviewed by:** TSB/TJC
**Date Completed:** 4/18/18

# BORING LOG B13

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | 0.3 | B13-2.5 | | | | |
| 5 | | | | 0.6 | B13-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B13-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B13-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.1 | B13-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/18/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 33 ft south of NW property corner |
| **Well Location E/W:** | 31 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/18/18 |

# BORING LOG B14

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 7 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 60 | 0.3 | B14-2.5 | | | | |
| 5 | | | | 0.1 | B14-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B14-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.8 | B14-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.4 | B14-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

**DRAFT**

# BORING LOG B15

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/18/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 33 ft south of NW property corner |
| **Well Location E/W:** | 10 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/18/18 |

**Site Address:** 6870 woodlawn Ave NE, Seattle, Washington

**Water Depth At Time of Drilling:** 7 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 20 | | | | | | |
| 5 | | | | 0.1 | B15-6 | | | | |
| | | | 60 | | | | | | |
| | | | | 0.0 | B15-10 | | | | |
| 10 | | | | | | | | | |
| | | | 75 | | | | | | |
| | | | | 0.0 | B15-14 | | | | |
| 15 | | | | | | | | | |
| | | | 50 | 0.0 | B15-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/18/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 67.5 ft south of NW property corner |
| **Well Location E/W:** | 7.5 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/18/18 |

# BORING LOG | B16

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 7 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 70 | 0.0 | B16-2.5 | | | | |
| 5 | | | | 0.0 | B16-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B16-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B16-14 | | | | |
| 15 | | | | | | | | | |
| | | | 60 | 0.1 | B16-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

DRAFT

**Project:** Hearthstone
**Project Number:** 0651-002
**Logged by:** SNW
**Date Started:** 4/18/18
**Surface Conditions:** Gravel
**Well Location N/S:** 67 ft south of NW property corner
**Well Location E/W:** 28 ft east of NW property corner
**Reviewed by:** TSB/TJC
**Date Completed:** 4/18/18

# BORING LOG B17

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 7 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 65 | 0.3 | B17-2.5 | | | | |
| 5 | | | | 0.1 | B17-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B17-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B17-14 | | | | |
| 15 | | | | | | | | | |
| | | | 70 | 0.0 | B17-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | **Notes/Comments:** |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/18/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 66 ft south of NW property corner |
| **Well Location E/W:** | 46 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/18/18 |

# BORING LOG B18

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 7 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | 0.1 | B18-2.5 | | | | |
| 5 | | | | 0.2 | B18-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B18-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B18-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.0 | B18-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

# BORING LOG B19

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 65 ft south of NW property corner |
| **Well Location E/W:** | 67.5 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

**Site Address:** 6870 woodlawn Ave NE, Seattle, Washington

**Water Depth At Time of Drilling:** 10 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 70 | 0.4 | B19-2.5 | | | | |
| 5 | | | | 0.5 | B19-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.3 | B19-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.5 | B19-14 | | | | |
| 15 | | | | | | | | | |
| | | | 80 | 0.1 | B19-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** | |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 65 ft south of NW property corner |
| **Well Location E/W:** | 94 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

# BORING LOG B20

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 5 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 60 | 0.2 | B20-2.5 | | | | |
| 5 | | | | 0.2 | B20-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B20-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B20-14 | | | | |
| 15 | | | | | | | | | |
| | | | 80 | 0.2 | B20-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 69 ft south of NW property corner |
| **Well Location E/W:** | 38 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

# BORING LOG B22

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 5 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 50 | 0.2 | B22-2.5 | | | | |
| 5 | | | | 0.4 | B22-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B22-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.4 | B22-14 | | | | |
| 15 | | | | | | | | | |
| | | | 90 | 0.3 | B22-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 69 ft south of NW property corner |
| **Well Location E/W:** | 38 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

# BORING LOG | B22

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 5 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 50 | 0.2 | B22-2.5 | | | | |
| 5 | | | | 0.4 | B22-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B22-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.4 | B22-14 | | | | |
| 15 | | | | | | | | | |
| | | | 90 | 0.3 | B22-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

# BORING LOG B23

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 74 ft south of NW property corner |
| **Well Location E/W:** | 16.5 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

**Site Address:** 6870 woodlawn Ave NE Seattle, Washington

**Water Depth At Time of Drilling:** 6 feet bgs

**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 65 | 0.2 | B23-2.5 | | | | |
| 5 | | | | 0.2 | B23-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B23-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B23-14 | | | | |
| 15 | | | | | | | | | |
| | | | 85 | 0.1 | B23-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 90 ft south of NW property corner |
| **Well Location E/W:** | 30 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

# BORING LOG | B24

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 6 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | 0.0 | B24-2.5 | | | | |
| 5 | | | | 0.0 | B24-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B24-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.0 | B24-14 | | | | |
| 15 | | | | | | | | | |
| | | | 80 | 0.1 | B24-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 90 ft south of NW property corner |
| **Well Location E/W:** | 50 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

# BORING LOG B25

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 6 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 75 | 0.2 | B25-2.5 | | | | |
| 5 | | | | 0.4 | B25-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.2 | B25-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B25-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.5 | B25-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

SoundEarth Strategies

DRAFT

| | |
|---|---|
| **Project:** | Hearthstone |
| **Project Number:** | 0651-002 |
| **Logged by:** | SNW |
| **Date Started:** | 4/19/18 |
| **Surface Conditions:** | Gravel |
| **Well Location N/S:** | 90 ft south of NW property corner |
| **Well Location E/W:** | 74 ft east of NW property corner |
| **Reviewed by:** | TSB/TJC |
| **Date Completed:** | 4/19/18 |

# BORING LOG B26

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 6 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 70 | 0.8 | B26-2.5 | | | | |
| 5 | | | | 0.5 | B26-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.3 | B26-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.1 | B26-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.9 | B26-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | |
|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | |

**Notes/Comments:**

SoundEarth Strategies

**DRAFT**

# BORING LOG B27

**Project:** Hearthstone
**Project Number:** 0651-002
**Logged by:** SNW
**Date Started:** 4/19/18
**Surface Conditions:** Gravel
**Well Location N/S:** 90 ft south of NW property corner
**Well Location E/W:** 90 ft east of NW property corner
**Reviewed by:** TSB/TJC
**Date Completed:** 4/19/18

**Site Address:** 6870 woodlawn Ave NE
Seattle, Washington

**Water Depth At Time of Drilling:** 6 feet bgs
**Water Depth After Completion:** -- feet bgs

| Depth (feet bgs) | Interval | Blow Count | % Recovery | PID (ppm) | Sample ID | USCS Class | Graphic | Lithologic Description | Well Construction Detail |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | **No lithology description recorded** | |
| | | | 60 | 0.4 | B27-2.5 | | | | |
| 5 | | | | 0.3 | B27-6 | | | | |
| | | | 100 | | | | | | |
| | | | | 0.5 | B27-10 | | | | |
| 10 | | | | | | | | | |
| | | | 100 | | | | | | |
| | | | | 0.3 | B27-14 | | | | |
| 15 | | | | | | | | | |
| | | | 100 | 0.4 | B27-16 | | | | |
| | | | | | | | | **Boring terminated at 16 ft bgs. Backfilled with bentonite and gravel.** | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Drilling Co./Driller:** | Holocene/ Mitch | | **Well/Auger Diamter:** | Not Applicable | inches | **Notes/Comments:** |
| **Drilling Equipment:** | Geoprobe 7822DT | | **Well Screened Interval:** | Not Applicable | feet bgs | |
| **Sampler Type:** | 2.25in/5ft macro and liner | | **Screen Slot Size:** | Not Applicable | inches | |
| **Hammer Type/Weight:** | Not Applicable | lbs | **Filter Pack Used:** | Not Applicable | | |
| **Total Boring Depth:** | 16 | feet bgs | **Surface Seal:** | Concrete | | |
| **Total Well Depth:** | Not Applicable | feet bgs | **Annular Seal:** | Bentonite | | |
| **State Well ID No.:** | Not Applicable | | **Monument Type:** | Not Applicable | | |

# ATTACHMENT B
# LABORATORY ANALYTICAL REPORTS

***OnSite Environmental, Inc. #1804-197***

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 1, 2018

Tom Cammarata
Sound Earth Strategies
2811 Fairview Avenue East, Suite 2000
Seattle, WA 98102

Re: Analytical Data for Project 0651-002
Laboratory Reference No. 1804-197

Dear Tom:

Enclosed are the analytical results and associated quality control data for samples submitted on April 18, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**Case Narrative**

Samples were collected on April 17, 2018 and received by the laboratory on April 18, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260C Analysis

The client requested PQL of 0.025ppm is not achievable for some compounds for samples B2-5, B2-10, B2-14, B3-7, B5-10, B6-2.5, B6-7.5, B7-6, B7-10, B9-6, B10-6 and B10-10 due to the necessary dilution of these samples.

All four internal standards did not meet acceptance criteria for low-level analysis for sample B5-14. Leaks in the sealed VOA environment caused by grit between the VOA lip and VOA cap septum have been shown to cause low internal standard recovery. The second VOA vial provided for low-level analysis was damaged. Therefore, the sample was extracted from a 4-ounce jar for low-level analysis. Some loss of volatiles may have occurred. The reported results for Trichloroethene and Tetrachloroethene are not affected.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B1-6** | | | | | |
| Laboratory ID: | 04-197-01 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | 0.033 | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.17 | 0.047 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *91* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B1-14** | | | | | |
| Laboratory ID: | 04-197-02 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | 0.15 | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.40 | 0.039 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *106* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *84* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B2-5** | | | | | |
| Laboratory ID: | 04-197-03 | | | | | |
| Vinyl Chloride | ND | 0.92 | EPA 8260C | 4-18-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.92 | EPA 8260C | 4-18-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | 1.8 | 0.92 | EPA 8260C | 4-18-18 | 4-19-18 | |
| Trichloroethene | 28 | 0.92 | EPA 8260C | 4-18-18 | 4-19-18 | |
| Tetrachloroethene | 27000 | 180 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *108* | *75-131* | | | | |
| *Toluene-d8* | *112* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *115* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B2-10** | | | | | |
| Laboratory ID: | 04-197-04 | | | | | |
| Vinyl Chloride | ND | 0.037 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.037 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | 0.16 | 0.037 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.037 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.77 | 0.037 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *104* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *112* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B2-14** | | | | | |
| Laboratory ID: | 04-197-05 | | | | | |
| Vinyl Chloride | ND | 0.034 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.034 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | 0.19 | 0.034 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.034 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.97 | 0.034 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *105* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *113* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B3-7** | | | | | |
| Laboratory ID: | 04-197-06 | | | | | |
| Vinyl Chloride | ND | 0.038 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.038 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.038 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.038 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.78 | 0.038 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *103* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B3-15** | | | | | |
| Laboratory ID: | 04-197-07 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.19 | 0.035 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *94* | *75-131* | | | | |
| *Toluene-d8* | *95* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *89* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B4-6** | | | | | |
| Laboratory ID: | 04-197-08 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | 0.033 | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *94* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B4-9.5** | | | | | |
| Laboratory ID: | 04-197-09 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | 0.049 | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *95* | *75-131* | | | | |
| *Toluene-d8* | *93* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *87* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B4-16** | | | | | |
| Laboratory ID: | 04-197-10 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | 0.059 | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *98* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *92* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B5-6** | | | | | |
| Laboratory ID: | 04-197-11 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.11 | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *100* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B5-10** | | | | | |
| Laboratory ID: | 04-197-12 | | | | | |
| Vinyl Chloride | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | 0.19 | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 7.4 | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *104* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *111* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B5-14** | | | | | |
| Laboratory ID: | 04-197-13 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | 0.066 | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.52 | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *87* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B6-2.5** | | | | | |
| Laboratory ID: | 04-197-14 | | | | | |
| Vinyl Chloride | ND | 0.046 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.046 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.046 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.046 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.77 | 0.046 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *102* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *110* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B6-7.5** | | | | | |
| Laboratory ID: | 04-197-15 | | | | | |
| Vinyl Chloride | ND | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | 0.096 | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.90 | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *101* | *75-131* | | | | |
| *Toluene-d8* | *103* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *108* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B6-12** | | | | | |
| Laboratory ID: | 04-197-16 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.17 | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *101* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B7-6** | | | | | |
| Laboratory ID: | 04-197-17 | | | | | |
| Vinyl Chloride | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 1.9 | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *105* | *75-131* | | | | |
| *Toluene-d8* | *102* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B7-10** | | | | | |
| Laboratory ID: | 04-197-18 | | | | | |
| Vinyl Chloride | ND | 0.048 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.048 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.048 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.048 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 3.5 | 0.048 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *102* | *75-131* | | | | |
| *Toluene-d8* | *100* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B7-14** | | | | | |
| Laboratory ID: | 04-197-19 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | 0.32 | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *90* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B8-6** | | | | | |
| Laboratory ID: | 04-197-20 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.55 | 0.054 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *90* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B8-10** | | | | | |
| Laboratory ID: | 04-197-21 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | 0.23 | 0.056 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *90* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B8-14** | | | | | |
| Laboratory ID: | 04-197-22 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.11 | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *90* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B9-6** | | | | | |
| Laboratory ID: | 04-197-23 | | | | | |
| Vinyl Chloride | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 4.0 | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B9-10** | | | | | |
| Laboratory ID: | 04-197-24 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *94* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *88* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B9-14** | | | | | |
| Laboratory ID: | 04-197-25 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.063 | 0.060 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *93* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *84* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B10-6** | | | | | |
| Laboratory ID: | 04-197-26 | | | | | |
| Vinyl Chloride | ND | 0.060 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.060 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.060 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.060 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 0.88 | 0.060 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *102* | *75-131* | | | | |
| *Toluene-d8* | *104* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *101* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B10-10** | | | | | |
| Laboratory ID: | 04-197-27 | | | | | |
| Vinyl Chloride | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | 2.2 | 0.053 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *103* | *75-131* | | | | |
| *Toluene-d8* | *104* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B10-14** | | | | | |
| Laboratory ID: | 04-197-28 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | 0.22 | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *98* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *91* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0418S1 | | | | | |
| Vinyl Chloride | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *100* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |
| Laboratory ID: | MB0418S2 | | | | | |
| Vinyl Chloride | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Trichloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| Tetrachloroethene | ND | 0.050 | EPA 8260C | 4-18-18 | 4-18-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *98* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *102* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0419S2 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-19-18 | 4-19-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *93* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |
| Laboratory ID: | MB0423S2 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *98* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *92* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0418S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0446** | **0.0378** | 0.0500 | 0.0500 | 89 | 76 | 58-126 | 17 | 20 | |
| Benzene | **0.0460** | **0.0401** | 0.0500 | 0.0500 | 92 | 80 | 72-122 | 14 | 19 | |
| Trichloroethene | **0.0453** | **0.0405** | 0.0500 | 0.0500 | 91 | 81 | 75-120 | 11 | 20 | |
| Toluene | **0.0453** | **0.0401** | 0.0500 | 0.0500 | 91 | 80 | 78-123 | 12 | 19 | |
| Chlorobenzene | **0.0431** | **0.0376** | 0.0500 | 0.0500 | 86 | 75 | 75-120 | 14 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *101* | *103* | *75-131* | | | |
| *Toluene-d8* | | | | | *102* | *104* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *99* | *100* | *78-130* | | | |
| Laboratory ID: | SB0418S2 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0357** | **0.0433** | 0.0500 | 0.0500 | 71 | 87 | 58-126 | 19 | 20 | |
| Benzene | **0.0419** | **0.0484** | 0.0500 | 0.0500 | 84 | 97 | 72-122 | 14 | 19 | |
| Trichloroethene | **0.0412** | **0.0489** | 0.0500 | 0.0500 | 82 | 98 | 75-120 | 17 | 20 | |
| Toluene | **0.0418** | **0.0489** | 0.0500 | 0.0500 | 84 | 98 | 78-123 | 16 | 19 | |
| Chlorobenzene | **0.0410** | **0.0475** | 0.0500 | 0.0500 | 82 | 95 | 75-120 | 15 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *104* | *99* | *75-131* | | | |
| *Toluene-d8* | | | | | *108* | *97* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *108* | *100* | *78-130* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0419S2 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0407** | **0.0465** | 0.0500 | 0.0500 | 81 | 93 | 58-126 | 13 | 20 | |
| Benzene | **0.0432** | **0.0478** | 0.0500 | 0.0500 | 86 | 96 | 72-122 | 10 | 19 | |
| Trichloroethene | **0.0433** | **0.0490** | 0.0500 | 0.0500 | 87 | 98 | 75-120 | 12 | 20 | |
| Toluene | **0.0438** | **0.0476** | 0.0500 | 0.0500 | 88 | 95 | 78-123 | 8 | 19 | |
| Chlorobenzene | **0.0390** | **0.0435** | 0.0500 | 0.0500 | 78 | 87 | 75-120 | 11 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *104* | *99* | *75-131* | | | |
| *Toluene-d8* | | | | | *104* | *102* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *98* | *99* | *78-130* | | | |
| Laboratory ID: | SB0423S2 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0452** | **0.0433** | 0.0500 | 0.0500 | 90 | 87 | 58-126 | 4 | 20 | |
| Benzene | **0.0487** | **0.0472** | 0.0500 | 0.0500 | 97 | 94 | 72-122 | 3 | 19 | |
| Trichloroethene | **0.0510** | **0.0495** | 0.0500 | 0.0500 | 102 | 99 | 75-120 | 3 | 20 | |
| Toluene | **0.0485** | **0.0484** | 0.0500 | 0.0500 | 97 | 97 | 78-123 | 0 | 19 | |
| Chlorobenzene | **0.0472** | **0.0449** | 0.0500 | 0.0500 | 94 | 90 | 75-120 | 5 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *103* | *102* | *75-131* | | | |
| *Toluene-d8* | | | | | *105* | *104* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *100* | *102* | *78-130* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**TCLP VOLATILES**
**EPA 1311/8260C**

Matrix: TCLP Extract
Units: ug/L

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B2-5** | | | | | |
| Laboratory ID: | 04-197-03 | | | | | |
| Vinyl Chloride | ND | 1000 | EPA 8260C | 4-30-18 | 5-1-18 | |
| Trichloroethene | ND | 1000 | EPA 8260C | 4-30-18 | 5-1-18 | |
| Tetrachloroethene | 45000 | 1000 | EPA 8260C | 4-30-18 | 5-1-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-127* | | | | |
| *Toluene-d8* | *97* | *80-127* | | | | |
| *4-Bromofluorobenzene* | *93* | *78-125* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**TCLP VOLATILES**
**EPA 1311/8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: TCLP Extract
Units: ug/L

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0430T1 | | | | | |
| Vinyl Chloride | ND | 2.0 | EPA 8260C | 4-30-18 | 5-1-18 | |
| Trichloroethene | ND | 2.0 | EPA 8260C | 4-30-18 | 5-1-18 | |
| Tetrachloroethene | ND | 2.0 | EPA 8260C | 4-30-18 | 5-1-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *95* | *75-127* | | | | |
| *Toluene-d8* | *99* | *80-127* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-125* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**TCLP VOLATILES**
**EPA 1311/8260C**
**SB/SBD QUALITY CONTROL**

Matrix: TCLP Extract
Units: ug/L

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0501T1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **8.56** | **8.51** | 10.0 | 10.0 | 86 | 85 | 63-126 | 1 | 21 | |
| Benzene | **9.40** | **9.33** | 10.0 | 10.0 | 94 | 93 | 78-122 | 1 | 19 | |
| Trichloroethene | **8.82** | **8.95** | 10.0 | 10.0 | 88 | 90 | 63-120 | 1 | 20 | |
| Toluene | **9.34** | **9.49** | 10.0 | 10.0 | 93 | 95 | 79-124 | 2 | 19 | |
| Chlorobenzene | **8.29** | **8.45** | 10.0 | 10.0 | 83 | 85 | 78-120 | 2 | 19 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *103* | *100* | *75-127* | | | |
| *Toluene-d8* | | | | | *100* | *100* | *80-127* | | | |
| *4-Bromofluorobenzene* | | | | | *99* | *99* | *78-125* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**% MOISTURE**

Date Analyzed: 4-19&23-18

| Client ID | Lab ID | % Moisture |
|---|---|---|
| B1-6 | 04-197-01 | 17 |
| B1-14 | 04-197-02 | 9 |
| B2-5 | 04-197-03 | 19 |
| B2-10 | 04-197-04 | 12 |
| B2-14 | 04-197-05 | 8 |
| B3-7 | 04-197-06 | 15 |
| B3-15 | 04-197-07 | 9 |
| B4-6 | 04-197-08 | 20 |
| B4-9.5 | 04-197-09 | 12 |
| B4-16 | 04-197-10 | 10 |
| B5-6 | 04-197-11 | 18 |
| B5-10 | 04-197-12 | 16 |
| B5-14 | 04-197-13 | 16 |
| B6-2.5 | 04-197-14 | 13 |
| B6-7.5 | 04-197-15 | 16 |
| B6-12 | 04-197-16 | 15 |
| B7-6 | 04-197-17 | 15 |
| B7-10 | 04-197-18 | 15 |
| B7-14 | 04-197-19 | 7 |
| B8-6 | 04-197-20 | 18 |
| B8-10 | 04-197-21 | 13 |
| B8-14 | 04-197-22 | 16 |
| B9-6 | 04-197-23 | 16 |
| B9-10 | 04-197-24 | 15 |
| B9-14 | 04-197-25 | 19 |
| B10-6 | 04-197-26 | 15 |
| B10-10 | 04-197-27 | 12 |

Date of Report: May 1, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-197
Project: 0651-002

**% MOISTURE**

Date Analyzed: 4-19&23-18

| Client ID | Lab ID | % Moisture |
|---|---|---|
| B10-14 | 04-197-28 | 14 |

OnSite Environmental Inc.

**Data Qualifiers and Abbreviations**

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

# Chain of Custody

Page 1 of 3

**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SNwa GRM

**Turnaround Request (in working days)**

(Check One)

- ☐ Same Day ☐ 1 Day
- ☐ 2 Days ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

**Laboratory Number:** 04-197

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C * PCE & TCE cis/trans-DCE-VC | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | | TCLP PCE, TCE, VC | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B1-6 | 4/17/18 | 0845 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | |
| 2 | B1-14 | | 0853 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | |
| 3 | B2-5 | | 0930 | S | 4 | | | | | X | | | | | | | | | | | | | | ⊗ | | | |
| 4 | B2-10 | | 0935 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 5 | B2-14 | | 0945 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 6 | B3-7 | | 1010 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | |
| 7 | B3-15 | | 1020 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | |
| 8 | B4-6 | | 1050 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | |
| 9 | B4-9.5 | | 1055 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | |
| 10 | B4-16 | | 1105 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sandy Wells | SES | 4/17/18 | 1550 |
| Received | Van | Spdy | 4/17/18 | 1550 |
| Relinquished | Van | Spdy | 4/17/18 | 1630 |
| Received | Kellee Green | OSE | 4/17/18 | 1630 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**

~~*PCE~~ Reporting Limit = 0.025 mg/kg
† Preliminary Results > 1 mg/kg run TCLP

* - PCE, TCE, cis/trans-DCE, VC
⊗ Added 4/25/18 - DB (STA)

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SNW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-197

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C * PCE *1 | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | B5-6 | 4/18/18 | 1215 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 12 | B5-10 | | 1220 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 13 | B5-14 | | 1225 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 14 | B6-2.5 | | 1235 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | 10 |
| 15 | B6-7.5 | | 1240 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | 1 |
| 16 | B6-12 | | 1245 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | 1 |
| 17 | B7-6 | | 1320 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 18 | B7-10 | | 1322 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 19 | B7-14 | | 1330 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 20 | B8-6 | | 1400 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Mullen | SES | 4/17/18 | 1550 |
| Received | Van | Spdy | 4/17/18 | 1550 |
| Relinquished | Van | Spdy | 4/17/18 | 1630 |
| Received | Kathee Liseen | OSE | 4/17/18 | 1630 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
*~~PCE~~ Reporting limit = 0.025 mg/kg
*Any preliminary Results >1 mg/kg run TCLP

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody

Page 3 of 3

**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sandtech Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SMW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-197

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C * PCE | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | B8-10 | 4/17/18 | 1410 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 22 | B8-14 | | 1412 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 23 | B9-6 | | 1430 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 24 | B9-10 | | 1433 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 25 | B9-14 | | 1437 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 26 | B10-6 | | 1445 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 27 | B10-10 | | 1455 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 28 | B10-14 | | 1500 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| | | | | | 8 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Wilkins | SES | 4/17/18 | 1550 |
| Received | Van | Spdy | 4/17/18 | 1550 |
| Relinquished | Van | Spdy | 4/17/18 | 1630 |
| Received | Kellie Lyon | OSE | 4/17/18 | 1630 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
* ~~PCE~~ Reporting Limit = 0.025
J Preliminary Result > 14 mg/kg; run TCLP

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Sample/Cooler Receipt and Acceptance Checklist

Client: SES

Client Project Name/Number: 0651-002

OnSite Project Number: 04-197

Initiated by: KL

Date Initiated: 4/17/18

## 1.0 Cooler Verification

| | | | | | |
|---|---|---|---|---|---|
| 1.1 Were there custody seals on the outside of the cooler? | Yes | (No) | N/A | 1 2 3 4 | |
| 1.2 Were the custody seals intact? | Yes | No | (N/A) | 1 2 3 4 | |
| 1.3 Were the custody seals signed and dated by last custodian? | Yes | No | (N/A) | 1 2 3 4 | |
| 1.4 Were the samples delivered on ice or blue ice? | (Yes) | No | | 1 2 3 4 | |
| 1.5 Were samples received between 0-6 degrees Celsius? | Yes | (No) | Temperature: 9 | | |
| 1.6 Have shipping bills (if any) been attached to the back of this form? | Yes | (N/A) | | | |
| 1.7 How were the samples delivered? | Client | (Courier) | UPS/FedEx | OSE Pickup | Other |

## 2.0 Chain of Custody Verification

| | | | | |
|---|---|---|---|---|
| 2.1 Was a Chain of Custody submitted with the samples? | (Yes) | No | | 1 2 3 4 |
| 2.2 Was the COC legible and written in permanent ink? | (Yes) | No | | 1 2 3 4 |
| 2.3 Have samples been relinquished and accepted by each custodian? | (Yes) | No | | 1 2 3 4 |
| 2.4 Did the sample labels (ID, date, time, preservative) agree with COC? | (Yes) | No | | 1 2 3 4 |
| 2.5 Were all of the samples listed on the COC submitted? | (Yes) | No | | 1 2 3 4 |
| 2.6 Were any of the samples submitted omitted from the COC? | Yes | (No) | | 1 2 3 4 |

## 3.0 Sample Verification

| | | | | |
|---|---|---|---|---|
| 3.1 Were any sample containers broken or compromised? | Yes | (No) | | 1 2 3 4 |
| 3.2 Were any sample labels missing or illegible? | Yes | (No) | | 1 2 3 4 |
| 3.3 Have the correct containers been used for each analysis requested? | (Yes) | No | | 1 2 3 4 |
| 3.4 Have the samples been correctly preserved? | Yes | No | (N/A) | 1 2 3 4 |
| 3.5 Are volatiles samples free from headspace and bubbles greater than 6mm? | Yes | No | (N/A) | 1 2 3 4 |
| 3.6 Is there sufficient sample submitted to perform requested analyses? | (Yes) | No | | 1 2 3 4 |
| 3.7 Have any holding times already expired or will expire in 24 hours? | Yes | (No) | | 1 2 3 4 |
| 3.8 Was method 5035A used? | (Yes) | No | N/A | 1 2 3 4 |
| 3.9 If 5035A was used, which sampling option was used (#1, 2, or 3). | # | 1 | N/A | 1 2 3 4 |

**Explain any discrepancies:**

| |
|---|
| |
| |
| |
| |
| |
| |

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

***OnSite Environmental, Inc. #1804-215***

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 27, 2018

Tom Cammarata
Sound Earth Strategies
2811 Fairview Avenue East, Suite 2000
Seattle, WA 98102

Re: Analytical Data for Project 0651-002
Laboratory Reference No. 1804-215

Dear Tom:

Enclosed are the analytical results and associated quality control data for samples submitted on April 18, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**Case Narrative**

Samples were collected on April 18, 2018 and received by the laboratory on April 18, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260C Analysis

The client-requested PQL of 0.025 ppm is not achievable for some compounds for samples B13-6, B14-2.5, B14-14, B14-16, B15-6, B15-10 and B16-6 due to the necessary dilution of these samples.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B11-2.5** | | | | | |
| Laboratory ID: | 04-215-01 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | 0.59 | 0.090 | EPA 8260C | 4-20-18 | 4-20-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *105* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *104* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B11-6** | | | | | |
| Laboratory ID: | 04-215-02 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | 0.59 | 0.052 | EPA 8260C | 4-20-18 | 4-20-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *105* | *75-131* | | | | |
| *Toluene-d8* | *100* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B11-10** | | | | | |
| Laboratory ID: | 04-215-03 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *110* | *75-131* | | | | |
| *Toluene-d8* | *112* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *109* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B11-14** | | | | | |
| Laboratory ID: | 04-215-04 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *109* | *75-131* | | | | |
| *Toluene-d8* | *110* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *109* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B12-6** | | | | | |
| Laboratory ID: | 04-215-07 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | 1.1 | 0.051 | EPA 8260C | 4-20-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B12-10** | | | | | |
| Laboratory ID: | 04-215-08 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *93* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B12-14** | | | | | |
| Laboratory ID: | 04-215-09 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *106* | *75-131* | | | | |
| *Toluene-d8* | *107* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *105* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B13-6** | | | | | |
| Laboratory ID: | 04-215-12 | | | | | |
| Vinyl Chloride | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | 2.1 | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *104* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B13-10** | | | | | |
| Laboratory ID: | 04-215-13 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B13-14** | | | | | |
| Laboratory ID: | 04-215-14 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *101* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B14-2.5** | | | | | |
| Laboratory ID: | 04-215-16 | | | | | |
| Vinyl Chloride | ND | 0.079 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.079 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.079 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | ND | 0.079 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | 2.1 | 0.079 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *93* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B14-6** | | | | | |
| Laboratory ID: | 04-215-17 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | 0.67 | 0.062 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *94* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *94* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B14-10** | | | | | |
| Laboratory ID: | 04-215-18 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B14-14** | | | | | |
| Laboratory ID: | 04-215-19 | | | | | |
| Vinyl Chloride | ND | 0.043 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.043 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | 0.097 | 0.043 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | ND | 0.043 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | 0.83 | 0.043 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *103* | *75-131* | | | | |
| *Toluene-d8* | *100* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B14-16** | | | | | |
| Laboratory ID: | 04-215-20 | | | | | |
| Vinyl Chloride | ND | 0.044 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.044 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | 0.048 | 0.044 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | ND | 0.044 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | 1.1 | 0.044 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B15-6** | | | | | |
| Laboratory ID: | 04-215-21 | | | | | |
| Vinyl Chloride | ND | 0.052 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.052 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.052 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | 0.075 | 0.052 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | 0.84 | 0.052 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *104* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B15-10** | | | | | |
| Laboratory ID: | 04-215-22 | | | | | |
| Vinyl Chloride | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | 1.1 | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.054 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *103* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *98* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B15-14** | | | | | |
| Laboratory ID: | 04-215-23 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *93* | *75-131* | | | | |
| *Toluene-d8* | *93* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B16-6** | | | | | |
| Laboratory ID: | 04-215-26 | | | | | |
| Vinyl Chloride | ND | 0.047 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.047 | EPA 8260C | 4-20-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | 0.18 | 0.047 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Trichloroethene | 0.46 | 0.047 | EPA 8260C | 4-20-18 | 4-23-18 | |
| Tetrachloroethene | 0.90 | 0.047 | EPA 8260C | 4-20-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *102* | *75-131* | | | | |
| *Toluene-d8* | *100* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B16-10** | | | | | |
| Laboratory ID: | 04-215-27 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *95* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B16-14** | | | | | |
| Laboratory ID: | 04-215-28 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *105* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *106* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B17-6** | | | | | |
| Laboratory ID: | 04-215-31 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B17-10** | | | | | |
| Laboratory ID: | 04-215-32 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B17-14** | | | | | |
| Laboratory ID: | 04-215-33 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B18-6** | | | | | |
| Laboratory ID: | 04-215-36 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | 0.74 | 0.057 | EPA 8260C | 4-20-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *101* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B18-10** | | | | | |
| Laboratory ID: | 04-215-37 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *111* | *75-131* | | | | |
| *Toluene-d8* | *110* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *109* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B18-14** | | | | | |
| Laboratory ID: | 04-215-38 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0420S3 | | | | | |
| Vinyl Chloride | ND | 0.050 | EPA 8260C | 4-20-18 | 4-20-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-20-18 | 4-20-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.050 | EPA 8260C | 4-20-18 | 4-20-18 | |
| Trichloroethene | ND | 0.050 | EPA 8260C | 4-20-18 | 4-20-18 | |
| Tetrachloroethene | ND | 0.050 | EPA 8260C | 4-20-18 | 4-20-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *95* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0423S1 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-23-18 | 4-23-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *108* | *75-131* | | | | |
| *Toluene-d8* | *113* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *115* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0424S3 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-24-18 | 4-24-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *90* | *75-131* | | | | |
| *Toluene-d8* | *90* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0425S1 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *114* | *75-131* | | | | |
| *Toluene-d8* | *117* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *122* | *78-130* | | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0420S2 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0384** | **0.0373** | 0.0500 | 0.0500 | 77 | 75 | 58-126 | 3 | 20 | |
| Benzene | **0.0461** | **0.0461** | 0.0500 | 0.0500 | 92 | 92 | 72-122 | 0 | 19 | |
| Trichloroethene | **0.0468** | **0.0484** | 0.0500 | 0.0500 | 94 | 97 | 75-120 | 3 | 20 | |
| Toluene | **0.0455** | **0.0469** | 0.0500 | 0.0500 | 91 | 94 | 78-123 | 3 | 19 | |
| Chlorobenzene | **0.0442** | **0.0443** | 0.0500 | 0.0500 | 88 | 89 | 75-120 | 0 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *105* | *95* | *75-131* | | | |
| *Toluene-d8* | | | | | *104* | *96* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *108* | *99* | *78-130* | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0423S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0365** | **0.0355** | 0.0500 | 0.0500 | 73 | 71 | 58-126 | 3 | 20 | |
| Benzene | **0.0480** | **0.0447** | 0.0500 | 0.0500 | 96 | 89 | 72-122 | 7 | 19 | |
| Trichloroethene | **0.0488** | **0.0464** | 0.0500 | 0.0500 | 98 | 93 | 75-120 | 5 | 20 | |
| Toluene | **0.0480** | **0.0452** | 0.0500 | 0.0500 | 96 | 90 | 78-123 | 6 | 19 | |
| Chlorobenzene | **0.0450** | **0.0420** | 0.0500 | 0.0500 | 90 | 84 | 75-120 | 7 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *109* | *93* | *75-131* | | | |
| *Toluene-d8* | | | | | *112* | *93* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *115* | *97* | *78-130* | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0424S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0337** | **0.0331** | 0.0500 | 0.0500 | 67 | 66 | 58-126 | 2 | 20 | |
| Benzene | **0.0452** | **0.0448** | 0.0500 | 0.0500 | 90 | 90 | 72-122 | 1 | 19 | |
| Trichloroethene | **0.0463** | **0.0464** | 0.0500 | 0.0500 | 93 | 93 | 75-120 | 0 | 20 | |
| Toluene | **0.0444** | **0.0445** | 0.0500 | 0.0500 | 89 | 89 | 78-123 | 0 | 19 | |
| Chlorobenzene | **0.0420** | **0.0428** | 0.0500 | 0.0500 | 84 | 86 | 75-120 | 2 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *97* | *93* | *75-131* | | | |
| *Toluene-d8* | | | | | *98* | *94* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *102* | *97* | *78-130* | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0425S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0428** | **0.0416** | 0.0500 | 0.0500 | 86 | 83 | 58-126 | 3 | 20 | |
| Benzene | **0.0528** | **0.0518** | 0.0500 | 0.0500 | 106 | 104 | 72-122 | 2 | 19 | |
| Trichloroethene | **0.0512** | **0.0527** | 0.0500 | 0.0500 | 102 | 105 | 75-120 | 3 | 20 | |
| Toluene | **0.0521** | **0.0486** | 0.0500 | 0.0500 | 104 | 97 | 78-123 | 7 | 19 | |
| Chlorobenzene | **0.0490** | **0.0475** | 0.0500 | 0.0500 | 98 | 95 | 75-120 | 3 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *99* | *93* | *75-131* | | | |
| *Toluene-d8* | | | | | *97* | *91* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *102* | *96* | *78-130* | | | |

Date of Report: April 27, 2018
Samples Submitted: April 18, 2018
Laboratory Reference: 1804-215
Project: 0651-002

**% MOISTURE**

Date Analyzed: 4-24-18

| Client ID | Lab ID | % Moisture |
|---|---|---|
| B11-2.5 | 04-215-01 | 37 |
| B11-6 | 04-215-02 | 18 |
| B11-10 | 04-215-03 | 15 |
| B11-14 | 04-215-04 | 18 |
| B12-6 | 04-215-07 | 12 |
| B12-10 | 04-215-08 | 12 |
| B12-14 | 04-215-09 | 16 |
| B13-6 | 04-215-12 | 19 |
| B13-10 | 04-215-13 | 16 |
| B13-14 | 04-215-14 | 15 |
| B14-6 | 04-215-17 | 18 |
| B14-10 | 04-215-18 | 14 |
| B14-14 | 04-215-19 | 9 |
| B14-16 | 04-215-20 | 9 |
| B15-6 | 04-215-21 | 15 |
| B15-10 | 04-215-22 | 18 |
| B15-14 | 04-215-23 | 10 |
| B16-6 | 04-215-26 | 14 |
| B16-10 | 04-215-27 | 14 |
| B16-14 | 04-215-28 | 10 |
| B17-6 | 04-215-31 | 16 |
| B17-10 | 04-215-32 | 13 |
| B17-14 | 04-215-33 | 11 |
| B18-6 | 04-215-36 | 19 |
| B18-10 | 04-215-37 | 13 |
| B18-14 | 04-215-38 | 14 |

OnSite Environmental Inc.

**Data Qualifiers and Abbreviations**

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

# Chain of Custody



**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SNW. GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☑ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-215

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C PCE* | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | Hold | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B11-2.5 | 4/18/18 | 0840 | S | 4 | | | | | X | | | | | | | | | | | | | | | | X |
| 2 | B11-6 | | 0845 | | | | | | | X | | | | | | | | | | | | | | | | X |
| 3 | B11-10 | | 0852 | | | | | | | X | | | | | | | | | | | | | | | | X |
| 4 | B11-14 | | 0855 | | | | | | | X | | | | | | | | | | | | | | | | X |
| 5 | B11-16 | | 0903 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | B12-2.5 | | 0930 | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | B12-6 | | 0935 | | | | | | | X | | | | | | | | | | | | | | | | X |
| 8 | B12-10 | | 0937 | | | | | | | X | | | | | | | | | | | | | | | | X |
| 9 | B12-14 | | 0940 | | | | | | | X | | | | | | | | | | | | | | | | X |
| 10 | B12-16 | | 0950 | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Welte | SES | 4/18/18 | 1545 |
| Received | | Alpha | 4/18/18 | 1545 |
| Relinquished | | Alpha | 4/18/18 | 16:47 |
| Received | Katie Lacey | OSE | 4/18/18 | 1647 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
* PCE Reporting Limit = 0.025 mg/kg
T Preliminary Results > 14 mg/kg run TCLP
Report PCE, TCE, cis/trans 1,2 DCE and VC.
X added 4-19-18 KL

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0051-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SNW eGRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☑ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-215

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C PCE*† | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | 14/12 | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | B13-2.5 | 4/18/18 | 1035 | S | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | B13-6 | | 1040 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 13 | B13-10 | | 1042 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 14 | B13-14 | | 1055 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 15 | B13-16 | | 1105 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | B14-2.5 | | 1125 | | | | | | | X | | | | | | | | | | | | | | | | | |
| 17 | B14-6 | | 1130 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 18 | B14-10 | | 1135 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 19 | B14-12.1 | | 1140 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 20 | B14-16 | | 1150 | | | | | | | X | | | | | | | | | | | | | | | | | X |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Wells | SES | 4/18/18 | 1545 |
| Received | | Alpha | 4/18/18 | 1545 |
| Relinquished | | Alpha | 4/18/18 | 16:47 |
| Received | Dave Lewis | OSE | 4/18/18 | 1647 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
*PCE Reporting Limit = 0.025 mg/kg
† Preliminary Results >14 mg/kg from TCLP
report PCE, TCE, cis/trans 1,2 DCE and VC.
X added 4-19-18 KL

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0051-002
Project Name: Hearthstone
Project Manager: Tom Camarata
Sampled by: SNW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☑ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-215

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C PCE* + | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | Hold | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | B15-6 | 4/18/18 | 1230 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 22 | B15-10 | | 1232 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 23 | B15-14 | | 1235 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 24 | B15-16 | | 1245 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | B16-2.5 | | 1335 | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | B16-6 | | 1340 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 27 | B16-10 | | 1345 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 28 | B16-14 | | 1352 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 29 | B16-16 | | 1400 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | B17-25 | | 1415 | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Welte | SES | 4/18/18 | 1545 |
| Received | | Alpha | 4/18/18 | 1545 |
| Relinquished | | Alpha | 4/18/18 | 16:47 |
| Received | Bertha Lizcano | OSE | 4/18/18 | 1647 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
* PCE Reporting Limit = 0.025 mg/kg
T Preliminary Results >1 mg/kg run TCLP
report PCE, TCE, cis/trans 1,2 DCE and VC.
x added 4-19-18 KL

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Camarata
Sampled by: SNW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☑ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-215

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C * PCE | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | Hold | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | B17-6 | 4/18/18 | 1417 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 32 | B17-10 | | 1420 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 33 | B17-14 | | 1425 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 34 | B17-16 | | 1430 | | | | | | | ~~X~~ | ~~X~~ ICL | | | | | | | | | | | | | | | | |
| 35 | B18-2.5 | | 1437 | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | B18-6 | | 1442 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 37 | B18-10 | | 1445 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 38 | B18-14 | | 1450 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 39 | B18-16 | | 1455 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | SNW | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Wellik | ~~Sara~~ SES | 4/18/18 | 1545 |
| Received | | Alpha | 4/18/18 | 1545 |
| Relinquished | | Alpha | 4/18/18 | 16:47 |
| Received | Heather Lisowski | OSE | 4/18/18 | 1647 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
* PCE Reporting Limit 0.025 mg/kg
T Preliminary results >14 mg/kg run TCLP report PCE, ~~TCE~~, cis/trans 1,2 DCE and VC.
X added 4-19-18 ICL

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Sample/Cooler Receipt and Acceptance Checklist

Client: SES

Client Project Name/Number: 0651-002

OnSite Project Number: 04-215

Initiated by: KL

Date Initiated: 4/18/18

## 1.0 Cooler Verification

| | | | | | |
|---|---|---|---|---|---|
| 1.1 Were there custody seals on the outside of the cooler? | Yes | (No) | N/A | 1 2 3 4 | |
| 1.2 Were the custody seals intact? | Yes | No | (N/A) | 1 2 3 4 | |
| 1.3 Were the custody seals signed and dated by last custodian? | Yes | No | (N/A) | 1 2 3 4 | |
| 1.4 Were the samples delivered on ice or blue ice? | (Yes) | No | | 1 2 3 4 | |
| 1.5 Were samples received between 0-6 degrees Celsius? | (Yes) | No | Temperature: 1.3 | | |
| 1.6 Have shipping bills (if any) been attached to the back of this form? | Yes | (N/A) | | | |
| 1.7 How were the samples delivered? | Client | (Courier) | UPS/FedEx | OSE Pickup | Other |

## 2.0 Chain of Custody Verification

| | | | | |
|---|---|---|---|---|
| 2.1 Was a Chain of Custody submitted with the samples? | (Yes) | No | 1 2 3 4 | |
| 2.2 Was the COC legible and written in permanent ink? | (Yes) | No | 1 2 3 4 | |
| 2.3 Have samples been relinquished and accepted by each custodian? | (Yes) | No | 1 2 3 4 | |
| 2.4 Did the sample labels (ID, date, time, preservative) agree with COC? | (Yes) | No | 1 2 3 4 | |
| 2.5 Were all of the samples listed on the COC submitted? | (Yes) | No | 1 2 3 4 | |
| 2.6 Were any of the samples submitted omitted from the COC? | Yes | (No) | 1 2 3 4 | |

## 3.0 Sample Verification

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Were any sample containers broken or compromised? | Yes | (No) | | 1 2 3 4 | |
| 3.2 Were any sample labels missing or illegible? | Yes | (No) | | 1 2 3 4 | |
| 3.3 Have the correct containers been used for each analysis requested? | (Yes) | No | | 1 2 3 4 | |
| 3.4 Have the samples been correctly preserved? | Yes | No | (N/A) | 1 2 3 4 | |
| 3.5 Are volatiles samples free from headspace and bubbles greater than 6mm? | Yes | No | (N/A) | 1 2 3 4 | |
| 3.6 Is there sufficient sample submitted to perform requested analyses? | (Yes) | No | | 1 2 3 4 | |
| 3.7 Have any holding times already expired or will expire in 24 hours? | Yes | (No) | | 1 2 3 4 | |
| 3.8 Was method 5035A used? | (Yes) | No | N/A | 1 2 3 4 | |
| 3.9 If 5035A was used, which sampling option was used (#1, 2, or 3). | # 1 | | N/A | 1 2 3 4 | |

**Explain any discrepancies:**

| |
|---|
| |
| |
| |
| |
| |
| |

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

***OnSite Environmental, Inc. #1804-226***

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 1, 2018

Tom Cammarata
Sound Earth Strategies
2811 Fairview Avenue East, Suite 2000
Seattle, WA 98102

Re: Analytical Data for Project 0651-002
Laboratory Reference No. 1804-226

Dear Tom:

Enclosed are the analytical results and associated quality control data for samples submitted on April 19, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**Case Narrative**

Samples were collected on April 19, 2018 and received by the laboratory on April 19, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B19-6** | | | | | |
| Laboratory ID: | 04-226-02 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | 0.24 | 0.051 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *102* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B19-10** | | | | | |
| Laboratory ID: | 04-226-03 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B19-14** | | | | | |
| Laboratory ID: | 04-226-04 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B20-6** | | | | | |
| Laboratory ID: | 04-226-07 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | 0.40 | 0.058 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *93* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B20-10** | | | | | |
| Laboratory ID: | 04-226-08 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *113* | *75-131* | | | | |
| *Toluene-d8* | *113* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *110* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B20-14** | | | | | |
| Laboratory ID: | 04-226-09 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *101* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B21-6** | | | | | |
| Laboratory ID: | 04-226-12 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | 0.15 | 0.046 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *94* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *102* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B21-10** | | | | | |
| Laboratory ID: | 04-226-13 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *112* | *75-131* | | | | |
| *Toluene-d8* | *112* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *110* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B21-14** | | | | | |
| Laboratory ID: | 04-226-14 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *105* | *75-131* | | | | |
| *Toluene-d8* | *108* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *108* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B22-2.5** | | | | | |
| Laboratory ID: | 04-226-16 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | 0.041 | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *93* | *75-131* | | | | |
| *Toluene-d8* | *95* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *103* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B22-6** | | | | | |
| Laboratory ID: | 04-226-17 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | 0.025 | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *102* | *75-131* | | | | |
| *Toluene-d8* | *107* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *114* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B22-10** | | | | | |
| Laboratory ID: | 04-226-18 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *98* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B22-14** | | | | | |
| Laboratory ID: | 04-226-19 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *98* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B23-6** | | | | | |
| Laboratory ID: | 04-226-22 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *92* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B23-10** | | | | | |
| Laboratory ID: | 04-226-23 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *97* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *99* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B23-14** | | | | | |
| Laboratory ID: | 04-226-24 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *102* | *75-131* | | | | |
| *Toluene-d8* | *99* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *104* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B24-6** | | | | | |
| Laboratory ID: | 04-226-27 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *96* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B24-10** | | | | | |
| Laboratory ID: | 04-226-28 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *110* | *75-131* | | | | |
| *Toluene-d8* | *109* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *108* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B24-14** | | | | | |
| Laboratory ID: | 04-226-29 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *100* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *101* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B25-2.5** | | | | | |
| Laboratory ID: | 04-226-31 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *93* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *89* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B25-6** | | | | | |
| Laboratory ID: | 04-226-32 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *103* | *75-131* | | | | |
| *Toluene-d8* | *108* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *108* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B25-10** | | | | | |
| Laboratory ID: | 04-226-33 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *98* | *75-131* | | | | |
| *Toluene-d8* | *95* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B25-14** | | | | | |
| Laboratory ID: | 04-226-34 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B26-2.5** | | | | | |
| Laboratory ID: | 04-226-36 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Tetrachloroethene | 0.085 | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *91* | *75-131* | | | | |
| *Toluene-d8* | *93* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *91* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B26-6** | | | | | |
| Laboratory ID: | 04-226-37 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *92* | *75-131* | | | | |
| *Toluene-d8* | *91* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B26-10** | | | | | |
| Laboratory ID: | 04-226-38 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *97* | *75-131* | | | | |
| *Toluene-d8* | *95* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *95* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B26-14** | | | | | |
| Laboratory ID: | 04-226-39 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *121* | *75-131* | | | | |
| *Toluene-d8* | *122* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *121* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B26-16** | | | | | |
| Laboratory ID: | 04-226-40 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *96* | *75-131* | | | | |
| *Toluene-d8* | *96* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *100* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B27-2.5** | | | | | |
| Laboratory ID: | 04-226-41 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | 0.10 | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *93* | *75-131* | | | | |
| *Toluene-d8* | *94* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *86* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B27-6** | | | | | |
| Laboratory ID: | 04-226-42 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | 0.041 | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *90* | *75-131* | | | | |
| *Toluene-d8* | *93* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *97* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B27-10** | | | | | |
| Laboratory ID: | 04-226-43 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *99* | *75-131* | | | | |
| *Toluene-d8* | *95* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *94* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B27-14** | | | | | |
| Laboratory ID: | 04-226-44 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *106* | *75-131* | | | | |
| *Toluene-d8* | *107* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *105* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **B27-16** | | | | | |
| Laboratory ID: | 04-226-45 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *110* | *75-131* | | | | |
| *Toluene-d8* | *110* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *108* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0425S1 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-25-18 | 4-25-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *114* | *75-131* | | | | |
| *Toluene-d8* | *117* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *122* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0426S1 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-26-18 | 4-26-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *103* | *75-131* | | | | |
| *Toluene-d8* | *101* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *108* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0427S1 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-27-18 | 4-27-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *108* | *75-131* | | | | |
| *Toluene-d8* | *107* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *113* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**METHOD BLANK QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0430S1 | | | | | |
| Vinyl Chloride | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (trans) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| (cis) 1,2-Dichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Trichloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| Tetrachloroethene | ND | 0.025 | EPA 8260C | 4-30-18 | 4-30-18 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Dibromofluoromethane* | *121* | *75-131* | | | | |
| *Toluene-d8* | *123* | *83-130* | | | | |
| *4-Bromofluorobenzene* | *129* | *78-130* | | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0425S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0428** | **0.0416** | 0.0500 | 0.0500 | 86 | 83 | 58-126 | 3 | 20 | |
| Benzene | **0.0528** | **0.0518** | 0.0500 | 0.0500 | 106 | 104 | 72-122 | 2 | 19 | |
| Trichloroethene | **0.0512** | **0.0527** | 0.0500 | 0.0500 | 102 | 105 | 75-120 | 3 | 20 | |
| Toluene | **0.0521** | **0.0486** | 0.0500 | 0.0500 | 104 | 97 | 78-123 | 7 | 19 | |
| Chlorobenzene | **0.0490** | **0.0475** | 0.0500 | 0.0500 | 98 | 95 | 75-120 | 3 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *99* | *93* | *75-131* | | | |
| *Toluene-d8* | | | | | *97* | *91* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *102* | *96* | *78-130* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0426S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0398** | **0.0397** | 0.0500 | 0.0500 | 80 | 79 | 58-126 | 0 | 20 | |
| Benzene | **0.0524** | **0.0532** | 0.0500 | 0.0500 | 105 | 106 | 72-122 | 2 | 19 | |
| Trichloroethene | **0.0548** | **0.0561** | 0.0500 | 0.0500 | 110 | 112 | 75-120 | 2 | 20 | |
| Toluene | **0.0502** | **0.0506** | 0.0500 | 0.0500 | 100 | 101 | 78-123 | 1 | 19 | |
| Chlorobenzene | **0.0486** | **0.0481** | 0.0500 | 0.0500 | 97 | 96 | 75-120 | 1 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *101* | *101* | *75-131* | | | |
| *Toluene-d8* | | | | | *102* | *102* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *108* | *105* | *78-130* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0427S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0404** | **0.0398** | 0.0500 | 0.0500 | 81 | 80 | 58-126 | 1 | 20 | |
| Benzene | **0.0520** | **0.0529** | 0.0500 | 0.0500 | 104 | 106 | 72-122 | 2 | 19 | |
| Trichloroethene | **0.0545** | **0.0558** | 0.0500 | 0.0500 | 109 | 112 | 75-120 | 2 | 20 | |
| Toluene | **0.0500** | **0.0515** | 0.0500 | 0.0500 | 100 | 103 | 78-123 | 3 | 19 | |
| Chlorobenzene | **0.0474** | **0.0483** | 0.0500 | 0.0500 | 95 | 97 | 75-120 | 2 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *93* | *96* | *75-131* | | | |
| *Toluene-d8* | | | | | *92* | *97* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *95* | *100* | *78-130* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**VOLATILES EPA 8260C**
**SB/SBD QUALITY CONTROL**

Matrix: Soil
Units: mg/kg

| Analyte | Result | | Spike Level | | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPIKE BLANKS** | | | | | | | | | | |
| Laboratory ID: | SB0430S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| 1,1-Dichloroethene | **0.0350** | **0.0345** | 0.0500 | 0.0500 | 70 | 69 | 58-126 | 1 | 20 | |
| Benzene | **0.0529** | **0.0520** | 0.0500 | 0.0500 | 106 | 104 | 72-122 | 2 | 19 | |
| Trichloroethene | **0.0547** | **0.0533** | 0.0500 | 0.0500 | 109 | 107 | 75-120 | 3 | 20 | |
| Toluene | **0.0511** | **0.0493** | 0.0500 | 0.0500 | 102 | 99 | 78-123 | 4 | 19 | |
| Chlorobenzene | **0.0481** | **0.0468** | 0.0500 | 0.0500 | 96 | 94 | 75-120 | 3 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *Dibromofluoromethane* | | | | | *93* | *93* | *75-131* | | | |
| *Toluene-d8* | | | | | *95* | *94* | *83-130* | | | |
| *4-Bromofluorobenzene* | | | | | *102* | *102* | *78-130* | | | |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**% MOISTURE**

Date Analyzed: 4-26&27-18

| Client ID | Lab ID | % Moisture |
|---|---|---|
| B19-6 | 04-226-02 | 14 |
| B19-10 | 04-226-03 | 12 |
| B19-14 | 04-226-04 | 17 |
| B20-6 | 04-226-07 | 19 |
| B20-10 | 04-226-08 | 13 |
| B20-14 | 04-226-09 | 17 |
| B21-6 | 04-226-12 | 13 |
| B21-10 | 04-226-13 | 13 |
| B21-14 | 04-226-14 | 11 |
| B22-2.5 | 04-226-16 | 13 |
| B22-6 | 04-226-17 | 17 |
| B22-10 | 04-226-18 | 15 |
| B22-14 | 04-226-19 | 10 |
| B23-6 | 04-226-22 | 15 |
| B23-10 | 04-226-23 | 13 |
| B23-14 | 04-226-24 | 10 |
| B24-6 | 04-226-27 | 15 |
| B24-10 | 04-226-28 | 17 |
| B24-14 | 04-226-29 | 10 |
| B25-2.5 | 04-226-31 | 19 |
| B25-6 | 04-226-32 | 26 |
| B25-10 | 04-226-33 | 12 |
| B25-14 | 04-226-34 | 6 |
| B26-2.5 | 04-226-36 | 26 |
| B26-6 | 04-226-37 | 16 |
| B26-10 | 04-226-38 | 15 |
| B26-14 | 04-226-39 | 12 |

Date of Report: May 1, 2018
Samples Submitted: April 19, 2018
Laboratory Reference: 1804-226
Project: 0651-002

**% MOISTURE**

Date Analyzed: 4-26&27-18

| Client ID | Lab ID | % Moisture |
|---|---|---|
| B26-16 | 04-226-40 | 8 |
| B27-2.5 | 04-226-41 | 36 |
| B27-6 | 04-226-42 | 19 |
| B27-10 | 04-226-43 | 14 |
| B27-14 | 04-226-44 | 13 |
| B27-16 | 04-226-45 | 15 |

OnSite Environmental Inc.

**Data Qualifiers and Abbreviations**

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

# Chain of Custody

Page 1 of 5

**OnSite Environmental Inc.**
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearth Stone
Project Manager: Tom Cammarata
Sampled by: SMW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-226

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean up) PCE + BPEAC | Volatiles 8260C PCE* T PCN | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | Hold | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B19-2.5 | 4/14/18 | 0800 | S | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | B19-6 | | 0810 | | | | | | X | | | | | | | | | | | | | | | | | | X |
| 3 | B19-10 | | 0812 | | | | | | X | | | | | | | | | | | | | | | | | | X |
| 4 | B19-14 | | 0815 | | | | | | X | | | | | | | | | | | | | | | | | | X |
| 5 | B19-16 | | 0820 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | B20-2.5 | | 0840 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | B20-6 | | 0845 | | | | | | X | | | | | | | | | | | | | | | | | | X |
| 8 | B20-10 | | 0847 | | | | | | X | | | | | | | | | | | | | | | | | | X |
| 9 | B20-14 | | 0850 | | | | | | X | | | | | | | | | | | | | | | | | | X |
| 10 | B20-16 | | 0900 | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Welter | SES | 4/14/18 | 4:10 |
| Received | Van | SDEQ | 4/19/18 | 4:10 |
| Relinquished | Van | SDEQ | 4/19/18 | 1650 |
| Received | Kellie Lisai | OSE | 4/19/18 | 1650 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
* PCE Reporting Limit = 0.025 mg/kg
T Preliminary Results >14 mg/kg run TCLP.
X - Added 4/23/18. DB (STA)

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



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14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SNW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-226

| Lab ID | Sample Identification | Date Sampled | Time Sampled | Matrix | Number of Containers | NWTPH-HCID | NWTPH-Gx/BTEX | NWTPH-Gx | NWTPH-Dx (☐ Acid / SG Clean-up) | Volatiles 8260C PCE*† | Halogenated Volatiles 8260C | EDB EPA 8011 (Waters Only) | Semivolatiles 8270D/SIM (with low-level PAHs) | PAHs 8270D/SIM (low-level) | PCBs 8082A | Organochlorine Pesticides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals | Total MTCA Metals | TCLP Metals | HEM (oil and grease) 1664A | Hold | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | B21-2.5 | 4/9/18 | 0915 | S | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | B21-6 | | 0920 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 13 | B21-10 | | 0925 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 14 | B21-14 | | 0927 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 15 | B21-16 | | 0930 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | B22-2.5 | | 1000 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 17 | B22-6 | | 1005 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 18 | B22-10 | | 1007 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 19 | B22-14 | | 1012 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 20 | B22-16 | | 1015 | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Welter | SES | 4/9/18 | 1710 |
| Received | Van | spdy | 4/9/18 | 1710 |
| Relinquished | Van | spdy | 4/9/18 | 1650 |
| Received | Katie Lisewa | OSE | 4/9/18 | 1650 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
*PCE Reporting Limit = 0.025 mg/kg
† Preliminary Results >14 mg/kg run TCLP

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



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Company: Sound Earth Strategies
Project Number: 0651-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
Sampled by: SMW & GRM

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number: 04-226**

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | BD3-2.5 | 4/14/18 | 1030 | S | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 22 | BD3-6 | | 1033 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 23 | BD3-10 | | 1035 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 24 | BD3-14 | | 1040 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 25 | BD3-16 | | 1045 | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | BD4-2.5 | | 1200 | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | BD4-6 | | 1203 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 28 | BD4-10 | | 1205 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 29 | BD4-14 | | 1210 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 30 | BD4-16 | | 1215 | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Welte | SES | 4/19/18 | 4:10 |
| Received | Van | Sply | 4/19/18 | 4:10 |
| Relinquished | Van | Sply | 4/19/18 | 16:50 |
| Received | Heather Lisowski | OSE | 4/19/18 | 1650 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
*PCE Reporting Limit = 0.025 mg/kg
† Preliminary Results > 14 mg/kg run TCLP

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



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(Check One)
☐ Same Day ☐ 1 Day
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☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-226

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | B25-2.5 | 4/19/18 | 1225 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 32 | B25-6 | | 1230 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 33 | B25-10 | | 1233 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 34 | B25-14 | | 1235 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 35 | B25-16 | | 1240 | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | B26-2.5 | | 1307 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 37 | B26-6 | | 1315 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 38 | B26-10 | | 1317 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 39 | B26-14 | | 1320 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 40 | B26-16 | | 1325 | | | | | | | X | | | | | | | | | | | | | | | | | X |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Welter | SES | 4/19/18 | 4:10 |
| Received | Van | Spdy | 4/19/18 | 4:10 |
| Relinquished | Van | Spdy | 4/19/18 | 1650 |
| Received | Matthew Lissau | OSE | 4/19/18 | 1650 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
*PCE Reporting Limit = 0.025 mg/kg
† Preliminary Results >14 mg/kg run TCLP

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Chain of Custody



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Company: Sound Earth Strategies
Project Number: 0051-002
Project Name: Hearthstone
Project Manager: Tom Cammarata
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**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 04-226

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | B27-2.5 | 4/19/18 | 1337 | S | 4 | | | | | X | | | | | | | | | | | | | | | | | X |
| 42 | B27-6 | | 1342 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 43 | B27-10 | | 1345 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 44 | B27-14 | | 1350 | | | | | | | X | | | | | | | | | | | | | | | | | X |
| 45 | B27-16 | | 1355 | | | | | | | X | | | | | | | | | | | | | | | | | X |

SNW

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | Sarah Wilkes | SES | 4/19/18 | 4:10 |
| Received | Van | Spdy | 4/19/18 | 4:10 |
| Relinquished | Van | Spdy | 4/19/18 | 1650 |
| Received | Heather Lisowski | OSE | 4/19/18 | 1650 |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
*PCE Reporting Limit = 0.025 mg/kg
T Preliminary Results >14 mg/kg in TCLP

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

# Sample/Cooler Receipt and Acceptance Checklist

Client: SES

Client Project Name/Number: 0651-002

OnSite Project Number: 04-226

Initiated by: MW

Date Initiated: 4/19/18

## 1.0 Cooler Verification

| | | | | |
|---|---|---|---|---|
| 1.1 Were there custody seals on the outside of the cooler? | Yes | No | N/A | 1 2 3 4 |
| 1.2 Were the custody seals intact? | Yes | No | N/A | 1 2 3 4 |
| 1.3 Were the custody seals signed and dated by last custodian? | Yes | No | N/A | 1 2 3 4 |
| 1.4 Were the samples delivered on ice or blue ice? | Yes | No | | 1 2 3 4 |
| 1.5 Were samples received between 0-6 degrees Celsius? | Yes | No | Temperature: 5,5 | |
| 1.6 Have shipping bills (if any) been attached to the back of this form? | Yes | N/A | | |
| 1.7 How were the samples delivered? | Client | Courier | UPS/FedEx | OSE Pickup Other |

## 2.0 Chain of Custody Verification

| | | | |
|---|---|---|---|
| 2.1 Was a Chain of Custody submitted with the samples? | Yes | No | 1 2 3 4 |
| 2.2 Was the COC legible and written in permanent ink? | Yes | No | 1 2 3 4 |
| 2.3 Have samples been relinquished and accepted by each custodian? | Yes | No | 1 2 3 4 |
| 2.4 Did the sample labels (ID, date, time, preservative) agree with COC? | Yes | No | 1 2 3 4 |
| 2.5 Were all of the samples listed on the COC submitted? | Yes | No | 1 2 3 4 |
| 2.6 Were any of the samples submitted omitted from the COC? | Yes | No | 1 2 3 4 |

## 3.0 Sample Verification

| | | | | |
|---|---|---|---|---|
| 3.1 Were any sample containers broken or compromised? | Yes | No | | 1 2 3 4 |
| 3.2 Were any sample labels missing or illegible? | Yes | No | | 1 2 3 4 |
| 3.3 Have the correct containers been used for each analysis requested? | Yes | No | | 1 2 3 4 |
| 3.4 Have the samples been correctly preserved? | Yes | No | N/A | 1 2 3 4 |
| 3.5 Are volatiles samples free from headspace and bubbles greater than 6mm? | Yes | No | N/A | 1 2 3 4 |
| 3.6 Is there sufficient sample submitted to perform requested analyses? | Yes | No | | 1 2 3 4 |
| 3.7 Have any holding times already expired or will expire in 24 hours? | Yes | No | | 1 2 3 4 |
| 3.8 Was method 5035A used? | Yes | No | N/A | 1 2 3 4 |
| 3.9 If 5035A was used, which sampling option was used (#1, 2, or 3). | # | 1 | N/A | 1 2 3 4 |

## Explain any discrepancies:

| |
|---|
| |
| |
| |
| |
| |
| |

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed