FARALLON consulting

975 5th Avenue Northwest, Issaquah, Washington 98027
Tel: (425) 295-0800 Fax: (425) 295-0850
www.farallonconsulting.com

CLEANUP ACTION PROGRESS REPORT
JUNE 2008 TO JUNE 2010

ALLISON'S NORGE VILLAGE (AKA EASTSIDE LAUNDRY)
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON
VCP# SW0370

Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

Farallon PN: 663-010

For:
Allison's Norge Village Dry Cleaners
Mr. Michael Allison
3845 South Warner Street
Tacoma, Washington 98409

October 25, 2010

Prepared by:

Heidi Fischer
Project Engineer

Reviewed by:

J. Riley Conkin, L.G., L.H.G.
Principal Geologist

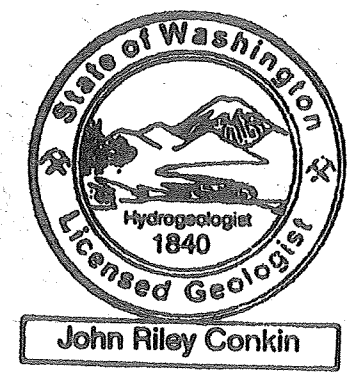


TABLE OF CONTENTS

1.0 INTRODUCTION 1-1
1.1 SITE DESCRIPTION AND BACKGROUND 1-1
1.2 REPORT ORGANIZATION 1-2

2.0 REMEDIAL INVESTIGATION ACTIVITIES 2-1
2.1 BACKGROUND 2-1
2.2 SCOPE OF WORK 2-1
2.3 RESULTS 2-2

3.0 GROUNDWATER MONITORING AND SAMPLING 3-1
3.1 SCOPE OF WORK 3-1
3.2 RESULTS 3-1
3.2.1 November 2009 3-2
3.2.2 March 2010 3-2
3.2.3 June 2010 3-2

4.0 SOIL VAPOR EXTRACTION SYSTEM OPERATIONS AND MAINTENANCE 4-1
4.1 JUNE - OCTOBER 2008 4-1
4.2 OCTOBER 2008 - SEPTEMBER 2009 4-1
4.3 SEPTEMBER 2009 - JUNE 2010 4-1
4.4 RESULTS 4-2

5.0 CONCLUSIONS 5-1
5.1 FUTURE WORK 5-1

6.0 LIMITATIONS 6-1

FIGURES

Figure 1 *Site Location Map*
Figure 2 *Site Plan Showing Soil Analytical Results*
Figure 3 *Site Plan Showing Groundwater Analytical Results*

TABLES

Table 1 *Summary of Soil Analytical Results*
Table 2 *Well Construction Summary*
Table 3 *Groundwater Elevation Data Summary*
Table 4 *Summary of Groundwater Analytical Results*
Table 5 *Summary of Soil Vapor Extraction System Operation*

APPENDICES

Appendix A Boring/Well Construction Logs

Appendix B Laboratory Analytical Reports

1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Cleanup Action Progress Report to provide a summary of the remedial investigation and cleanup action activities conducted between June 2008 and June 2010 for the former Allison's Norge Village Dry Cleaners site located at 120 Northeast Turner Street in Olympia, Washington (herein referred to as the Site) (Figure 1). The remedial investigation was conducted to complete the characterization and to address releases of tetrachloroethene (PCE) attributable to former dry cleaning operations at the Site that have impacted soil and groundwater at concentrations exceeding the Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels as established in Chapter 173-340 of the Washington Administrative Code (WAC 173-340). The remedial investigation activities were conducted to address a data gap identified by the Washington State Department of Ecology (Ecology) in the evaluation of the lateral extent of PCE in groundwater at concentrations exceeding the MTCA Method A cleanup levels on the southwestern portion of the Site.

The cleanup action is being conducted in accordance with MTCA as an independent remedial action under the Ecology Voluntary Cleanup Program. The cleanup action at the Site consists of the operation and maintenance of a soil vapor extraction (SVE) remediation system and compliance groundwater sampling. This report presents a brief summary of the project background, summarizes the remedial investigation activities performed during the reporting period, describes the compliance monitoring activities conducted between June 2008 and June 2010, and presents the future work planned at the Site.

1.1 SITE DESCRIPTION AND BACKGROUND

The Site currently is developed with a single-story brick masonry building on the northwestern portion of the Site (Figure 2). The building was constructed in the early 1960s and is developed with four separate suites. The tenant suites are currently occupied by Eastside Laundry, a barbershop, and an insurance broker. Eastside Laundry occupies the northern and southern suites. Dry cleaning operations have been conducted at the Site since approximately 1962. Both historical and current dry cleaning operations have been located in the northern suite. According to Eastside Laundry, the southern suite is used only for laundry pick-up and drop-off.

The SVE system was installed at the Site in 2006 to reduce concentrations of PCE in soil and reduce the source of PCE to groundwater. Operation of the SVE system was initiated at the Site in April 2007.

A detailed summary of the SVE system construction, installation, and operation was presented in the *Cleanup Action Status Report, August 2006 to August 2007 Allison's Norge Village (aka Eastside Laundry), 120 Northeast Turner Street, Olympia, Washington* dated October 19, 2007, prepared by Farallon. Cleanup action activities conducted between September 2007 and May 2008 were summarized in the letter regarding Cleanup Action Status Report – September 2007 through January 2008, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington dated March 26, 2008, prepared by Farallon; and the letter regarding Cleanup

Action Progress Report – February through May 2008, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington dated July 29, 2008, prepared by Farallon. These documents should be referenced for additional background information and specific details pertaining to the cleanup action.

1.2 REPORT ORGANIZATION

This Cleanup Action Progress Report has been organized into the following sections:

- Section 2 presents a description of the remedial investigation activities and results conducted between June 2008 and June 2010;
- Section 3 presents a description of the methods and results of the quarterly groundwater compliance monitoring and sampling conducted during the reporting period;
- Section 4 provides a description of the operations and performance of the SVE system;
- Section 5 presents the conclusions; and
- Section 6 includes Farallon's standard limitations.

2.0 REMEDIAL INVESTIGATION ACTIVITIES

This section presents a summary of the remedial investigation activities conducted between June 2008 and June 2010. The remedial investigation activities consisted of the advancement of two borings for the construction of monitoring wells, and collection of soil and groundwater samples for laboratory analysis to evaluate the nature and extent of concentrations of PCE in groundwater exceeding the MTCA Method A cleanup level.

2.1 BACKGROUND

The cleanup action was designed based on the results of the remedial investigation activities and the conceptual site model presented in the *Draft Cleanup Action Plan, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington* dated December 14, 2005, prepared by Farallon. The conceptual site model was updated with the results of subsequent investigation activities conducted by Farallon in 2006. The remedial investigation activities performed during this reporting period were conducted to address a data gap identified by Ecology in the November 19, 2007 letter regarding *Opinion under WAC 173-340-515(5) on Remedial Action(s) for the following Hazardous Waste Site: Name: Allison's Norge Village (a.k.a. Eastside Laundry)* (Opinion Letter), and discussed during a meeting between Ecology and Farallon on September 29, 2009. In the Opinion Letter, Ecology requested that additional investigation of groundwater quality and evaluation of groundwater flow direction be conducted south-southwest of the primary source area to complete characterization of groundwater at the Site.

2.2 SCOPE OF WORK

Monitoring wells MW-12 and MW-13 were installed at the Site in October 2009 to address the data gap identified by Ecology. The scope of work to address the data gap was provided to Ecology in the letter regarding Compliance Monitoring Well Installation dated October 6, 2009, prepared by Farallon, which was subsequently approved by the Ecology VCP Project Manager, Mr. Thomas Middleton. The monitoring wells were installed south-southwest of the primary source area in the City of Olympia right-of-way on the west sidewalk along Turner Street (Figure 2). Farallon obtained a Right of Way/Obstruction Permit from the City of Olympia for drilling and construction of the monitoring wells.

The drilling and well construction was conducted by Cascade Drilling, Inc. of Woodinville, Washington between October 12 and 15, 2009 using sonic drilling technology under the observation of a Farallon Geologist. The borings were logged continuously from the ground surface to the total depth of the boring and described in accordance with the Unified Soil Classification System (USCS). The soil was observed during the drilling activities for any visual or olfactory signs of contamination, and volatile organic vapors in each soil sample were measured using a photoionization detector (PID). Headspace analysis was conducted by placing soil from each sample interval into a resealable plastic bag and allowing the sample to warm for several minutes. The probe of the PID was then inserted into the bag and the highest reading obtained over an approximately 30-second interval was recorded. Soil samples were retained for potential laboratory analysis in 10-foot intervals beginning at a depth of 30 feet bgs to the total

depth of each boring. The soil conditions above a depth of 30 feet bgs were previously evaluated and characterized by collection and laboratory analysis of soil samples from borings EB-12 and EB-13 (Figure 2). The USCS symbol, visual and olfactory notations for the samples, and PID readings were recorded on boring log forms, which are provided in Appendix A.

The monitoring wells were constructed in accordance with the *Minimum Standards for Construction and Maintenance of Wells*, WAC 173-160. The monitoring wells were constructed of 2-inch, Schedule 40 polyvinyl chloride (PVC) well casing flush-threaded to 5 feet of 0.020-inch slotted, Schedule 40 PVC well screen set at the base of the water-bearing zone, as indicated by the observation of the basal confining clay encountered during drilling. The clay was observed at depths of 109 feet below ground surface (bgs) and 103 feet bgs at monitoring wells MW-12 and MW-13, respectively, which is consistent with the depth to clay previously observed at monitoring wells MW-9, MW-10, and MW-11. The bottom and top of the monitoring well were fitted with a threaded PVC bottom cap and a locking compression-fit well cap, respectively. The annulus of each monitoring well was filled with #2/12 silica sand filter pack to 1 foot above the top of the screened interval. A bentonite seal was installed above the sand filter pack. The monitoring wells were completed at the surface with a flush-mount, traffic-rated well box set in concrete.

Following installation, each monitoring well was developed using a combination of surging and bailing until approximately five submerged casing volumes of groundwater were removed from the well, and the quantity of fine-grained sediment in the extracted groundwater stabilized. Following installation of the monitoring wells, a licensed surveyor surveyed the top of each monitoring well casing to an accuracy of 0.01 foot relative to the established survey datum for the Site.

The soil samples collected during the well drilling activities were placed into laboratory-prepared sample containers, which were placed on ice in a cooler and transported to OnSite Environmental, Inc. under standard chain-of-custody protocols. Two soil samples collected from each boring were submitted to OnSite Environmental, Inc. for laboratory analysis of halogenated volatile organic compounds (HVOCs) by U.S. Environmental Protection Agency (EPA) Method 8260B.

The soil cuttings, decontamination water, and purge water generated during the drilling and development activities were placed into appropriately labeled 55-gallon drums and temporarily stored on the Site pending waste profiling. The drums were transported off the Site by Kleen Environmental Technologies, Inc. for disposal at the Columbia Ridge Landfill in Arlington, Oregon.

2.3 RESULTS

Monitoring wells MW-12 and MW-13 were installed to evaluate the lateral extent of PCE in groundwater southwest of the primary source area (Figure 2). The well construction details and field measurements and observations are summarized on the borings logs (Appendix A). The laboratory analytical results of soil samples collected from the borings are summarized on Table 1. The laboratory analytical reports are provided in Appendix B.

The laboratory analytical results of soil samples collected from monitoring well MW-12 at depths of 50 and 70 feet bgs and from monitoring well MW-13 at depths of 30 and 40 feet bgs detected PCE at concentrations ranging from 0.0011 to 0.12 milligrams per kilogram (mg/kg) (Table 1). All concentrations are below the MTCA Method A cleanup level of 0.05 mg/kg, with the exception of the soil sample collected from monitoring well MW-12 at a depth of 50 feet bgs (Figure 2; Table 1).

The low concentrations of PCE detected in shallow subsurface soil likely are attributable to vapor phase migration from the source area. Although the PCE concentrations in soil slightly exceed the MTCA Method A cleanup level at borings MW-12, EB-12, and EB-13, these areas are within the radius of influence of SVE wells and the concentrations of PCE in soil are expected to be removed with continued operation of the SVE system. The results of groundwater monitoring and sampling at monitoring wells MW-12 and MW-13 are discussed in Section 3.2.

3.0 GROUNDWATER MONITORING AND SAMPLING

This section summarizes the compliance groundwater monitoring and sampling conducted at the Site between June 2008 and June 2010, which included three groundwater monitoring and sampling events. The well construction details, groundwater level measurements and calculated groundwater surface elevations, and laboratory analytical results are presented on Tables 2 through 4, respectively. The laboratory analytical reports are included in Appendix B.

3.1 SCOPE OF WORK

Compliance sampling conducted at the Site between June 2008 and June 2010 included groundwater monitoring and sampling at monitoring wells MW-12 and MW-13 in November 2009 following their installation. Groundwater monitoring and sampling events at Site groundwater monitoring wells, including monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13, were conducted in March 2010 and June 2010.

Upon personnel arrival at the Site, monitoring wells MW-2 through MW-13 were opened to allow equilibration of water levels with the atmospheric pressure for a minimum of 15 minutes prior to obtaining groundwater level measurements. Groundwater levels were measured to an accuracy of 0.01 foot using an electric water-level meter to the surveyed location on the top of the well casing. Groundwater level measurements were taken at the monitoring wells within a 2-hour period. Reusable equipment was decontaminated between uses at each location

Groundwater monitoring and sampling were conducted in accordance with the EPA guidance document *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* dated April 1996. The well purging and sampling was performed using a bladder pump with a dedicated bladder and polyethylene tubing at flow rates ranging from 100 to 300 milliliters per minute. The tubing intake was placed at approximately mid-screen in each monitoring well. During purging, water quality was monitored using a YSI water quality system equipped with a flow-through cell. The water quality parameters that were monitored and recorded included temperature, pH, specific conductance, oxidation-reduction potential, and dissolved oxygen. The wells were purged until the pH, temperature, and specific conductance stabilized. Following purging, groundwater samples were collected directly from the tubing into laboratory-prepared containers, placed on ice in a cooler, and transported to OnSite Environmental, Inc. under standard chain-of-custody protocols for laboratory analysis of HVOCs by EPA Method 2860B.

Purge water generated during the groundwater sampling event was placed in an appropriately labeled 55-gallon steel drum and stored on the Site pending waste profiling and proper disposal.

3.2 RESULTS

The results of the November 2009 and the March and June 2010 groundwater monitoring and sampling events are summarized in the following subsections.

3.2.1 November 2009

Groundwater levels measured on November 9, 2009 ranged from 81.95 feet below the top of the monitoring well casing (TOC) in monitoring well MW-9 to 86.59 feet below TOC in monitoring well MW-7, with calculated groundwater surface elevations ranging from 114.47 to 115.89 feet, relative to an arbitrary datum of 200 feet (Table 3).

The November 2009 groundwater monitoring and sampling event included collection and laboratory analysis of groundwater samples from newly installed monitoring wells MW-12 and MW-13. The laboratory analytical results detected concentrations of PCE of 0.29 micrograms per liter (µg/l) in the groundwater sample collected from monitoring well MW-12, which is below the MTCA Method A cleanup level of 5 µg/l (Table 4). Concentrations of PCE were not reported above the laboratory practical quantitation limit (PQL) in the groundwater sample collected from monitoring well MW-13 (Table 4).

3.2.2 March 2010

Groundwater levels measured on March 15, 2010 ranged from 74.97 feet below TOC in monitoring well MW-2 to 78.38 feet below TOC in monitoring well MW-7, with calculated groundwater surface elevations ranging from 122.15 to 124.63 feet, relative to an arbitrary datum of 200 feet (Table 3).

The March 2010 groundwater monitoring and sampling event included collection and laboratory analysis of groundwater samples from monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13. The laboratory analytical results detected concentrations of PCE ranging from 5.7 to 270 µg/l in groundwater samples collected from monitoring wells MW-2, MW-5, and MW-11, exceeding the MTCA Method A cleanup level of 5 µg/l (Table 4). The detected concentration of PCE in the groundwater sample collected from monitoring well MW-7 was below the MTCA Method A cleanup level of 5 µg/l (Table 4). Concentrations of PCE were not reported above the laboratory PQL in the groundwater samples collected from monitoring wells MW-9, MW-10, MW-12, or MW-13 (Table 4).

3.2.3 June 2010

Groundwater levels measured on June 21, 2010 ranged from 74.73 feet below TOC in monitoring well MW-9 to 78.61 feet below TOC in monitoring well MW-7, with calculated groundwater surface elevations ranging from 121.77 to 124.27 feet, relative to an arbitrary datum of 200 feet (Table 3).

The June 2010 groundwater monitoring and sampling event included collection and laboratory analysis of groundwater samples from monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13. The laboratory analytical results detected concentrations of PCE of 230 µg/l and 60 µg/l in groundwater samples collected from monitoring wells MW-2 and MW-5, respectively, exceeding the MTCA Method A cleanup level of 5 µg/l (Table 4). The detected concentrations of PCE in groundwater samples collected from monitoring wells MW-7 and MW-11 were below the MTCA Method A cleanup level of 5 µg/l (Table 4). Concentrations of PCE

were not reported above the laboratory PQL in groundwater samples collected from monitoring wells MW-9, MW-10, MW-12, or MW-13 (Table 4).

4.0 SOIL VAPOR EXTRACTION SYSTEM OPERATIONS AND MAINTENANCE

Farallon has performed routine operation and maintenance (O&M) of the SVE system since system startup. Routine O&M consists of measuring and recording the following:

- The system vacuum;
- Air flow rates for individual wells;
- Concentrations of PCE in emissions from individual SVE wells; and
- Concentrations of PCE in emissions from the SVE system both pre- and post-treatment.

The SVE system operated between June and October 2008 before it was shut down for changeout of carbon in the treatment canister. The SVE system did not operate between October 2008 and September 2009 but was restarted in September 2009 and has operated nearly continuously through June 2010. A summary of the SVE system operations and maintenance is provided in the following subsections. A summary of SVE system performance and SVE emission measurements is provided in Table 5.

4.1 JUNE - OCTOBER 2008

The SVE system operated for a total of approximately 94 days between June and October 2008 prior to shutdown on October 28, 2008 to replace the carbon in the first carbon canister. During that time period, the SVE system operated with a total vacuum of approximately 27 inches of water (Table 5). The average flow rate from each operating SVE well was 43.5 cubic feet per minute. Concentrations of PCE were measured in individual SVE wells ranging from 4 to 12 parts per million volume (Table 5). Based on flow rates to individual SVE wells and measured concentrations of PCE in individual SVE wells, the SVE system settings were modified to maximize flow from SVE wells that were withdrawing a greater mass of PCE. The SVE wells with low rates of PCE removal were not operated to allow greater flow to those with higher rates of PCE removal. A calculated total of 141.3 pounds of PCE was removed from the soil between June and October 2008 (Table 5).

4.2 OCTOBER 2008 - SEPTEMBER 2009

The SVE system did not operate between October 28, 2008 and September 8, 2009 pending approval of the scope of work and cost estimate for changeout of the carbon, ongoing operation of the SVE system, and ongoing compliance monitoring.

4.3 SEPTEMBER 2009 - JUNE 2010

The SVE system was restarted on September 9, 2009 and operated nearly continuously through June 2010, with the exception of a brief period in December 2009 when freezing temperatures prevented operation. The SVE system operated for a total duration of approximately 233 days between September 9, 2009 and June 14, 2010. During that time period, the SVE system operated with a total vacuum ranging from 25.3 to 34.9 inches of water (Table 5). The average

flow rate from each operating SVE well ranged from 33.1 to 40.6 cubic feet per minute (Table 5). Concentrations of PCE were measured in individual SVE wells ranging from 0.02 to 5 parts per million volume (Table 5). Based on flow rates to individual SVE wells and measured concentrations of PCE in individual SVE wells, a calculated total of 55.15 pounds of PCE was removed from the soil between September 9, 2009 and June 14, 2010.

4.4 RESULTS

The SVE system continues to produce positive removal rates of PCE from the soil in the vadose zone. The cleanup action activities conducted to date have achieved the following results:

- Removal of a calculated 571 pounds of PCE from soil in the vadose zone;
- Mitigation of the potential risk to human health through the soil to indoor air pathway; and
- Reduction of the mass flux of PCE from soil and soil vapor to groundwater.

The SVE system will be operated continuously until asymptotic trends in the mass of PCE removal from the subsurface are observed. The SVE system settings will be modified quarterly to maximize PCE removal from the vadose zone and evaluate the continued effectiveness of operation of the SVE system. Based on the current calculated removal rates, Farallon anticipates an additional 6 to 9 months of SVE system operation.

5.0 CONCLUSIONS

Monitoring wells MW-12 and MW-13 were installed to evaluate the extent of PCE in soil and groundwater to the south-southwest of the source area at the Site in response to a request from Ecology to address a data gap in the Site characterization. Concentrations of PCE were not detected above the MTCA Method A cleanup level in soil samples collected and analyzed from monitoring well MW-13. The lateral and vertical extent of PCE in soil at concentrations exceeding the MTCA Method A cleanup level has been delineated to the southwest of the source area. Low concentrations of PCE were detected in soil above the MTCA Method A cleanup level at boring MW-12 that are consistent with the analytical results of soil samples collected from proximate boring EB-13. The detected concentrations of PCE in the vicinity of monitoring well MW-12 are likely attributable to vapor-phase transport of PCE in the vadose zone, and within the radius of influence of the SVE system.

The results of compliance groundwater monitoring and sampling at the Site detected concentrations of PCE in groundwater samples collected from monitoring wells MW-2, MW-5, and MW-11 during one or more of the sampling events conducted between June 2008 and June 2010 (Figure 3). The groundwater analytical results are similar to results of previous groundwater monitoring and sampling events at each of the monitoring wells (Table 4).

The extent of PCE in groundwater exceeding the MTCA Method A cleanup levels is delineated down-gradient of the source area by the laboratory analytical results of groundwater samples collected from monitoring wells MW-9, MW-10, MW-12, and MW-13 (Figure 3). The results of the remedial investigation activities conducted between June 2008 and June 2010 have met the requirements of MTCA and complete the characterization of concentrations of PCE in groundwater exceeding the MTCA Method A cleanup level.

The SVE system has removed an estimated total of 571 pounds of PCE from the vadose zone (Table 5). The SVE system will operate for an additional 6 to 9 months to maximize the removal of PCE from the vadose zone.

5.1 FUTURE WORK

The next groundwater monitoring and sampling event will be conducted at the Site in December 2010. Farallon will continue to operate the SVE system and to monitor the SVE system operations on a quarterly basis. The operational settings will be modified to maximize the total SVE system vacuum and focus on SVE wells with the greatest measured mass removal rates. The next O&M event is scheduled for September 2010.

6.0 LIMITATIONS

The conclusions and recommendations contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations:

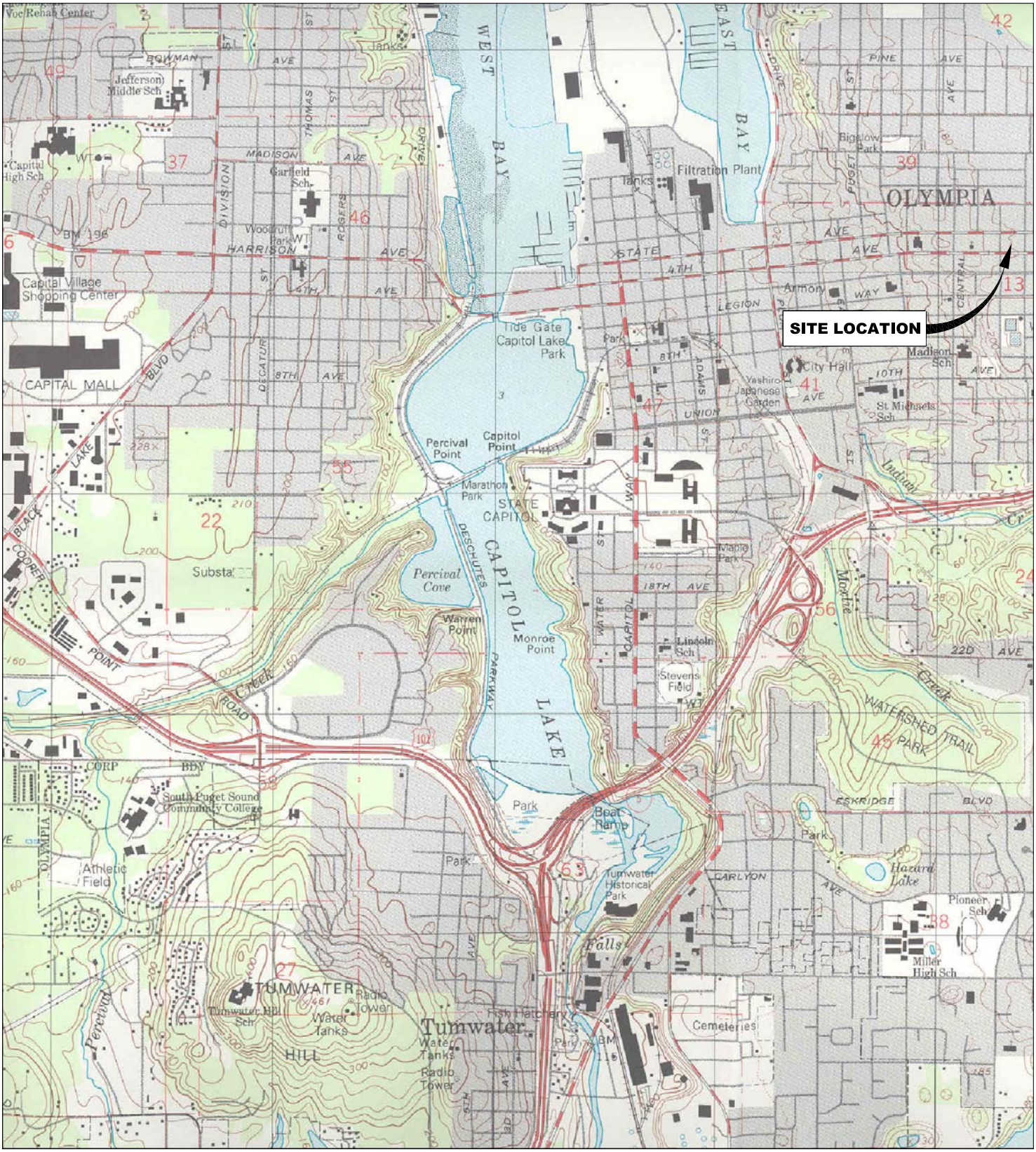
- **Accuracy of Information.** Certain information utilized by Farallon in this report/assessment has been obtained, reviewed, and evaluated from various sources believed to be reliable, including the local health districts, fire departments, and the previously discussed interviews. Although Farallon's conclusions, opinions, and recommendations are based in part on such information, Farallon's services did not include the verification of its accuracy or authenticity. Should such information prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

- **Reconnaissance.** Farallon performed a reconnaissance of the site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions, while other areas received limited attention or were inaccessible at the time of our reconnaissance.

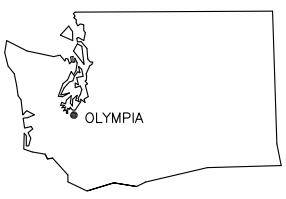
FIGURES

CLEANUP ACTION PROGRESS REPORT
June 2008 to June 2010
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010



REFERENCE: 7.5 MINUTE USGS QUADRANGLE TUMWATER, WASHINGTON. DATED 1997





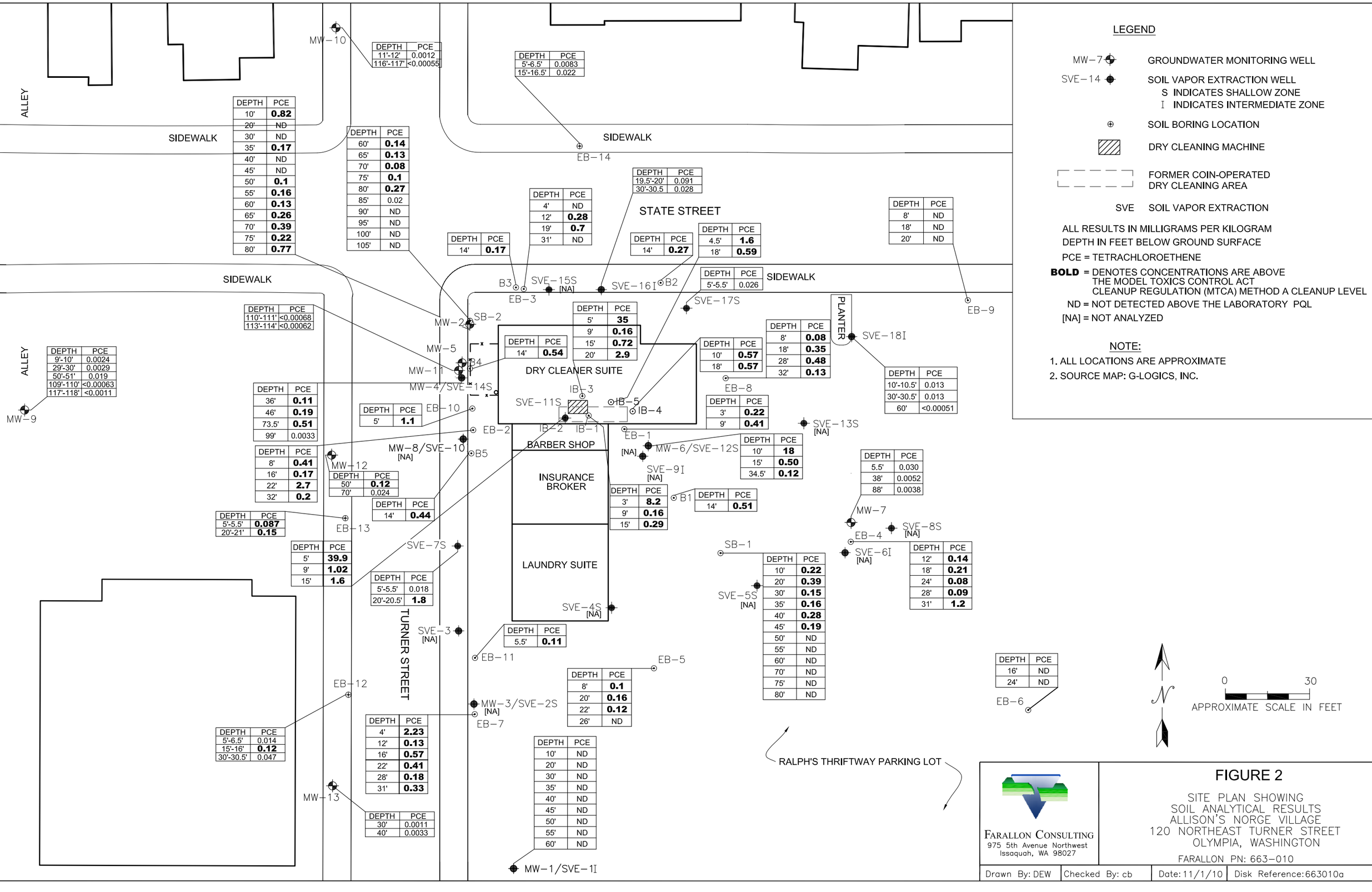
FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 1

SITE LOCATION MAP
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: DEW	Checked By: RC	Date: 11/1/10	Disk Reference: 663010a



DEPTH	PCE
11'-12'	0.0012
116'-117'	<0.00055

DEPTH	PCE
5'-6.5'	0.0083
15'-16.5'	0.022

DEPTH	PCE
10'	**0.82**
20'	ND
30'	ND
35'	**0.17**
40'	ND
45'	ND
50'	**0.1**
55'	**0.16**
60'	**0.13**
65'	**0.26**
70'	**0.39**
75'	**0.22**
80'	**0.77**

DEPTH	PCE
60'	**0.14**
65'	**0.13**
70'	**0.08**
75'	**0.1**
80'	**0.27**
85'	0.02
90'	ND
95'	ND
100'	ND
105'	ND

DEPTH	PCE
19.5'-20'	0.091
30'-30.5	0.028

DEPTH	PCE
4'	ND
12'	**0.28**
19'	**0.7**
31'	ND

DEPTH	PCE
14'	**0.17**

DEPTH	PCE
14'	**0.27**

DEPTH	PCE
4.5'	**1.6**
18'	**0.59**

DEPTH	PCE
5'-5.5'	0.026

DEPTH	PCE
8'	ND
18'	ND
20'	ND

DEPTH	PCE
110'-111'	<0.00068
113'-114'	<0.00062

DEPTH	PCE
5'	**35**
9'	**0.16**
15'	**0.72**
20'	**2.9**

DEPTH	PCE
14'	**0.54**

DEPTH	PCE
10'	**0.57**
18'	**0.57**

DEPTH	PCE
8'	**0.08**
18'	**0.35**
28'	**0.48**
32'	**0.13**

DEPTH	PCE
10'-10.5'	0.013
30'-30.5'	0.013
60'	<0.00051

DEPTH	PCE
9'-10'	0.0024
29'-30'	0.0029
50'-51'	0.019
109'-110'	<0.00063
117'-118'	<0.0011

DEPTH	PCE
36'	**0.11**
46'	**0.19**
73.5'	**0.51**
99'	0.0033

DEPTH	PCE
5'	**1.1**

DEPTH	PCE
3'	**0.22**
9'	**0.41**

DEPTH	PCE
8'	**0.41**
16'	**0.17**
22'	**2.7**
32'	**0.2**

DEPTH	PCE
50'	**0.12**
70'	0.024

DEPTH	PCE
14'	**0.44**

DEPTH	PCE
10'	**18**
15'	**0.50**
34.5'	**0.12**

DEPTH	PCE
3'	**8.2**
9'	**0.16**
15'	**0.29**

DEPTH	PCE
14'	**0.51**

DEPTH	PCE
5'-5.5'	**0.087**
20'-21'	**0.15**

DEPTH	PCE
5.5'	0.030
38'	0.0052
88'	0.0038

DEPTH	PCE
5'	**39.9**
9'	**1.02**
15'	**1.6**

DEPTH	PCE
5'-5.5'	0.018
20'-20.5'	**1.8**

DEPTH	PCE
10'	**0.22**
20'	**0.39**
30'	**0.15**
35'	**0.16**
40'	**0.28**
45'	**0.19**
50'	ND
55'	ND
60'	ND
70'	ND
75'	ND
80'	ND

DEPTH	PCE
12'	**0.14**
18'	**0.21**
24'	**0.08**
28'	**0.09**
31'	**1.2**

DEPTH	PCE
5.5'	**0.11**

DEPTH	PCE
8'	**0.1**
20'	**0.16**
22'	**0.12**
26'	ND

DEPTH	PCE
16'	ND
24'	ND

DEPTH	PCE
5'-6.5'	0.014
15'-16'	**0.12**
30'-30.5'	0.047

DEPTH	PCE
4'	**2.23**
12'	**0.13**
16'	**0.57**
22'	**0.41**
28'	**0.18**
31'	**0.33**

DEPTH	PCE
30'	0.0011
40'	0.0033

DEPTH	PCE
10'	ND
20'	ND
30'	ND
35'	ND
40'	ND
45'	ND
50'	ND
55'	ND
60'	ND

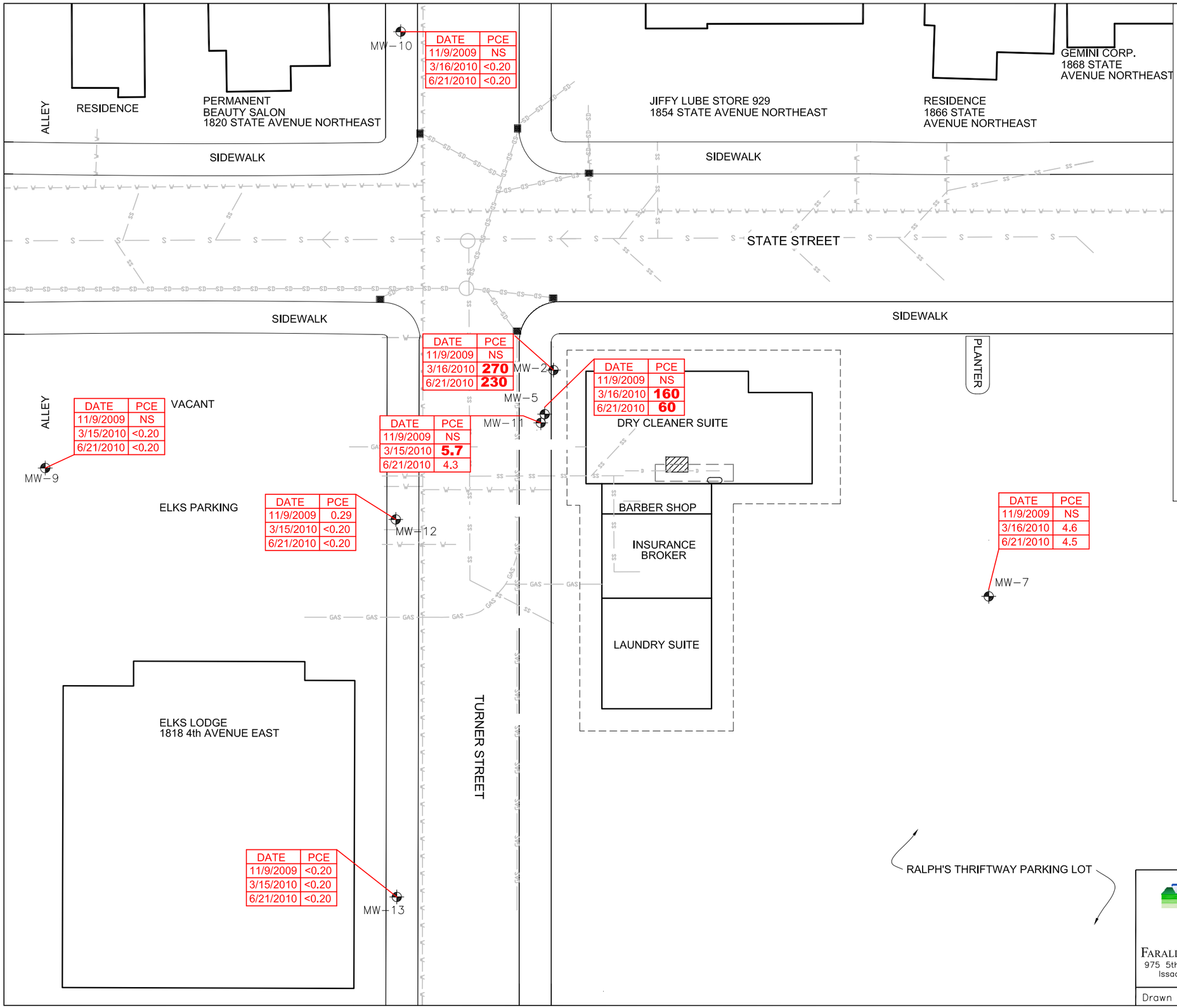
FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 2

SITE PLAN SHOWING
SOIL ANALYTICAL RESULTS
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: DEW	Checked By: cb	Date: 11/1/10	Disk Reference: 663010a



LEGEND

- MW-7 — GROUNDWATER MONITORING WELL
- DRY CLEANING MACHINE
- FORMER COIN-OPERATED DRY CLEANING AREA
- ROOF LINE
- FLOOR DRAIN
- SANITARY SEWER MAIN AND DIRECTION OF FLOW
- SIDE SEWER
- WATER MAIN
- STORMDRAIN
- NATURAL GAS
- CATCH BASIN
- MANHOLE

ALL RESULTS IN MICROGRAMS PER LITER
PCE = TETRACHLOROETHENE
BOLD = DENOTES CONCENTRATIONS ARE ABOVE THE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) METHOD A CLEANUP LEVEL
< = INDICATES PCE NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT
NS = NOT SAMPLED

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE
2. SOURCE MAP: G-LOGICS, INC.

FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 3

SITE PLAN SHOWING
GROUNDWATER ANALYTICAL RESULTS
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: DEW	Checked By: CB	Date: 11/1/10	Disk Reference: 663010a

TABLES

CLEANUP ACTION PROGRESS REPORT
June 2008 to June 2010
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

Table 1
Summary of Soil Analytical Results
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Location Identification	Sample Identification	Sample Date	Depth (feet)[1]	Analytical Results (milligrams per kilogram) [2]				
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
EB-12	EB12-5-6.5	8/31/2006	5-6.5	0.014	<0.001	<0.001	<0.001	<0.001
	EB12-15-16	8/31/2006	15-16	**0.12**	<0.001	<0.001	<0.001	<0.001
	EB12-30-30.5	8/31/2006	30-30.5	0.047	<0.001	<0.001	<0.001	<0.001
EB-13	EB13-5-5.5	8/31/2006	5-5.5	**0.087**	<0.0013	<0.0013	<0.0013	<0.0013
	EB13-20-21	8/31/2006	20-21	**0.15**	<0.001	<0.001	<0.001	<0.001
MW-12	MW12-50	10/14/2009	50	**0.12**	<0.00082	<0.00082	<0.00082	<0.00082
	MW12-70	10/14/2009	70	0.024	<0.00067	<0.00067	<0.00067	<0.00067
MW-13	MW13-30	10/12/2009	30	0.0011	<0.00083	<0.00083	<0.00083	<0.00083
	MW13-40	10/12/2009	40	0.0033	<0.00085	<0.00085	<0.00085	<0.00085
MTCA Cleanup Levels for Soil				**0.05[3]**	**0.03[3]**	**800[4]**	**1,600[4]**	**240[4]**

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

PCE = tetrachloroethene

TCE = trichloroethene

[1]Depth in feet below ground surface.

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

[3]Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

[4]Washington State Department of Ecology Cleanup Levels and Risk Calculations under the Washington State Model Toxics Control Act Cleanup Regulation, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx

Table 2
Well Construction Summary
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date Installed	Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Casing Diameter (inches)	Depth of Screened Interval (feet)[2]
Deep Zone Monitoring Wells					
MW-2	8/22/2001	199.6	95.16	2.0	80-105
MW-5	12/10/2005	199.77	97.69	2.0	85-100
MW-7	12/14/2005	201.88	97.51	2.0	85-100
MW-9	8/24/2006	197.73	116.5	2.0	111.5-116.5
MW-10	8/25/2006	199.18	114	2.0	109-114
MW-11	8/22/2006	199.55	116	2.0	110-115
MW-12	10/15/2009	199.66	109	2.0	104-109
MW-13	10/13/2009	199.83	103	2.0	98-103
Shallow Zone SVE Wells					
SVE-2S (MW-3)	12/8/2004	—	19.79	4	4-20
SVE-4S	9/14/2006	—	20.00	4	3-20
SVE-5S	9/14/2006	—	20.00	4	3-20
SVE-7S	9/15/2006	—	20.00	4	3-20
SVE-8S	9/14/2006	—	20.00	4	3-20
SVE-11S		—	20.00	4	3-20
SVE-12S (MW-6)	12/8/2004	—	24.30	4	7.5-12.5
SVE-13S	9/20/2006	—	20.00	4	3-20
SVE-14S (MW-4)	12/8/2004	—	12.81	4	8-24
SVE-15S	9/18/2006	—	20.00	4	3-20
SVE-17S	9/18/2006	—	20.00	4	3-20
Intermediate Zone SVE Wells					
SVE-1I (MW-1)	8/2/2004	200.46	60.44	2	50-60
SVE-3I	9/15/2006	—	60.00	4	25-60
SVE-6I	9/19/2006	—	60.00	4	25-60
SVE-9I	9/15/2006	—	60.00	4	25-60
SVE-10I (MW-8)	6/22/2005	—	60.55	4	35-60
SVE-16I	9/18/2006	—	60.00	4	25-60
SVE-18I	9/19/2006	—	60.00	4	25-60

NOTES:

— = casing elevation not surveyed

SVE = soil vapor extraction

[1]Elevation of top of casing using relative datum of 200 feet. Surveyed elevations by Professional Land Surveyors, Inc.

[2]Depth below top of well casing.

[3]Elevation in feet relative to survey datum.

Table 3
Groundwater Elevation Data Summary
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date Measured	Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
MW-1	8/1/2001	200.46	60.43	53.4	147.06
	8/24/2001			59.1	141.36
	12/23/2004			59.36	141.10
	1/26/2005			59.34	141.12
	6/23/2005			59.06	141.40
	9/16/2006			NE	NC
	7/10/2007			58.73[4]	NC
MW-2	8/24/2001	199.60	96.85	84.50	115.10
	12/23/2004			86.35	113.25
	1/26/2005			85.40	114.20
	6/23/2005			76.95	122.65
	9/16/2006			81.80	117.80
	7/10/2007			76.38	123.22
	10/10/2007			83.14	116.46
	1/10/2008			82.42	117.18
	4/28/2008			72.99	126.61
	11/9/2009			83.75	115.85
	3/15/2010			74.97	124.63
	6/21/2010			75.33	124.27
MW-3	12/23/2004	—	19.79	NE	NC
	1/26/2005			NE	NC
	6/23/2005			NE	NC
	9/16/2006			NE	NC
	7/10/2007			NE	NC
	3/16/2010			NE	NC
	6/21/2010			NE	NC
MW-4	12/23/2004	—	24.30	NE	NC
	1/26/2005			NE	NC
	6/23/2005			NE	NC
	9/16/2006			NE	NC
	7/10/2007			NE	NC
	3/16/2010			NE	NC
	6/21/2010			NE	NC
MW-5	12/23/2004	199.77	100.25	86.10	113.67
	1/26/2005			85.21	114.56
	6/23/2005			77.47	122.30
	9/16/2006			82.03	117.74
	7/10/2007			77.09	122.68
	10/10/2007			83.3	116.47
	1/10/2008			82.61	117.16
	4/28/2008			73.38	126.39
	11/9/2009			83.95	115.82
	3/15/2010			75.45	124.32
	6/21/2010			75.85	123.92

Table 3
Groundwater Elevation Data Summary
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date Measured	Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
MW-6	12/23/2004	—	12.94	NE	NC
	1/26/2005			NE	NC
	6/23/2005			NE	NC
	9/16/2006			12.76	NC
	7/10/2007			12.73	NC
	3/16/2010			12.93	NC
	6/21/2010			12.65	NC
MW-7	12/23/2004	201.88	98.60	88.73	113.15
	1/26/2005			87.91	113.97
	6/23/2005			80.22	121.66
	9/16/2006			84.68	117.20
	7/10/2007			79.76	122.12
	10/10/2007			85.85	116.03
	1/10/2008			85.40	116.48
	4/28/2008			76.19	125.69
	11/9/2009			86.59	115.29
	3/15/2010			78.38	123.50
	6/21/2010			78.61	123.27
MW-8	6/23/2005	—	60.55	NE	NC
	9/16/2006			59.86	NC
	7/10/2007			59.92	NC
	3/16/2010			59.86	NC
	6/21/2010			58.82	NC
MW-9	9/16/2006	197.73	115.91	86.40	111.33
	7/10/2007			75.90	121.83
	10/10/2007			81.45	116.28
	1/10/2008			80.16	117.57
	4/28/2008			72.47	125.26
	11/9/2009			81.95	115.78
	3/15/2010			74.29	123.44
	6/21/2010			74.73	123.00
MW-10	9/16/2006	199.18	114.00	82.50	116.68
	7/10/2007			77.63	121.55
	10/10/2007			83.6	115.58
	1/10/2008			83.10	116.08
	4/28/2008			74.02	125.16
	11/9/2009			84.39	114.79
	3/15/2010			76.23	122.95
	6/21/2010			76.44	122.74
MW-11	9/16/2006	199.55	115.04	82.62	116.93
	7/10/2007			77.78	121.77
	10/10/2007			83.86	115.69
	1/10/2008			83.20	116.35
	4/28/2008			74.25	125.30
	11/9/2009			NM	NC
	3/15/2010			76.48	123.07
	6/21/2010			76.69	122.86

Table 3
Groundwater Elevation Data Summary
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date Measured	Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
MW-12	11/9/2009	199.66	108.44	85.19	114.47
	3/15/2010			77.51	122.15
	6/21/2010			77.89	121.77
MW-13	11/9/2009	199.83	102.77	84.92	114.91
	3/15/2010			77.10	122.73
	6/21/2010			77.68	122.15

NOTES:

— = casing elevation not surveyed

NC = not calculated

NE = not encountered

NM = not measured

[1]Elevation of top of casing using relative datum of 200 feet. Surveyed Elevations by Professional Land Surveyors, Inc.

[2]Depth below top of well casing.

[3]Elevation in feet relative to survey datum.

[4]Water measured in monitoring wells is assumed to be condensate that has accumulated in well caps and is not indicative of groundwater.

Table 4
Summary of Groundwater Analytical Results
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Monitoring Well	Date Sampled	Sampled By	Screened Zone (feet)[1]	Analytical Results (micrograms per liter)[2]				
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MW-1	8/7/2001	G-Logics	50'-60'	**480**	ND	ND	ND	ND
	8/24/2001	G-Logics		**84**	ND	ND	ND	ND
	12/14/2004	Farallon		**170**	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	8/24/2001	G-Logics	80'-105'	**11**	ND	ND	ND	ND
	8/24/2001[3]	G-Logics		**12**	ND	ND	ND	ND
	12/23/2004	Farallon		**27**	< 0.20	< 0.20	< 0.20	< 0.20
	9/17/2006	Farallon		**400**	<2.0	<2.0	<2.0	<2.0
	7/10/2007	Farallon		**920**	<4.0	<4.0	<4.0	<4.0
	10/10/2007	Farallon		**530**	<4.0	<4.0	<4.0	<4.0
	1/10/2008	Farallon		**270**	<2.0	<2.0	<2.0	<2.0
	4/29/2008	Farallon		**480**	<4.0	<4.0	<4.0	<4.0
	3/16/2010	Farallon		**270**	<2.0	<2.0	<2.0	<2.0
	6/21/2010	Farallon		**230**	<2.0	<2.0	<2.0	<2.0
MW-5	12/14/2004	Farallon	85'-100'	**56**	< 0.40	< 0.40	< 0.40	< 0.40
	9/17/2006	Farallon		**74**	<0.40	<0.40	<0.40	<0.40
	7/10/2007	Farallon		**53**	<0.40	<0.40	<0.40	<0.40
	10/10/2007	Farallon		**170**	<1.0	<1.0	<1.0	<1.0
	1/10/2008	Farallon		**290**	<2.0	<2.0	<2.0	<2.0
	4/29/2008	Farallon		**170**	<1.0	<1.0	<1.0	<1.0
	3/16/2010	Farallon		**160**	<1.0	<1.0	<1.0	<1.0
	6/21/2010	Farallon		**60**	<0.20	<0.20	<0.20	<0.20
MW-7	12/14/2004	Farallon	85'-100'	**7.0**	< 0.20	< 0.20	< 0.20	< 0.20
	9/17/2006	Farallon		**7.3**	<0.20	<0.20	<0.20	<0.20
	7/10/2007	Farallon		**35**	<0.20	<0.20	<0.20	<0.20
	10/10/2007	Farallon		**17**	<0.20	<0.20	<0.20	<0.20
	1/10/2008	Farallon		**11**	<0.20	<0.20	<0.20	<0.20
	4/29/2008	Farallon		**11**	<0.20	<0.20	<0.20	<0.20
	3/16/2010	Farallon		4.6	<0.20	<0.20	<0.20	<0.20
	6/21/2010	Farallon		4.5	<0.20	<0.20	<0.20	<0.20
MW-9	9/16/2006	Farallon	111.5-116.5	<0.20	<0.20	<0.20	<0.20	<0.20
	7/10/2007	Farallon		0.29	<0.20	<0.20	<0.20	<0.20
	10/10/2007	Farallon		<0.24	<0.20	<0.20	<0.20	<0.20
	1/10/2008	Farallon		0.6	<0.20	<0.20	<0.20	<0.20
	4/29/2008	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/15/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	6/21/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
MW-10	9/16/2006	Farallon	109-114	<0.20	<0.20	<0.20	<0.20	<0.20
	7/10/2007	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	10/10/2007	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	1/10/2008	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	4/29/2008	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/16/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	6/21/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20

Table 4
Summary of Groundwater Analytical Results
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Monitoring Well	Date Sampled	Sampled By	Screened Zone (feet)[1]	Analytical Results (micrograms per liter)[2] PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MW-11	9/16/2006	Farallon	110-115	0.42	<0.20	<0.20	<0.20	<0.20
	7/10/2007	Farallon		**9**	<0.20	<0.20	<0.20	<0.20
	10/10/2007	Farallon		**21**	<0.20	<0.20	<0.20	<0.20
	1/11/2008	Farallon		**14**	<0.20	<0.20	<0.20	<0.20
	4/29/2008	Farallon		**15**	<0.20	<0.20	<0.20	<0.20
	3/15/2010	Farallon		**5.7**	<0.20	<0.20	<0.20	<0.20
	6/21/2010	Farallon		4.3	<0.20	<0.20	<0.20	<0.20
MW-12	11/9/2009	Farallon	104-109	0.29	<0.20	<0.20	<0.20	<0.20
	3/15/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	6/21/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
MW-13	11/9/2009	Farallon	98-103	<0.20	<0.20	<0.20	<0.20	<0.20
	3/15/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	6/21/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
MTCA Cleanup Levels for Groundwater				**5**[4]	**5**[4]	**80**[5]	**160**[5]	**0.2**[4]

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

[1]Depth in feet below ground surface.

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

[3]Duplicate sample.

[4]Washington State Department of Ecology Model Toxics Control Act Cleanup Regulation (MTCA) Method A Groundwater Cleanup Level, Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

[5]MTCA Cleanup Levels and Risk Calculations, Standard Method B Values for Groundwater, https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx

Farallon = Farallon Consulting, L.L.C.

ND = not detected

PCE = tetrachloroethene

TCE = trichloroethene

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	4/4/2007 (avg)	25	0.00	0.00	0.00	3.10	21.36	--	--	--	
SVE-2S	4/4/2007 (avg)	25	12.00	0.32	33.50	31.25	215.31	--	--	--	
SVE-3I	4/4/2007 (avg)	25	15.13	0.56	30.19	71.00	489.19	--	--	--	Lab Data: Air-3I = 190 µg/l
SVE-4S	4/4/2007 (avg)	25	14.00	0.51	29.01	111.50	768.24	--	--	--	
SVE-5S	4/4/2007 (avg)	25	7.25	0.48	29.61	41.50	285.94	--	--	--	
SVE-6I	4/4/2007 (avg)	25	7.75	0.01	26.69	15.50	106.80	--	--	--	
SVE-7S	4/4/2007 (avg)	25	16.00	0.59	31.33	225.00	1550.25	--	--	--	Lab Data: Air-7S = 380 µg/l
SVE-8S	4/4/2007 (avg)	25	6.00	0.43	27.14	7.50	51.68	--	--	--	
SVE-9I	4/4/2007 (avg)	25	10.75	0.41	23.69	107.50	740.68	--	--	--	
SVE-10I	4/4/2007 (avg)	25	18.50	0.44	25.12	120.50	830.25	--	--	--	
SVE-11S	4/4/2007 (avg)	25	19.38	0.00	16.00	400.00	2756.00	--	--	--	Lab Data: Air-11S = 700 µg/l
SVE-11H	4/4/2007 (avg)	25	0.00	0.00	17.00	159.00	1095.51	--	--	--	
SVE-12S	4/4/2007 (avg)	25	13.00	0.33	23.69	237.50	1636.38	--	--	--	Lab Data: Air-12S = 190 µg/l
SVE-13S	4/4/2007 (avg)	25	9.25	0.48	30.19	37.50	258.38	--	--	--	
SVE-14S	4/4/2007 (avg)	25	13.25	1.59	45.10	160.00	1102.40	--	--	--	
SVE-15S	4/4/2007 (avg)	25	11.25	1.08	44.30	89.00	613.21	--	--	--	
SVE-16I	4/4/2007 (avg)	25	10.50	0.66	32.97	36.00	248.04	--	--	--	Lab Data: Air-16I = 100 µg/l
SVE-17S	4/4/2007 (avg)	25	11.38	0.67	34.02	40.50	279.05	--	--	--	
SVE-18I	4/4/2007 (avg)	25	10.88	0.00	0.00	5.75	39.62	--	--	--	Lab Data: Total SVE System, PCE = 37 µg/l
SVE-1I	4/11/2007	25	--	--	--	--	--	--	0	0	Well Not Operating
SVE-2S	4/11/2007	25	--	--	--	--	--	--	0	0	Well Not Operating
SVE-3I	4/11/2007	25	--	0.43	38.32	4.5	31.0	282.43	6.28	6.28	
SVE-4S	4/11/2007	25	--	0.49	41.45	3	20.7	463.31	10.30	10.30	
SVE-5S	4/11/2007	25	--	--	--	--	--	--	0	0	Well Not Operating
SVE-6I	4/11/2007	25	--	0.18	25.12	8	55.1	57.63	1.28	1.28	Estimated PCE removal based on 4/4/2007 and 5/11/2007 values
SVE-7S	4/11/2007	25	--	0.44	39.28	17	117.1	927.95	20.62	20.62	Lab Data: Air-7S = 42 µg/l
SVE-8S	4/11/2007	25	--	--	--	--	--	--	0	0	Well Not Operating
SVE-9I	4/11/2007	25	--	0.3	32.43	7	48.2	362.48	8.06	8.06	
SVE-10I	4/11/2007	25	--	0.27	30.77	3.5	24.1	372.47	8.28	8.28	
SVE-11S	4/11/2007	25	0	--	--	--	--	--	0	0	No flow upon arrival, Lab Data: Air-11S = 190 µg/l
SVE-11H	4/11/2007	25	0	--	--	--	--	--	0	0	No flow upon arrival, Lab Data: Air-11H = 59 µg/l
SVE-12S	4/11/2007	25	--	0.28	31.33	6.5	44.8	746.26	16.58	16.58	
SVE-13S	4/11/2007	25	--	--	--	--	--	--	0	0	Well Not Operating
SVE-14S	4/11/2007	25	--	1.05	60.7	18	124.0	1054.74	23.44	23.44	Lab Data: Air-14S = 38 µg/l
SVE-15S	4/11/2007	25	--	1.2	59.2	3.5	24.1	534.57	11.88	11.88	
SVE-16I	4/11/2007	25	--	0.59	45.5	4	27.6	177.67	3.95	3.95	Lab Data: Air-16I = 12 µg/l
SVE-17S	4/11/2007	25	--	--	--	--	--	--	0	0	Well Not Operating
SVE-18I	4/11/2007	25	--	0.14	22.16	--	--	24.88	0.55	0.55	Estimated PCE removal based on 4/4/2007 calculated average
TOTAL REMOVED THROUGH 4/11/2007 - FIRST WEEK OF OPERATION										**111.21**	Lab Data: Total SVE System Pre-Carbon, PCE = 40 µg/l, Mid Carbon 1 and 2, PCE = <1.0 µg/l

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	4/23/2007	32	--	--	--	--	--	--	0	0	Well Not Operating
SVE-2S	4/23/2007	32	--	--	--	--	--	--	0	0	Well Not Operating
SVE-3I	4/23/2007	32	--	1	59.2	5.7	39.3	58.95	2.25	8.52	
SVE-4S	4/23/2007	32	--	--	--	--	--	--	0	10.30	Well Not Operating
SVE-5S	4/23/2007	32	--	--	--	--	--	--	0	0	Well Not Operating
SVE-6I	4/23/2007	32	--	--	--	--	--	--	0	1.28	Well Not Operating
SVE-7S	4/23/2007	32	--	0.82	53.6	9	62.0	136.04	5.18	25.80	
SVE-8S	4/23/2007	32	--	--	--	--	--	--	0	0	Well Not Operating
SVE-9I	4/23/2007	32	--	0.64	47.4	9	62.0	74.03	2.82	10.88	
SVE-10I	4/23/2007	32	--	0.06	14.5	7.2	49.6	15.15	0.58	8.85	hard to get flow reading use to moisture
SVE-11S	4/23/2007	32	--	--	9.374	3	20.7	5.49	0	0	hot wire amp conversion
SVE-11H	4/23/2007	32	--	1.5	72.5	7.8	53.7	110.41	4.21	4.21	
SVE-12S	4/23/2007	32	--	0.22	27.77	4.5	31.0	24.40	0.54	17.13	moisture suspect - used 5/11 concentration to estimate removal amount
SVE-13S	4/23/2007	32	--	--	--	--	--	--	0	0	Well Not Operating
SVE-14S	4/23/2007	32	--	2.2	87.8	9	62.0	231.42	8.82	32.26	
SVE-15S	4/23/2007	32	--	0	0	2.8	19.3	0.00	0.00	11.88	Well not operating upon arrival, modified settings and collected sample
SVE-16I	4/23/2007	32	--	1.2	64.9	2.7	18.6	42.45	1.62	5.57	
SVE-17S	4/23/2007	32	--	--	--	--	--	--	0	0	Well Not Operating
SVE-18I	4/23/2007	32	--	--	--	--	--	--	0	0.55	Well Not Operating
TOTAL REMOVED THROUGH 4/23/2007 - FIRST TWO WEEKS OF OPERATION										**137.43**	Field Measurement: Mid Carbon 1 and 2, PCE = 0.0 ppmv
SVE-1I	5/11/2007	26	--	--	0.65	1.6	11.0	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-2S	5/11/2007	26	--	0.72	50.2	3.6	24.8	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-3I	5/11/2007	26	--	0.67	48.5	0.5	3.4	29.35	1.68	10.20	
SVE-4S	5/11/2007	26	--	0.50	41.87	3.9	26.9	--	0	10.30	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-5S	5/11/2007	26	--	0.52	42.7	3.6	24.8	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-6I	5/11/2007	26	--	0.24	29.01	0.5	3.4	--	0	1.28	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-7S	5/11/2007	26	--	0.56	44.3	4.9	33.8	60.11	3.43	29.24	
SVE-8S	5/11/2007	26	--	0.49	41.45	1.5	10.3	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-9I	5/11/2007	26	--	0.08	16.75	3.6	24.8	20.60	1.18	12.05	Pitot tube gets wet
SVE-10I	5/11/2007	26	--	0.36	35.53	6.0	41.3	45.78	2.62	11.47	
SVE-11S	5/11/2007	26	--	--	8.61	10.0	68.9	10.93	0.62	0.83	hot wire amp conversion
SVE-11H	5/11/2007	26	--	0.95	57.7	2.0	13.8	55.20	3.15	7.36	
SVE-12S	5/11/2007	26	--	0.42	38.38	4.5	31.0	33.72	1.93	19.05	
SVE-13S	5/11/2007	26	--	0.61	46.2	1.0	6.9	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-14S	5/11/2007	26	--	1.30	67.5	1.4	9.6	68.53	3.92	36.17	
SVE-15S	5/11/2007	26	--	1.30	67.5	1.5	10.3	28.33	1.62	13.50	
SVE-16I	5/11/2007	26	--	0.86	54.9	0.6	4.1	17.69	1.01	6.58	
SVE-17S	5/11/2007	26	--	0.77	52	0.6	4.1	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-18I	5/11/2007	26	--	0.26	30.19	0.0	0.0	--	0	0.55	Well not operating, activated for PCE reading only, not used in volume calculation
TOTAL REMOVED THROUGH 5/11/2007 - FIRST FIVE WEEKS OF OPERATION										**158.6**	Field Measurement: Total SVE System Pre-Carbon, PCE = 2.0 ppmv, Mid Carbon 1 and 2, PCE = 0.0 ppmv

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	6/11/2007	24	--	--	0.87	3.5	24.1	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-2S	6/11/2007	24	--	0.59	45.5	7.0	48.2	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-3I	6/11/2007	24	--	0.51	42.3	12.0	82.7	51.62	5.08	15.28	
SVE-4S	6/11/2007	24	--	0.48	41.03	9.0	62.0	--	0	10.30	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-5S	6/11/2007	24	--	0.44	39.28	9.0	62.0	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-6I	6/11/2007	24	--	0.20	26.48	1.7	11.7	--	0	1.28	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-7S	6/11/2007	24	--	0.67	48.5	16.0	110.2	98.95	9.74	38.98	
SVE-8S	6/11/2007	24	--	0.42	38.38	1.0	6.9	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-9I	6/11/2007	24	--	0.36	35.53	14.0	96.5	61.04	6.01	18.06	
SVE-10I	6/11/2007	24	--	0.30	32.43	15.0	103.4	66.48	6.54	18.01	
SVE-11S	6/11/2007	24	--	--	6.54	25.0	172.3	22.35	2.20	3.03	hot wire amp conversion
SVE-11H	6/11/2007	24	--	0.91	56.5	13.0	89.6	82.73	8.14	15.50	
SVE-12S	6/11/2007	24	--	0.36	35.53	10.0	68.9	50.29	4.95	24.00	
SVE-13S	6/11/2007	24	--	0.50	41.87	3.0	20.7	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-14S	6/11/2007	24	--	1.30	67.5	28.0	192.9	193.73	19.07	55.24	
SVE-15S	6/11/2007	24	--	1.20	64.9	4.0	27.6	34.85	3.43	16.93	
SVE-16I	6/11/2007	24	--	0.74	50.9	5.0	34.5	27.83	2.74	9.31	
SVE-17S	6/11/2007	24	--	0.70	49.5	2.0	13.8	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-18I	6/11/2007	24	--	0.24	29.01	0.0	0.0	--	0	0.55	Well not operating, activated for PCE reading only, not used in volume calculation
TOTAL REMOVED THROUGH 6/11/2007 - FIRST TWO MONTHS OF OPERATION										**226.48**	Field Measurement: Total SVE System Pre-Carbon, PCE = 17 ppmv, Mid Carbon 1 and 2, PCE - 8 ppmv
SVE-1I	9/24/2007	25		--	--	14.0	96.5	--	--	--	Startup after carbon changeout - run time clock = 1142 hours Well not operating, activated for PCE reading only, not used in volume calculation
SVE-2S	9/24/2007	25		0.50	41.87	15.0	103.4	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-3I	9/24/2007	25		0.76	51.6	28.0	192.9	--	--	--	Open
SVE-4S	9/24/2007	25		0.42	38.38	17.0	117.1	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-5S	9/24/2007	25		0.45	39.72	15.0	103.4	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-6I	9/24/2007	25		0.18	25.12	5.0	34.5	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-7S	9/24/2007	25		0.57	44.7	39.0	268.7	--	--	--	Open
SVE-8S	9/24/2007	25		0.36	35.57	4.2	28.9	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-9I	9/24/2007	25		0.36	35.57	18.0	124.0	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-10I	9/24/2007	25		0.49	41.45	32.0	220.5	--	--	--	Open
SVE-11S	9/24/2007	25		--	--	400.0	2756.0	--	--	--	Open
SVE-11H	9/24/2007	25		0.86	54.90	75.0	516.8	--	--	--	Open
SVE-12S	9/24/2007	25		0.29	31.89	130.0	895.7	--	--	--	Open
SVE-13S	9/24/2007	25		0.47	40.6	13.0	89.6	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-14S	9/24/2007	25		1.30	67.5	45.0	310.1	--	--	--	Open
SVE-15S	9/24/2007	25		1.30	67.5	20.0	137.8	--	--	--	Open
SVE-16I	9/24/2007	25		0.78	52.5	14.0	96.5	--	--	--	Open
SVE-17S	9/24/2007	25		0.63	47	13.0	89.6	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-18I	9/24/2007	25		0.30	32.43	2.0	13.8	--	--	--	Well not operating, activated for PCE reading only, not used in volume calculation
TOTAL REMOVED THROUGH 9/24/2007										**226.48**	Field Measurement: Total SVE System Pre-Carbon, PCE = 70 ppmv, Mid Carbon 1 and 2, PCE = 0 ppmv

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
											System not operational upon arrival - run time clock = 1321 hours
SVE-1I	10/10/2007	25		-0.03	--	10.0	68.9	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-2S	10/10/2007	25		0.53	43.10	9.0	62.0	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-3I	10/10/2007	25		0.88	55.5	17.0	117.1	243.81	5.80	21.08	Open
SVE-4S	10/10/2007	25		0.47	40.6	9.0	62.0	--	0	10	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-5S	10/10/2007	25		0.44	39.28	8.0	55.1	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-6I	10/10/2007	25		0.18	25.12	2.1	14.5	--	0	1.28	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-7S	10/10/2007	25		0.64	47.4	13.0	89.6	240.61	5.73	44.71	Open
SVE-8S	10/10/2007	25		0.37	36.02	1.9	13.1	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-9I	10/10/2007	25		0.41	37.92	13.0	89.6	--	0	18.06	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-10I	10/10/2007	25		0.62	46.6	15.0	103.4	213.81	5.09	23.10	Open
SVE-11S	10/10/2007	25		-0.02	--	175.0	1205.8	367.10	8.74	11.77	Open, 6/11/2007 Flow Rate used in PCE Removal Calculation
SVE-11H	10/10/2007	25		1.00	59.2	20.0	137.8	549.01	13.07	28.57	Open
SVE-12S	10/10/2007	25		-0.01	--	20.0	137.8	466.96	11.12	35.12	Open, 9/24/2007 Flow Rate used in PCE Removal Calculation
SVE-13S	10/10/2007	25		0.51	0.51	8.1	55.8	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-14S	10/10/2007	25		1.40	1.4	22.0	151.6	9.16	0.22	55.45	Open
SVE-15S	10/10/2007	25		1.20	1.2	7.0	48.2	3.16	0.08	17.00	Open
SVE-16I	10/10/2007	25		0.89	0.89	7.0	48.2	1.82	0.04	9.36	Open
SVE-17S	10/10/2007	25		0.64	0.64	4.0	27.6	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-18I	10/10/2007	25		0.30	0.3	0.8	5.5	--	0	0.55	Well not operating, activated for PCE reading only, not used in volume calculation
									TOTAL REMOVED THROUGH 10/10/2007	**276.37**	Field Measurement: Total SVE System Pre-Carbon, PCE = 20 ppmv, Mid Carbon 1 and 2, PCE = 0 ppmv
									11/20/2007	**No Measurements**	System not operational upon arrival - run time clock = 1473 hours, Restart
SVE-1I	11/29/2007	29		0.15	--	3.6	24.8	--	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-2S	11/29/2007	29		0.80	53.6	2.4	16.5	59.65	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-3I	11/29/2007	29		--	59.2	>6.0	155.0	228.27	4.57	25.65	Open, Water in lines impeding measurements, Average of last two measurements used in mass removal calculation
SVE-4S	11/29/2007	29		0.58	45.1	2.5	17.2	50.63	0	10.30	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-5S	11/29/2007	29		0.65	47.7	3.0	20.7	51.22	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-6I	11/29/2007	29		0.32	33.5	0.7	4.8	9.16	0	1.28	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-7S	11/29/2007	29		1.00	59.2	6.0	41.3	109.80	2.20	46.90	Open
SVE-8S	11/29/2007	29		0.57	44.7	0.5	3.4	10.47	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-9I	11/29/2007	29		0.70	49.5	8.0	55.1	101.48	0	18.06	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-10I	11/29/2007	29		0.02	8.37	23.5	161.9	31.46	0.63	23.73	Open, Water in lines impeding measurements, Average of last two measurements used in mass removal calculation
SVE-11S	11/29/2007	29		0.04	11.84	9.0	62.0	212.67	4.25	16.03	Open
SVE-11H	11/29/2007	29		1.30	67.5	4.0	27.6	158.14	3.16	31.74	Open
SVE-12S	11/29/2007	29		0.02	8.37	1.6	11.0	17.65	0.35	35.47	Open
SVE-13S	11/29/2007	29		0.69	49.2	1.9	13.1	48.03	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-14S	11/29/2007	29		1.80	79.4	3.0	20.7	193.78	3.88	59.33	Open
SVE-15S	11/29/2007	29		1.70	77.2	0.5	3.4	56.52	1.13	18.13	Open
SVE-16I	11/29/2007	29		1.60	74.9	3.0	20.7	73.12	1.46	10.82	Open
SVE-17S	11/29/2007	29		0.98	58.6	0.6	4.1	26.31	0	0	Well not operating, activated for PCE reading only, not used in volume calculation
SVE-18I	11/29/2007	29		0.51	42.3	0.2	1.4	4.13	0	0.55	Well not operating, activated for PCE reading only, not used in volume calculation
									TOTAL REMOVED THROUGH 11/29/2007	**298.00**	Field Measurement: Total SVE System Pre-Carbon, PCE = 3.5 ppmv, Mid Carbon 1 and 2, PCE = 0 ppmv. Runtime = 1689 hours

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	2/25/2008	29		<0.01		1.4	9.6	0.0	0.0	0.00	Open
SVE-2S	2/25/2008	29						0.0	0.0	0.00	
SVE-3I	2/25/2008	29		0.85	54.6	3.0	20.7	135.9	16.5	42.18	Open
SVE-4S	2/25/2008	29						0.0	0.0	10.30	
SVE-5S	2/25/2008	29		0.60	45.9			13.4	1.6	1.63	Open
SVE-6I	2/25/2008	29						0.0	0.0	1.28	
SVE-7S	2/25/2008	29		0.70	49.5	2.2	15.2	39.6	4.8	51.72	Open
SVE-8S	2/25/2008	29						0.0	0.0	0.00	
SVE-9I	2/25/2008	29		<0.01		0	0.0	0.0	0.0	18.06	Open
SVE-10I	2/25/2008	29		0.01	5.92	7.5	51.7	17.9	2.2	25.91	Open
SVE-11S	2/25/2008	29		0.020	8.37	5.0	34.5	11.4	1.4	17.42	Open
SVE-11H	2/25/2008	29		1.4	70.1	3.7	25.5	52.7	6.4	38.14	Open
SVE-12S	2/25/2008	29		<0.01		0.0	0.0	0.0	0.0	35.47	Open
SVE-13S	2/25/2008	29						0.0	0.0	0.00	
SVE-14S	2/25/2008	29		1.35	68.8	1.2	8.3	28.2	3.4	62.76	Open
SVE-15S	2/25/2008	29		1.4	70.1	0.0	0.0	0.0	0.0	18.13	Open
SVE-16I	2/25/2008	29		0.90	56.2	1.5	10.3	24.7	3.0	13.82	Open
SVE-17S	2/25/2008	29						0.0	0.0	0.00	
SVE-18I	2/25/2008	29						0.0	0.0	0.55	
							TOTAL REMOVED THROUGH 2/25/2008			**337.4**	Field Measurement: Total SVE System Pre-Carbon, PCE = 2.4 ppmv, Mid Carbon, PCE = 0 ppmv. Runtime = 2608 hours
SVE-1I	3/7/2008	30						0.0	0.0	0.00	
SVE-2S	3/7/2008	30						0.0	0.0	0.00	Closed
SVE-3I	3/7/2008	30	21.5	1.10	62.1		0.0	18.2	0.6	42.81	Open
SVE-4S	3/7/2008	30						0.0	0.0	10.30	Closed
SVE-5S	3/7/2008	30	20	0.50	41.87		0.0	6.1	0.2	1.85	Open, Used average of 2/25 average (10.235) and 0 for PCE concentration
SVE-6I	3/7/2008	30						0.0	0.0	1.28	Closed
SVE-7S	3/7/2008	30						0.0	0.0	51.72	Closed
SVE-8S	3/7/2008	30						0.0	0.0	0.00	Closed
SVE-9I	3/7/2008	30	19.5	0.55	43.9		0.0	0.0	0.0	18.06	Open
SVE-10I	3/7/2008	30	21.5					0.0	0.0	25.91	Open
SVE-11S	3/7/2008	30	20.5	<0.01	<5.92	9	62.0	0.0	0.0	17.42	Open
SVE-11H	3/7/2008	30	20.5	1.40	70.1	2.5	17.2	42.4	1.5	39.63	Open
SVE-12S	3/7/2008	30	19.5	0.50	41.87		0.0	0.0	0.0	35.47	Open
SVE-13S	3/7/2008	30						0.0	0.0	0.00	Closed
SVE-14S	3/7/2008	30	20	2.00	83.7		0.0	9.8	0.3	63.10	Open
SVE-15S	3/7/2008	30						0.0	0.0	18.13	Closed
SVE-16I	3/7/2008	30	20	1.05	60.7		0.0	8.9	0.3	14.13	Open
SVE-17S	3/7/2008	30					0.0	0.0	0.0	0.00	Closed
SVE-18I	3/7/2008	30					0.0	0.0	0.0	0.55	Closed
							TOTAL REMOVED THROUGH 3/7/2008			**340.4**	Field Measurement: Total SVE System Pre-Carbon, PCE = 3 ppmv, Mid Carbon, PCE = 0 ppmv. Runtime = 2872

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	4/28/2008	30	21	0.05	13.24	9	62.0	23.3	2.4	2.39	
SVE-2S	4/28/2008	30	21	0.90	56.2	2	13.8	21.9	2.3	2.25	
SVE-3I	4/28/2008	30	21	1.05	60.7	6	41.3	35.6	3.6	46.46	
SVE-4S	4/28/2008	30	21	0.79	52.6	1.5	10.3	15.4	1.6	11.88	
SVE-5S	4/28/2008	30	19	0.72	50.2	1.1	7.6	5.4	0.6	2.40	
SVE-6I	4/28/2008	30	19	0.32	33.50	0.6	4.1	3.9	0.4	1.68	
SVE-7S	4/28/2008	30	21	1.05	60.7	2.8	19.3	33.2	3.4	55.12	
SVE-8S	4/28/2008	30	19	0.58	45.1	<0.1	0.0	0.0	0.0	0.00	
SVE-9I	4/28/2008	30	19	0.63	47.0	7.2	49.6	33.0	3.4	21.45	
SVE-10I	4/28/2008	30	20.5	0.05	13.24	7	48.2	18.1	1.9	27.77	
SVE-11S	4/28/2008	30	20.5	0.03	10.26	13	89.6	22.0	2.3	19.68	
SVE-11H	4/28/2008	30	20	1.40	70.1	6	41.3	58.2	6.0	45.59	
SVE-12S	4/28/2008	30	19	0.56	44.3	2.3	15.8	9.9	1.0	36.49	
SVE-13S	4/28/2008	30	19	0.73	50.6	0.7	4.8	6.9	0.7	0.71	
SVE-14S	4/28/2008	30	19.5	2.3	89.8	2	13.8	17.5	1.8	64.90	
SVE-15S	4/28/2008	30	19.5	1.85	80.5	0.8	5.5	12.6	1.3	19.42	
SVE-16I	4/28/2008	30	19.5	1.25	66.2	2.3	15.8	14.9	1.5	15.66	
SVE-17S	4/28/2008	30	19	0.96	58.0	0.7	4.8	4.0	0.4	0.41	
SVE-18I	4/28/2008	30	19	0.39	36.98	<1	0.0	0.0	0.0	0.55	
									TOTAL REMOVED THROUGH 4/28/2008	**374.8**	Field Measurement: Total SVE System Pre-Carbon, PCE = 3.5 ppmv, Mid Carbon, PCE = 0 ppmv. Runtime = 3646 hours
SVE-1I	6/16/2008	28	19	<0.01	<5.92						
SVE-2S	6/16/2008	28									
SVE-3I	6/16/2008	28	19	0.86	54.9						
SVE-4S	6/16/2008	28									
SVE-5S	6/16/2008	28	17	0.63	47						
SVE-6I	6/16/2008	28									
SVE-7S	6/16/2008	28	19	0.80	53						
SVE-8S	6/16/2008	28									
SVE-9I	6/16/2008	28	17	0.51	42.3						
SVE-10I	6/16/2008	28	19.0	0.01	5.92						
SVE-11S	6/16/2008	28	18.0	0.02	8.37						
SVE-11H	6/16/2008	28	18	1.15	63.5						
SVE-12S	6/16/2008	28	17	0.41	37.92						
SVE-13S	6/16/2008	28									
SVE-14S	6/16/2008	28	17.0	1.75	78.3						
SVE-15S	6/16/2008	28									
SVE-16I	6/16/2008	28	17.0	0.94	57.4						
SVE-17S	6/16/2008	28									
SVE-18I	6/16/2008	28									
					44.9				**TOTAL REMOVED THROUGH 6/16/2008**	**Not Calculated**	Field Measurement: Total SVE System Pre-Carbon, PCE = 6 ppmv, Mid Carbon, PCE = 0 ppmv. Runtime = 3739 hours

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
									7/14/2008	**No Measurements**	Runtime = 4417 hours
SVE-1I	9/24/2008	27	17	<0.01	<6	0	0.0	0.0	0.0	2.39	
SVE-2S	9/24/2008	27								2.25	
SVE-3I	9/24/2008	27	18	0.80	53	6	41.3	62.1	12.9	59.37	
SVE-4S	9/24/2008	27								11.88	
SVE-5S	9/24/2008	27	17	0.60	46	4	27.6	22.9	4.8	7.17	
SVE-6I	9/24/2008	27								1.68	
SVE-7S	9/24/2008	27	18	0.75	51.3	5	34.5	39.1	8.1	63.25	
SVE-8S	9/24/2008	27								0.00	
SVE-9I	9/24/2008	27	17	0.48	41	7	48.2	56.8	11.8	33.27	
SVE-10I	9/24/2008	27	17.0	0.01	5.9	5	34.5	6.9	1.4	29.20	
SVE-11S	9/24/2008	27	17.0	0.02	8.4	7	48.2	16.4	3.4	23.09	
SVE-11H	9/24/2008	27	17	1.11	62	12	82.7	108.9	22.7	68.26	
SVE-12S	9/24/2008	27	16.5	0.38	36.5	7	48.2	33.1	6.9	43.39	
SVE-13S	9/24/2008	27								0.71	
SVE-14S	9/24/2008	27	16.5	1.71	77.4	5.5	37.9	56.7	11.8	76.69	
SVE-15S	9/24/2008	27								19.42	
SVE-16I	9/24/2008	27	16.5	0.91	56.5	6	41.3	45.8	9.5	25.18	
SVE-17S	9/24/2008	27								0.41	
SVE-18I	9/24/2008	27								0.55	
					43.8				**TOTAL REMOVED THROUGH 9/24/2008**	**468.2**	Field Measurement: Total SVE System Pre-Carbon, PCE = 7 ppmv, Mid Carbon, PCE = 0 ppmv. Runtime = 5219 hours
SVE-1I	10/22/2008		20	0.01	5.9	--	--	0.0	0.0	2.39	
SVE-2S	10/22/2008								0.0	2.25	
SVE-3I	10/22/2008		19	0.60	45.9	--	--	53.8	4.8	64.15	
SVE-4S	10/22/2008									11.88	
SVE-5S	10/22/2008		18	0.30	32.43	--	--	25.3	2.2	9.41	
SVE-6I	10/22/2008									1.68	
SVE-7S	10/22/2008		19	0.80	53	--	--	51.7	4.6	67.84	
SVE-8S	10/22/2008									0.00	
SVE-9I	10/22/2008		18	0.40	37.45	--	--	51.2	4.5	37.82	
SVE-10I	10/22/2008		19.6	0.10	18.7	--	--	18.3	1.6	30.83	
SVE-11S	10/22/2008		18.8	0.10	18.7	--	--	25.6	2.3	25.36	
SVE-11H	10/22/2008		18	1.00	59.2	--	--	138.7	12.3	80.57	
SVE-12S	10/22/2008		18	0.14	22.2	--	--	30.3	2.7	46.08	
SVE-13S	10/22/2008									0.71	
SVE-14S	10/22/2008		18.2	1.70	77.2	--	--	82.9	7.4	84.05	
SVE-15S	10/22/2008									19.42	
SVE-16I	10/22/2008		18.1	0.80	53	--	--	62.1	5.5	30.69	
SVE-17S	10/22/2008									0.41	
SVE-18I	10/22/2008									0.55	
					41.8				**TOTAL REMOVED THROUGH 10/22/2008**	**516.1**	Field Measurement: Total SVE System Pre-Carbon, PCE = 0.7 ppmv, Mid Carbon, PCE = 0.3 ppmv. Runtime = 5890 hours
System shut down 10/28/2008 through 9/9/2009 pending carbon changeout and client approval of budget/scope of work for ongoing operation											

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	9/14/2009		16.7	0.0	0			0.0	0.0	2.39	
SVE-2S	9/14/2009									2.25	
SVE-3I	9/14/2009		16.5	0.5	41.87			28.6	0.5	64.60	
SVE-4S	9/14/2009									11.88	
SVE-5S	9/14/2009		15.2	0.5	41.87			12.3	0.2	9.61	
SVE-6I	9/14/2009		15.2	0.2	26.5			2.6	0.0	1.72	
SVE-7S	9/14/2009		16.7	0.7	49.50			29.0	0.5	68.30	
SVE-8S	9/14/2009									0.00	
SVE-9I	9/14/2009		15.2	0.3	32.43			31.7	0.5	38.32	
SVE-10I	9/14/2009	25.3	16.8	0.3	32.43			25.3	0.4	31.23	
SVE-11S	9/14/2009		16.7	0.1	18.70			16.4	0.3	25.62	
SVE-11H	9/14/2009		16.3	0.8	53.00			46.6	0.7	81.31	
SVE-12S	9/14/2009		16.5	0.0	0.00			0.0	0.0	46.08	
SVE-13S	9/14/2009									0.71	
SVE-14S	9/14/2009		15.6	1.4	70.10			0.0	0.0	84.05	
SVE-15S	9/14/2009									19.42	
SVE-16I	9/14/2009		15.2	0.6	45.90			13.4	0.2	30.91	
SVE-17S	9/14/2009									0.41	
SVE-18I	9/14/2009									0.55	
					38.6		**TOTAL REMOVED THROUGH 9/14/2009**			**519.35**	Days of Operation Since Last Visit = 6. Field Measurement: Total SVE System Pre-Carbon PCE = 2.3 ppmv, Mid Carbon PCE = 0.0 ppmv
SVE-1I	10/5/2009		17.0	0.016	7.5	0	0.0	0.0	0.0	2.39	
SVE-2S	10/5/2009									2.25	
SVE-3I	10/5/2009		16.0	0.77	52	4	24.1	35.5	2.0	66.63	
SVE-4S	10/5/2009									11.88	
SVE-5S	10/5/2009		15.0	0.49	41	1.5	10.3	12.0	0.7	10.30	
SVE-6I	10/5/2009		15.0	0.18	21	0.5	3.4	2.1	0.1	1.84	
SVE-7S	10/5/2009		17.0	0.74	51	3.0	20.7	29.9	1.7	70.01	
SVE-8S	10/5/2009									0.00	
SVE-9I	10/5/2009		15.0	0.36	35.5	5	34.5	34.7	2.0	40.30	
SVE-10I	10/5/2009	27	17.0	0.45	40	4	27.6	31.2	1.8	33.01	
SVE-11S	10/5/2009		16.0	0.98	59	4.5	31.0	51.8	3.0	28.58	
SVE-11H	10/5/2009		15.0	0.03	3.2	4.5	31.0	2.8	0.2	81.47	
SVE-12S	10/5/2009		15.0	0.02	2.6	0	0.0	0.0	0.0	46.08	
SVE-13S	10/5/2009									0.71	
SVE-14S	10/5/2009		15.0	1.5	72	0	0.0	0.0	0.0	84.05	
SVE-15S	10/5/2009									19.42	
SVE-16I	10/5/2009		15.0	0.7	50	1.5	10.3	14.6	0.8	31.74	
SVE-17S	10/5/2009									0.41	
SVE-18I	10/5/2009									0.55	
					40.6		**TOTAL REMOVED THROUGH 10/5/2009**			**531.62**	Days of Operation Since Last Visit = 18.Run Time = 6444 hours. Field Measurement: Total SVE System Pre-Carbon PCE = 4.0 ppmv, Mid Carbon PCE = 0.0 ppmv

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
										11/9/2009 Run Time	7222 hours
										11/17/2009 Run Time	7408 hours
										1/5/2010 Run Time	7818 hours
										1/20/2010 Run Time	8121 hours
SVE-1I	2/2/2010		24.1	0.000	0	--		0.0	0.0	2.39	
SVE-2S	2/2/2010									2.25	
SVE-3I	2/2/2010		23.7	1.10	62.1	--		42.4	11.2	77.82	
SVE-4S	2/2/2010									11.88	
SVE-5S	2/2/2010		22.8	0.00	0	0.5	3.4	0.0	0.0	10.30	
SVE-6I	2/2/2010		22.8	0.10	18.7	0.25	1.7	1.4	0.4	2.20	
SVE-7S	2/2/2010		24.0	0.60	45.9	0.38	2.6	15.1	4.0	74.00	
SVE-8S	2/2/2010									0.00	
SVE-9I	2/2/2010		22.3	0.50	41.89	0.67	4.6	23.2	6.1	46.42	
SVE-10I	2/2/2010	31	24.2	0.10	18.7	--		14.6	3.9	36.86	
SVE-11S	2/2/2010		22.9	0.00	0	0.14	1.0	0.0	0.0	28.58	
SVE-11H	2/2/2010		22.3	1.40	70.1	0	0.0	30.8	8.1	89.59	
SVE-12S	2/2/2010		22.6	0.00	0	0.2	1.4	0.0	0.0	46.08	
SVE-13S	2/2/2010									0.71	
SVE-14S	2/2/2010		22.7	1.7	77.2	0.17	1.2	1.3	0.3	84.39	
SVE-15S	2/2/2010									19.42	
SVE-16I	2/2/2010		22.7	1.1	62.1	0.13	0.9	9.9	2.6	34.35	
SVE-17S	2/2/2010									0.41	
SVE-18I	2/2/2010									0.55	
					33.1			**TOTAL REMOVED THROUGH 2/2/2010**		**568.20**	Days of Operation Since Last Site Visit = 83. Run Time = 8438 hours. Field Measurement: Total SVE System Pre-Carbon PCE = 0.1 ppmv, Mid Carbon PCE = 0.0 ppmv
										2/23/2010 Run Time	8838 hours
										3/15/2010 Run Time	9311 hours
SVE-1I	4/2/2010		24.5	0.17	24.4	0.06	0.41	0.29	0.05	2.43	
SVE-2S	4/2/2010		-	-	-	-	-		0.0	2.25	
SVE-3I	4/2/2010		24.3	0.90	56.2	0.05	0.34	0.55	0.09	77.92	
SVE-4S	4/2/2010		-	-	-	-	-		0.0	11.88	
SVE-5S	4/2/2010		23.3	0.13	21.4	0.06	0.41	1.17	0.20	10.49	
SVE-6I	4/2/2010		23.4	0.13	21.4	0.06	0.41	0.65	0.11	2.31	
SVE-7S	4/2/2010		24.5	0.50	41.87	0.04	0.28	1.72	0.29	74.29	
SVE-8S	4/2/2010		-	-	-	-	-		0.0	0.00	
SVE-9I	4/2/2010		23.0	0.40	37.45	0.04	0.28	2.60	0.44	46.85	
SVE-10I	4/2/2010	31.5	24.0	0.10	18.7	0.05	0.34	0.18	0.03	36.90	
SVE-11S	4/2/2010		23.5	0.14	22.2	0.06	0.41	0.43	0.07	28.65	
SVE-11H	4/2/2010		23.1	1.50	72.5	0.04	0.28	0.28	0.05	89.64	
SVE-12S	4/2/2010		23.3	0.13	21.4	0.04	0.28	0.50	0.08	46.17	
SVE-13S	4/2/2010		-	-	-	-	-		0.0	0.71	
SVE-14S	4/2/2010		23.3	1.8	79.4	0.04	0.28	1.63	0.27	84.66	
SVE-15S	4/2/2010		-	-	-	-	-		0.0	19.42	
SVE-16I	4/2/2010		23.3	1.1	62.1	0.05	0.34	1.09	0.18	34.53	
SVE-17S	4/2/2010		-	-	-	-	-		0.0	0.41	
SVE-18I	4/2/2010		-	-		-	-		0.0	0.55	
					39.9			**TOTAL REMOVED THROUGH 4/2/2010**		**570.07**	Days of Operation Since Last Site Visit = 53. Run Time = 9714 hours. Field Measurement: Total SVE System Pre-Carbon PCE = 0.5 ppmv, Mid Carbon PCE = 0.0 ppmv

Table 5
Summary of Soil Vapor Extraction System Operation
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Well Identification	Date	System Vacuum (IOW)	Vacuum at Well (IOW)	Flow Rate Pitot Tube Reading	Flow Rate (CFM)	PCE - Tube Concentration (ppmv)	PCE - Tube Concentration (mg/m^3)	Amount PCE Removed (mg/min)	Amount PCE Removed Between Testing (lbs)	Total Amount PCE Removed to Date (lbs)	Comments
SVE-1I	6/14/2010	34.9	24.7	0.04	11.8	0.02	0.14	0.09	0.02	2.46	
SVE-2S	6/14/2010		-	-	-	-	-		0.0	2.25	
SVE-3I	6/14/2010		24.5	0.98	58.6	0.19	1.31	1.37	0.32	78.24	
SVE-4S	6/14/2010		-	-	-	-	-		0.0	11.88	
SVE-5S	6/14/2010		24.0	0.04	11.8	0.2	1.38	0.30	0.07	10.56	
SVE-6I	6/14/2010		24.2	0.33	34.0	0.07	0.48	0.43	0.10	2.41	
SVE-7S	6/14/2010		24.8	0.76	51.6	0.07	0.48	0.55	0.13	74.42	
SVE-8S	6/14/2010		-	-	-	-	-		0.0	0.00	
SVE-9I	6/14/2010		24.4	0.65	47.7	0.02	0.14	0.28	0.06	46.92	
SVE-10I	6/14/2010		25.0	0.75	51.3	0.06	0.41	0.55	0.13	37.02	
SVE-11S	6/14/2010		24.3	0.07	15.67	0.1	0.69	0.24	0.06	28.71	
SVE-11H	6/14/2010		23.8	1.65	76.1	0.03	0.21	0.52	0.12	89.76	
SVE-12S	6/14/2010		24.0	0.06	14.5	0.03	0.21	0.10	0.02	46.19	
SVE-13S	6/14/2010		-	-	-	-	-		0.0	0.71	
SVE-14S	6/14/2010		-	-	-	-	-		0.00	84.66	
SVE-15S	6/14/2010		-	-	-	-	-		0.0	19.42	
SVE-16I	6/14/2010		24.8	1.3	66.5	0.05	0.34	0.65	0.15	34.68	
SVE-17S	6/14/2010		-	-	-	-	-		0.0	0.41	
SVE-18I	6/14/2010		-	-		-	-		0.0	0.55	
					40.0			**TOTAL REMOVED THROUGH 6/14/2010**		**571.25**	Days of Operation Since Last Site Visit = 73. Run Time = 11,464 hours. Field Measurement: Total SVE System Pre-Carbon PCE = 0.78 ppmv, Mid Carbon PCE = 0.0 ppmv.

NOTES
mg/min = milligrams per minute
mg/m3 = milligrams per cubic meter
Mid Carbon = sampling location located between the first and second carbon treatment canisters
PCE = tetrachloroethene
ppmv = parts per million volume
Pre-Carbon = sampling location located upstream of both of the carbon treatment canisters

APPENDIX A
BORING/WELL CONSTRUCTION LOGS

CLEANUP ACTION PROGRESS REPORT
June 2008 to June 2010
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-12

Client: Wilbur Allison
Project: Allison's Norge Village
Location: Olympia, Washington

Farallon PN: 663-010

Logged By: Javan Ruark

Date/Time Started:	10/14/09 0910	**Sampler Type:**	4" Steel
Date/Time Completed:	10/15/09 1330	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic Rig	**Depth of Water ATD (ft bgs):**	82
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	111
Drilling Foreman:	Rodney	**Total Well Depth (ft bgs):**	109
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0-.3' Concrete	CO							Cap
		.3-4.8' SILT (100%), brown to tan, moist, no odor, roots.	ML							Concrete
5		5-5.5' SILT (100%), brown to tan, moist, no odor, roots.	ML		20	NA				Bentonite Chips
		7.5-8.5' SILT (90% silt, 10% sand), fine sand, brown to grey, moist, no odor.	ML		40	NA				Casing
10		10-14' No recovery.	BLANK							Bentonite Chips
		14-15' SILT (95% silt, 5% sand), fine sand, brown to grey, moist, no odor.	ML		50	NA				
15		16-18' SILT (85% silt, 10% sand, 5% gravel), fine sand, fine gravel, brown to grey, moist, no odor, roots, pine cones.	ML		50	NA				
										Casing
20										

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 104-109

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): G:\Forms and Templ
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-12

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
20		20-20.5' SILT (85% silt, 10% sand, 5% gravel), fine sand, fine gravel, brown to grey, moist, no odor, roots, pine cones.	ML		75	NA				Bentonite Chips
		20.5-21.5' Silty SAND (85% sand, 15% silt), fine sand, brown, moist, no odor.	SM							
		22-23' Silty SAND (85% sand, 15% silt), fine sand, brown, moist, no odor.	SM		75	NA				
		23-23.5' SILT (90% silt, 5% sand, 5% gravel), fine sand, coarse gravel, brown to grey, moist, no odor.	ML							
25		24-26' Silty GRAVEL (75% gravel, 20% silt, 5% sand), fine to coarse gravel, fine sand, grey, moist, no odor.	GM		70	NA				
		27-29' Gravelly SILT (70% silt, 20% gravel, 10% sand), coarse gravel, fine sand, grey, moist, no odor.	ML		100	NA				Casing
		29-30.5' SILT with gravel (80% silt, 20% gravel), coarse gravel, grey, moist, no odor.			75	NA	1.7	MW12-30		Bentonite Chips
30		31-32.5' SILT with gravel (85% silt, 15% gravel), fine to coarse gravel, grey, moist, no odor.	ML		75	NA				
		33-35' SILT with gravel (85% silt, 15% gravel), fine to coarse gravel, grey, moist, no odor.	ML		100	NA				
		35-38' SILT with gravel (80% silt, 15% gravel, 5% sand), fine to coarse gravel, fine sand, grey, moist, no odor.			100	NA				
35					100	NA				
		38-39' SILT with gravel (80% silt, 15% gravel, 5% sand), fine gravel, fine sand, grey, moist, no odor.								Casing
		39.5-40' SILT with gravel (80% silt, 15% gravel, 5% sand), fine gravel, fine sand, grey, moist, no odor.	ML		75	NA	0.9	MW12-40		Blank Casing
40		40-42' Silty GRAVEL (65% gravel, 35% silt), fine gravel, grey, moist, no odor.	GM							
		42-42.5' Silty SAND (70% sand, 20% silt, 10% gravel), fine sand, coarse gravel, grey, moist, no odor.	SM		100	NA				
		42.5-44' Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine sand, fine gravel, grey, moist, no odor.	ML		100	NA				

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 104-109

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): G:\Forms and Templa
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-12

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
45		44-46' Gravelly SILT (70% silt, 25% gravel, 5% sand), coarse gravel, fine sand, grey, moist, no odor.								
		46-50' SILT with gravel (75% silt, 15% gravel, 10% sand), fine to coarse gravel, fine sand, grey, moist, no odor.			100	NA				
					100	NA				Blank Casing
50		50-53.5' Sandy SILT with gravel (70% silt, 15% sand, 15% gravel), fine fine to medium sand, fine gravel, grey, moist, no odor.			100	NA	1.6	MW12-50	X	Bentonite Chips
					100	NA				
		53.5-54.5' Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine to coarse sand, fine gravel, grey, moist, no odor.	SM							
55		54.5-57' Gravelly SILT (60% silt, 30% gravel, 10% sand), fine to coarse gravel, fine to medium sand, grey, moist, no odor.	ML		100	NA				
		57-59' Gravelly SILT (65% silt, 30% gravel, 5% sand), fine to coarse gravel, fine to medium sand, grey, moist, no odor.			100	NA				Casing
		59-59.5' Poorly graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), medium to coarse sand, fine gravel, grey, moist, no odor.	SP-SM		100	NA				
60			ML				1.7	MW12-60		Bentonite Chips
		59.5-60.5' Gravelly SILT (70% silt, 25% gravel, 5% sand), coarse gravel, fine sand, grey, moist, no odor.	SM		100	NA				
		60.5-61' Silty SAND (80% sand, 20% silt), fine sand, brown, moist, no odor.			100	NA				
		61-61.5' Silty SAND (75% sand, 20% silt, 5% gravel), fine sand, fine gravel, brown to grey, moist, no odor.	GM							
65		61.5-63' Silty SAND (65% sand, 25% silt, 10% gravel), fine sand, coarse gravel, brown to grey, moist, no odor.	ML		100	NA				
		63-63.5' Silty SAND (85% sand, 15% silt), fine sand, grey, moist, no odor.								
		63.5-65' Silty GRAVEL (75% gravel, 15% silt, 10% sand), fine to coarse gravel, fine sand, grey, moist, no odor.			100	NA				
		65-67' SILT with gravel (75% silt, 20% gravel, 5% sand), coarse gravel, fine sand, grey, moist, no odor.								Casing

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 104-109

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): G:\Forms and Templa
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-12

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
70		67-67.5' Gravelly SILT (70% silt, 20% gravel, 10% sand), fine gravel, fine sand, grey, moist, no odor.			70	NA	1.1	MW12-70	X	Bentonite Chips
		67.5-70' Gravelly SILT (60% silt, 30% gravel), fine to coarse gravel, fine to medium sand, grey, moist, no odor.								
		70-71' Gravelly SILT (70% silt, 25% gravel, 5% sand), fine gravel, fine to medium sand, grey, moist, no odor.								
		71-72.5' SILT with gravel (75% silt, 25% gravel), coarse gravel, grey, moist, no odor.	ML		80	NA				
		73-73.5' SILT (90% silt, 5% gravel, 5% sand), fine gravel, fine sand, grey, moist, no odor.	SP-SM							
75		73.5-75' Poorly graded SAND with silt (85% sand, 10% silt, 5% gravel), fine to medium sand, fine gravel, brown, moist, no odor.			100	NA				
		75-77.5' Poorly graded SAND with silt (90% sand, 10% silt), fine sand, brown, moist, no odor.								
		77.5-78.5' Silty GRAVEL (65% gravel, 25% silt, 10% sand), fine gravel, fine sand, grey, moist, no odor.	GM		100	NA				Casing
		78.5-80' Silty GRAVEL (75% gravel, 15% silt, 10% sand), fine to coarse gravel, fine sand, grey, moist, no odor.								
80		80-82.5' Gravelly SILT (70% silt, 20% gravel, 10% sand), fine to coarse gravel, fine to medium sand, grey, moist to wet, no odor.	ML		100	NA	9.8	MW12-80		Bentonite Chips
		82.5-83' Silty GRAVEL (75% gravel, 20% silt, 5% sand), fine gravel, fine sand, grey, wet, no odor.	GM		100	NA				
		83-85' Gravelly SILT (70% silt, 20% gravel, 10% sand), fine to coarse gravel, fine to medium sand, grey, wet, no odor.	ML							
85		85-85.5' SILT (85% silt, 10% gravel, 5% sand), coarse gravel, fine sand, grey, wet, no odor.			100	NA				
		85.5-87.5' Silty GRAVEL (75% gravel, 20% silt, 5% sand), fine to coarse gravel, fine to medium sand, brown to grey, wet, no odor.	GM							
		87.5-90' Silty GRAVEL (75% gravel, 15% silt, 10% sand), fine to coarse gravel, fine to medium sand, grey, wet, no odor.			100	NA				Casing
90		90-91' Silty GRAVEL (70% gravel, 20% silt, 10% sand), fine to coarse gravel, fine to medium sand, brown, wet, no odor.			75	NA				Bentonite Chips
		91-91.5' Poorly graded GRAVEL with silt (85% gravel, 10% silt, 5% sand), fine to coarse gravel, medium to coarse sand, brown, wet, no odor.	GP-GM		75	NA				
		92-92.5' Poorly graded GRAVEL with silt (85% gravel, 10% silt, 5%	GP-GM							
			GM							

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 104-109

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): G:\Forms and Templa
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-12

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
		sand), fine to coarse gravel, medium to coarse sand, brown, wet, no odor.								
95		92.5-93.5' Silty GRAVEL (70% gravel, 30% silt), fine to coarse gravel, brown, wet, no odor.	GM		100	NA				
		94-96.8' Silty GRAVEL (70% gravel, 30% silt), fine to coarse gravel, brown, wet, no odor.			75	NA				
		96.8-97' SILT with sand (80% silt, 15% sand, 5% gravel), fine to medium sand, coarse gravel, grey, wetm, no odor.	ML							
		97-97.5' Silty GRAVEL (70% gravel, 25% silt, 5% sand), fine to coarse gravel, fine to medium sand, brown, wet, no odor.	GM		100	NA				Casing
100		98-99' Silty GRAVEL (70% gravel, 25% silt, 5% sand), fine to coarse gravel, fine to medium sand, brown, wet, no odor.	GM		100	NA				Bentonite Chips
		99-99.2' SILT (85% silt, 10% gravel, 5% sand), coarse gravel, fine sand, brown, wet, no odor.	ML							
		99.2-99.5' Silty GRAVEL (65% gravel, 25% silt, 10% sand), fine to coarse gravel, fine to medium sand, brown, wet, no odor.	SM		100	NA				
		99.5-101' SILT (90% silt, 5% gravel, 5% sand), coarse gravel, fine sand, brown, wet, no odor.	ML							Sand Pack
105		101-101.5' Silty SAND (80% sand, 15% silt, 5% gravel), fine to medium sand, coarse gravel, grey, wet, no odor.	SP-SM		100	NA				Screen
		101.5-103' SILT (85% silt, 10% gravel, 5% sand), fine gravel, fine sand, grey, wet, no odor.								
		103-106.5' Poorly graded SAND with silt and gravel (75% sand, 15% gravel, 10% silt), fine to medium sand, coarse gravel, grey, wet, no odor.	ML		100	NA				
		106.5-107' SILT (80% silt, 10% gravel, 10% sand), fine to medium sand, fine gravel, grey, moist, no odor.	SP							
110		107-107.5' Poorly graded SAND (85% sand, 10% gravel, 5% silt), fine to medium sand, coarse gravel, grey, wet, no odor.	ML				1.5	MW12-108.5		
		101.5-103' SILT (85% silt, 10% gravel, 5% sand), fine gravel, fine sand, grey, wet, no odor.	CL		50	NA				
		109-110' Lean CLAY with gravel (85% clay, 15% gravel), coarse gravel, grey, moist, no odor.								

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 104-109

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): G:\Forms and Templa
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-13

Client: Wilbur Allison
Project: Allison's Norge Village
Location: Olympia, Washington

Farallon PN: 663-010

Logged By: Javan Ruark

Date/Time Started:	10/12/09 1030	**Sampler Type:**	4" Steel
Date/Time Completed:	10/13/09 1400	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic Rig	**Depth of Water ATD (ft bgs):**	80
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	107
Drilling Foreman:	Rodney	**Total Well Depth (ft bgs):**	103
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	Sample Analyzed	Boring/Well Construction Details
0		0-.3' Concrete	CO				Cap
		.3-7.5' Silty SAND (85% sand, 15% silt), fine sand, brown, moist, no odor.	SM				Concrete
5				100	N		Bentonite Chips
		7.5-10' Poorly graded SAND with silt (90% sand, 10% silt), fine sand, grey, moist, no odor.	SP-SM	100	NA		Casing
10		10-20' Poorly graded SAND (95% sand, 5% silt), fine sand, grey, moist, no odor.	SP	100	NA		Bentonite Chips
				100	NA		
15				100	NA		
				100	NA		Casing
20							

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 98-103

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-13

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
20		20-21.5' Silty SAND (80% sand, 15% silt, 5% gravel), fine sand, fine gravel, grey, moist, no odor.	SM		100	NA				Bentonite Chips
		21.5-28' SILT with gravel (85% silt, 15% gravel), fine gravel, grey, moist, no odor.	ML		100	NA				
					100	NA				
25					100	NA				
		28-30' SILT with sand (75% silt, 15% sand, 10% gravel), fine sand, fine gravel, grey, moist, no odor.			100	NA				Casing
30		30-30.5' SILT (90% silt, 10% sand), fine sand, grey, moist, no odor.			100	NA	280	MW13-30	X	Bentonite Chips
		30.5-35' Poorly graded GRAVEL with silt (90% gravel, 10% silt), fine gravel, grey, moist, no odor.	GP-GM		100	NA				
35		35-37' SILT with gravel (85% silt, 15% gravel), fine gravel, grey, moist, no odor.	ML		80	NA				
		37.5-40' SILT (90% silt, 10% gravel), fine gravel, grey, moist, no odor.	ML		100	NA				Casing
40		40-42.1' Silty GRAVEL (85% gravel, 15% silt), fine gravel, grey, moist, no odor.	GM		100	NA	0.0	MW13-40	X	Blank Casing
		42.1-42.5' SILT (90% silt, 10% gravel), fine gravel, grey, moist, no odor.	ML		100	NA				
		42.5-45' Silty GRAVEL (65% gravel, 45% silt), fine gravel, grey, moist, no odor.	GM							

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 98-103

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-13

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
45		45-47.5' Silty GRAVEL (70% gravel, 30% silt), fine to coarse gravel, grey, moist, no odor.			100	NA				
		47.5-50' SILT with gravel (85% silt, 15% gravel), fine gravel, grey, moist, no odor.	ML		100	NA				Blank Casing
50		50-52.5' Sandy SILT with gravel (70% silt, 15% gravel, 15% sand), fine gravel, medium sand, grey, moist, no odor.			100	NA	0.0	MW13-50		Bentonite Chips
		52.5-54.7' Gravelly SILT (65% silt, 30% gravel, 5% sand), coarse gravel, fine sand, grey, moist, no odor.			100	NA				
55		54.7-55' SILT with sand (80% silt, 15% sand, 5% gravel), fine sand, coarse gravel, grey to brown, moist, no odor.			100	NA				
		Did not log.								
		57.5-60.5' SILT with sand (75% silt, 15% sand, 10% gravel), fine to medium sand, fine gravel, grey, moist, no odor.	ML		100	NA				Casing
60		60.5-62.5' SILT (85% silt, 10% sand, 5% gravel), fine sand, fine gravel, grey, moist, no odor.			100	NA	0.0	MW13-60		Bentonite Chips
		62.5-65' SILT with gravel (75% silt, 25% gravel), fine gravel, grey, moist, no odor.			100	NA				
65		65-67.5' Sandy SILT with gravel (70% silt, 15% gravel, 15% sand), fine gravel, fine to medium sand, grey, moist, no odor.								
		67.5-70' Gravelly SILT (70% silt, 30% gravel), coarse gravel, grey, moist, no odor.			100	NA				Casing

Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 98-103

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-13

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
70		70-75' Gravelly SILT (70% silt, 20% gravel, 10% sand), coarse gravel, medium sand, grey, moist, no odor.			100	NA	0.0	MW13-70		Bentonite Chips
75		75-76' Gravelly SILT (65% silt, 35% gravel), coarse gravel, grey, moist, no odor.			100	NA				
		76-80' SILT with gravel (75% silt, 25% gravel), coarse gravel, grey, moist, no odor.			100	NA				
					100	NA				Casing
80		80-82.5' Silty GRAVEL with sand (65% gravel, 20% silt, 15% sand), fine gravel, medium to coarse sand, grey, wet, no odor.	GM		100	NA	144	MW13-80		Bentonite Chips
		82.5-85' Silty GRAVEL (75% gravel, 15% silt, 10% sand), fine to coarse gravel, coarse sand, grey, wet, no odor.			100	NA				
85		85-88' Gravelly SILT (70% silt, 20% gravel, 10% sand), coarse gravel, medium to coarse sand, grey, wet, no odor.	ML		100	NA				
					100	NA				
		88-89' Silty GRAVEL (80% gravel, 15% silt, 5% sand), fine gravel, coarse sand, grey, wet, no odor.	GM							Casing
		89-90' Gravelly SILT (70% silt, 20% gravel, 10% sand), coarse gravel, coarse sand, grey, wet, no odor.	ML							
90		90-92.5' Silty GRAVEL with sand (70% gravel, 15% silt, 15% sand), fine gravel, coarse sand, grey, wet, no odor.	GM		100	NA				Bentonite Chips
		92.8-100' Poorly graded GRAVEL with silt (80% gravel, 10% silt, 10% sand), fine gravel, coarse sand, grey, wet, no odor.	GP-GM		100	NA				

Well Construction Information

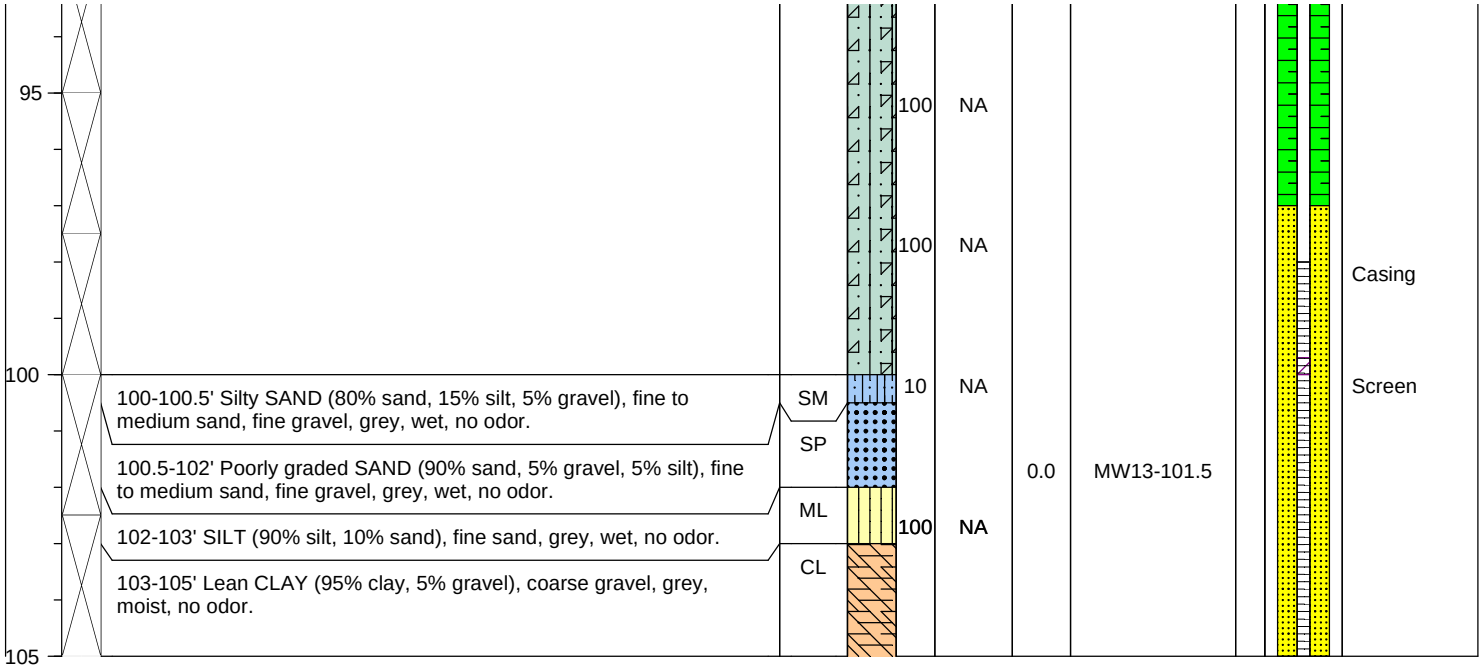
Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 98-103

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: MW-13



Well Construction Information

Monument Type: Flush-Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 98-103

Filter Pack: #2/12 medium sand
Surface Seal: Concrete
Annular Seal: Bentonite Chips

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Boring Abandonment: NA
Surveyed Location: **X:** NA **Y:** NA

APPENDIX B
LABORATORY ANALYTICAL REPORTS

CLEANUP ACTION PROGRESS REPORT
June 2008 to June 2010
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

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

October 29, 2009

Carla Brock
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 0910-122

Dear Carla:

Enclosed are the analytical results and associated quality control data for samples submitted on October 15, 2009.

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

Case Narrative

Samples were collected on October 14, 2009, and received by the laboratory on October 15, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as 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.

Halogenated Volatiles EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

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.

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-122-03
Client ID: MW12-50

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00082
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00082
Bromomethane	ND		0.00082
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00082
1,1-Dichloroethene	ND		0.00082
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0082
(trans) 1,2-Dichloroethene	ND		0.00082
1,1-Dichloroethane	ND		0.00082
2,2-Dichloropropane	ND		0.00082
(cis) 1,2-Dichloroethene	ND		0.00082
Bromochloromethane	ND		0.00082
Chloroform	ND		0.00082
1,1,1-Trichloroethane	ND		0.00082
Carbon Tetrachloride	ND		0.00082
1,1-Dichloropropene	ND		0.00082
1,2-Dichloroethane	ND		0.00082
Trichloroethene	ND		0.00082
1,2-Dichloropropane	ND		0.00082
Dibromomethane	ND		0.00082
Bromodichloromethane	ND		0.00082
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00082
(trans) 1,3-Dichloropropene	ND		0.00082

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 10-122-03
Client ID: MW12-50

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00082
Tetrachloroethene	0.12		0.00082
1,3-Dichloropropane	ND		0.00082
Dibromochloromethane	ND		0.00082
1,2-Dibromoethane	ND		0.00082
Chlorobenzene	ND		0.00082
1,1,1,2-Tetrachloroethane	ND		0.00082
Bromoform	ND		0.00082
Bromobenzene	ND		0.00082
1,1,2,2-Tetrachloroethane	ND		0.00082
1,2,3-Trichloropropane	ND		0.00082
2-Chlorotoluene	ND		0.00082
4-Chlorotoluene	ND		0.00082
1,3-Dichlorobenzene	ND		0.00082
1,4-Dichlorobenzene	ND		0.00082
1,2-Dichlorobenzene	ND		0.00082
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00082
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00082

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	110	55-125
Toluene-d8	109	56-127
4-Bromofluorobenzene	89	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-122-05
Client ID: MW12-70

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00067
Chloromethane	ND		0.0033
Vinyl Chloride	ND		0.00067
Bromomethane	ND		0.00067
Chloroethane	ND		0.0033
Trichlorofluoromethane	ND		0.00067
1,1-Dichloroethene	ND		0.00067
Iodomethane	ND		0.0033
Methylene Chloride	ND		0.0067
(trans) 1,2-Dichloroethene	ND		0.00067
1,1-Dichloroethane	ND		0.00067
2,2-Dichloropropane	ND		0.00067
(cis) 1,2-Dichloroethene	ND		0.00067
Bromochloromethane	ND		0.00067
Chloroform	ND		0.00067
1,1,1-Trichloroethane	ND		0.00067
Carbon Tetrachloride	ND		0.00067
1,1-Dichloropropene	ND		0.00067
1,2-Dichloroethane	ND		0.00067
Trichloroethene	ND		0.00067
1,2-Dichloropropane	ND		0.00067
Dibromomethane	ND		0.00067
Bromodichloromethane	ND		0.00067
2-Chloroethyl Vinyl Ether	ND		0.0033
(cis) 1,3-Dichloropropene	ND		0.00067
(trans) 1,3-Dichloropropene	ND		0.00067

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 10-122-05
Client ID: MW12-70

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00067
Tetrachloroethene	0.024		0.00067
1,3-Dichloropropane	ND		0.00067
Dibromochloromethane	ND		0.00067
1,2-Dibromoethane	ND		0.00067
Chlorobenzene	ND		0.00067
1,1,1,2-Tetrachloroethane	ND		0.00067
Bromoform	ND		0.00067
Bromobenzene	ND		0.00067
1,1,2,2-Tetrachloroethane	ND		0.00067
1,2,3-Trichloropropane	ND		0.00067
2-Chlorotoluene	ND		0.00067
4-Chlorotoluene	ND		0.00067
1,3-Dichlorobenzene	ND		0.00067
1,4-Dichlorobenzene	ND		0.00067
1,2-Dichlorobenzene	ND		0.00067
1,2-Dibromo-3-chloropropane	ND		0.0033
1,2,4-Trichlorobenzene	ND		0.00067
Hexachlorobutadiene	ND		0.0033
1,2,3-Trichlorobenzene	ND		0.00067

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	55-125
Toluene-d8	106	56-127
4-Bromofluorobenzene	91	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1022S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.010
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1022S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	112	55-125
Toluene-d8	112	56-127
4-Bromofluorobenzene	99	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB1022S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0509	102	0.0527	105	70-130	
Benzene	0.0500	0.0485	97	0.0501	100	70-128	
Trichloroethene	0.0500	0.0476	95	0.0464	93	70-124	
Toluene	0.0500	0.0489	98	0.0475	95	73-123	
Chlorobenzene	0.0500	0.0498	100	0.0488	98	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	3	16	
Benzene	3	15	
Trichloroethene	3	14	
Toluene	3	14	
Chlorobenzene	2	13	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

% MOISTURE

Date Analyzed: 10-20-09

Client ID	Lab ID	% Moisture
MW12-50	10-122-03	10
MW12-70	10-122-05	10

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

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-napthalene) are present in the sample.

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

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

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.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Phone: (425) 883-3881 • Fax: (425) 885-4603

Laboratory Number: 10-122

Company: Farallon
Project Number: 663-0110
Project Name: Allison's Norge Village
Project Manager: Carla Brock
Sampled by: Jovan Ruark

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

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664							% Moisture
1	MW12-30	10/14/09	1040	S	4																				
2	MW12-40		1152	S	4																				
3	MW12-50		1302	S	4					⊗															⊗
4	MW12-60		1335	S	4																				
5	MW12-70		1433	S	4					⊗															⊗
6	MW12-80		1500	S	4																				

JR

	Signature	Company	Date	Time
Relinquished by	[signature]	Farallon	10/15/09	0630
Received by	[signature]	OSE	10/15/09	~~7~~ 15A
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:
⊗ Added 10/20/09. DB

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

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

October 29, 2009

Carla Brock
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 0910-122

Dear Carla:

Enclosed are the analytical results and associated quality control data for samples submitted on October 15, 2009.

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

Case Narrative

Samples were collected on October 14, 2009, and received by the laboratory on October 15, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as 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.

Halogenated Volatiles EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

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.

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-122-03
Client ID: MW12-50

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00082
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00082
Bromomethane	ND		0.00082
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00082
1,1-Dichloroethene	ND		0.00082
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0082
(trans) 1,2-Dichloroethene	ND		0.00082
1,1-Dichloroethane	ND		0.00082
2,2-Dichloropropane	ND		0.00082
(cis) 1,2-Dichloroethene	ND		0.00082
Bromochloromethane	ND		0.00082
Chloroform	ND		0.00082
1,1,1-Trichloroethane	ND		0.00082
Carbon Tetrachloride	ND		0.00082
1,1-Dichloropropene	ND		0.00082
1,2-Dichloroethane	ND		0.00082
Trichloroethene	ND		0.00082
1,2-Dichloropropane	ND		0.00082
Dibromomethane	ND		0.00082
Bromodichloromethane	ND		0.00082
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00082
(trans) 1,3-Dichloropropene	ND		0.00082

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 10-122-03
Client ID: MW12-50

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00082
Tetrachloroethene	0.12		0.00082
1,3-Dichloropropane	ND		0.00082
Dibromochloromethane	ND		0.00082
1,2-Dibromoethane	ND		0.00082
Chlorobenzene	ND		0.00082
1,1,1,2-Tetrachloroethane	ND		0.00082
Bromoform	ND		0.00082
Bromobenzene	ND		0.00082
1,1,2,2-Tetrachloroethane	ND		0.00082
1,2,3-Trichloropropane	ND		0.00082
2-Chlorotoluene	ND		0.00082
4-Chlorotoluene	ND		0.00082
1,3-Dichlorobenzene	ND		0.00082
1,4-Dichlorobenzene	ND		0.00082
1,2-Dichlorobenzene	ND		0.00082
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00082
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00082

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	110	55-125
Toluene-d8	109	56-127
4-Bromofluorobenzene	89	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-122-05
Client ID: MW12-70

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00067
Chloromethane	ND		0.0033
Vinyl Chloride	ND		0.00067
Bromomethane	ND		0.00067
Chloroethane	ND		0.0033
Trichlorofluoromethane	ND		0.00067
1,1-Dichloroethene	ND		0.00067
Iodomethane	ND		0.0033
Methylene Chloride	ND		0.0067
(trans) 1,2-Dichloroethene	ND		0.00067
1,1-Dichloroethane	ND		0.00067
2,2-Dichloropropane	ND		0.00067
(cis) 1,2-Dichloroethene	ND		0.00067
Bromochloromethane	ND		0.00067
Chloroform	ND		0.00067
1,1,1-Trichloroethane	ND		0.00067
Carbon Tetrachloride	ND		0.00067
1,1-Dichloropropene	ND		0.00067
1,2-Dichloroethane	ND		0.00067
Trichloroethene	ND		0.00067
1,2-Dichloropropane	ND		0.00067
Dibromomethane	ND		0.00067
Bromodichloromethane	ND		0.00067
2-Chloroethyl Vinyl Ether	ND		0.0033
(cis) 1,3-Dichloropropene	ND		0.00067
(trans) 1,3-Dichloropropene	ND		0.00067

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 10-122-05
Client ID: MW12-70

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00067
Tetrachloroethene	0.024		0.00067
1,3-Dichloropropane	ND		0.00067
Dibromochloromethane	ND		0.00067
1,2-Dibromoethane	ND		0.00067
Chlorobenzene	ND		0.00067
1,1,1,2-Tetrachloroethane	ND		0.00067
Bromoform	ND		0.00067
Bromobenzene	ND		0.00067
1,1,2,2-Tetrachloroethane	ND		0.00067
1,2,3-Trichloropropane	ND		0.00067
2-Chlorotoluene	ND		0.00067
4-Chlorotoluene	ND		0.00067
1,3-Dichlorobenzene	ND		0.00067
1,4-Dichlorobenzene	ND		0.00067
1,2-Dichlorobenzene	ND		0.00067
1,2-Dibromo-3-chloropropane	ND		0.0033
1,2,4-Trichlorobenzene	ND		0.00067
Hexachlorobutadiene	ND		0.0033
1,2,3-Trichlorobenzene	ND		0.00067

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	55-125
Toluene-d8	106	56-127
4-Bromofluorobenzene	91	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1022S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.010
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1022S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	112	55-125
Toluene-d8	112	56-127
4-Bromofluorobenzene	99	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB1022S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0509	102	0.0527	105	70-130	
Benzene	0.0500	0.0485	97	0.0501	100	70-128	
Trichloroethene	0.0500	0.0476	95	0.0464	93	70-124	
Toluene	0.0500	0.0489	98	0.0475	95	73-123	
Chlorobenzene	0.0500	0.0498	100	0.0488	98	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	3	16	
Benzene	3	15	
Trichloroethene	3	14	
Toluene	3	14	
Chlorobenzene	2	13	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 29, 2009
Samples Submitted: October 15, 2009
Laboratory Reference: 0910-122
Project: 663-010

% MOISTURE

Date Analyzed: 10-20-09

Client ID	Lab ID	% Moisture
MW12-50	10-122-03	10
MW12-70	10-122-05	10

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

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-napthalene) are present in the sample.

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

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

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.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Phone: (425) 883-3881 • Fax: (425) 885-4603

Laboratory Number: 10-122

Company: Farallon
Project Number: 663-0110
Project Name: Allison's Norge Village
Project Manager: Carla Brock
Sampled by: Jovan Ruark

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

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664							% Moisture
1	MW12-30	10/14/09	1040	S	4																				
2	MW12-40		1152	S	4																				
3	MW12-50		1302	S	4					⊗															⊗
4	MW12-60		1335	S	4																				
5	MW12-70		1433	S	4					⊗															⊗
6	MW12-80		1500	S	4																				

JR

	Signature	Company	Date	Time
Relinquished by	[signature]	Farallon	10/15/09	0630
Received by	[signature]	OSE	10/15/09	~~7~~ 15A
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:
⊗ Added 10/20/09. DB

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

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

October 27, 2009

Carla Brock
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 683-010
Laboratory Reference No. 0910-103

Dear Carla:

Enclosed are the analytical results and associated quality control data for samples submitted on October 13, 2009.

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Lab Reference: 0910-103
Project: 683-010

Case Narrative

Samples were collected on October 12, 2009, and received by the laboratory on October 13, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as 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.

Halogenated Volatiles EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

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.

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-103-01
Client ID: MW13-30

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00083
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00083
Bromomethane	ND		0.00083
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00083
1,1-Dichloroethene	ND		0.00083
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0083
(trans) 1,2-Dichloroethene	ND		0.00083
1,1-Dichloroethane	ND		0.00083
2,2-Dichloropropane	ND		0.00083
(cis) 1,2-Dichloroethene	ND		0.00083
Bromochloromethane	ND		0.00083
Chloroform	ND		0.00083
1,1,1-Trichloroethane	ND		0.00083
Carbon Tetrachloride	ND		0.00083
1,1-Dichloropropene	ND		0.00083
1,2-Dichloroethane	ND		0.00083
Trichloroethene	ND		0.00083
1,2-Dichloropropane	ND		0.00083
Dibromomethane	ND		0.00083
Bromodichloromethane	ND		0.00083
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00083
(trans) 1,3-Dichloropropene	ND		0.00083

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 10-103-01
Client ID: MW13-30

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00083
Tetrachloroethene	0.0011		0.00083
1,3-Dichloropropane	ND		0.00083
Dibromochloromethane	ND		0.00083
1,2-Dibromoethane	ND		0.00083
Chlorobenzene	ND		0.00083
1,1,1,2-Tetrachloroethane	ND		0.00083
Bromoform	ND		0.00083
Bromobenzene	ND		0.00083
1,1,2,2-Tetrachloroethane	ND		0.00083
1,2,3-Trichloropropane	ND		0.00083
2-Chlorotoluene	ND		0.00083
4-Chlorotoluene	ND		0.00083
1,3-Dichlorobenzene	ND		0.00083
1,4-Dichlorobenzene	ND		0.00083
1,2-Dichlorobenzene	ND		0.00083
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00083
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00083

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	103	55-125
Toluene-d8	105	56-127
4-Bromofluorobenzene	90	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-103-02
Client ID: MW13-40

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00085
Chloromethane	ND		0.0042
Vinyl Chloride	ND		0.00085
Bromomethane	ND		0.00085
Chloroethane	ND		0.0042
Trichlorofluoromethane	ND		0.00085
1,1-Dichloroethene	ND		0.00085
Iodomethane	ND		0.0042
Methylene Chloride	ND		0.0085
(trans) 1,2-Dichloroethene	ND		0.00085
1,1-Dichloroethane	ND		0.00085
2,2-Dichloropropane	ND		0.00085
(cis) 1,2-Dichloroethene	ND		0.00085
Bromochloromethane	ND		0.00085
Chloroform	ND		0.00085
1,1,1-Trichloroethane	ND		0.00085
Carbon Tetrachloride	ND		0.00085
1,1-Dichloropropene	ND		0.00085
1,2-Dichloroethane	ND		0.00085
Trichloroethene	ND		0.00085
1,2-Dichloropropane	ND		0.00085
Dibromomethane	ND		0.00085
Bromodichloromethane	ND		0.00085
2-Chloroethyl Vinyl Ether	ND		0.0042
(cis) 1,3-Dichloropropene	ND		0.00085
(trans) 1,3-Dichloropropene	ND		0.00085

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 10-103-02
Client ID: MW13-40

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00085
Tetrachloroethene	0.0033		0.00085
1,3-Dichloropropane	ND		0.00085
Dibromochloromethane	ND		0.00085
1,2-Dibromoethane	ND		0.00085
Chlorobenzene	ND		0.00085
1,1,1,2-Tetrachloroethane	ND		0.00085
Bromoform	ND		0.00085
Bromobenzene	ND		0.00085
1,1,2,2-Tetrachloroethane	ND		0.00085
1,2,3-Trichloropropane	ND		0.00085
2-Chlorotoluene	ND		0.00085
4-Chlorotoluene	ND		0.00085
1,3-Dichlorobenzene	ND		0.00085
1,4-Dichlorobenzene	ND		0.00085
1,2-Dichlorobenzene	ND		0.00085
1,2-Dibromo-3-chloropropane	ND		0.0042
1,2,4-Trichlorobenzene	ND		0.00085
Hexachlorobutadiene	ND		0.0042
1,2,3-Trichlorobenzene	ND		0.00085

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	98	55-125
Toluene-d8	94	56-127
4-Bromofluorobenzene	80	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1022S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.010
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1022S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	112	55-125
Toluene-d8	112	56-127
4-Bromofluorobenzene	99	54-130

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 10-22-09
Date Analyzed: 10-22-09

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB1022S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0509	102	0.0527	105	70-130	
Benzene	0.0500	0.0485	97	0.0501	100	70-128	
Trichloroethene	0.0500	0.0476	95	0.0464	93	70-124	
Toluene	0.0500	0.0489	98	0.0475	95	73-123	
Chlorobenzene	0.0500	0.0498	100	0.0488	98	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	3	16	
Benzene	3	15	
Trichloroethene	3	14	
Toluene	3	14	
Chlorobenzene	2	13	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 27, 2009
Samples Submitted: October 13, 2009
Laboratory Reference: 0910-103
Project: 683-010

% MOISTURE

Date Analyzed: 10-20-09

Client ID	Lab ID	% Moisture
MW13-30	10-103-01	6
MW13-40	10-103-02	5

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

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-napthalene) are present in the sample.

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

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

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.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: Farallon
Project Number: 683-010
Project Name: Allison's Norge Village
Project Manager: Carla Brock
Sampled by: Jawan Pruyn

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

Laboratory Number: 10-103

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH					% Moisture
1	MW13-30	10/12/09	1210	S	4					●	-405														●
2	MW13-40		1330	S	4					●															●
3	MW13-70		1548	S	4																				
4	MW13-60		1512	S	4																				
5	MW13-80		1412	S	4																				

	Signature	Company	Date	Time
Relinquished by		Farallon	10/12/09	
Received by		Speedy	10/13/09	1230pm
Relinquished by		Speedy	10/13/09	100pm
Received by			10/13/10	1300
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:
~~Will Call with~~
Analysis DB
Thank You
● Added 10/20/09. DB.

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

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

November 19, 2009

Carla Brock
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 0911-069

Dear Carla:

Enclosed are the analytical results and associated quality control data for samples submitted on November 10, 2009.

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

Case Narrative

Samples were collected on November 9, 2009, and received by the laboratory on November 10, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as 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.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Date Extracted: 11-16-09
Date Analyzed: 11-16-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: 11-069-01
Client ID: MW12-110909

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 11-069-01
Client ID: MW12-110909

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.29		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	71-126
Toluene-d8	93	76-116
4-Bromofluorobenzene	89	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 11-16-09
Date Analyzed: 11-16-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: 11-069-02
Client ID: MW13-110909

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 11-069-02
Client ID: MW13-110909

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	92	71-126
Toluene-d8	90	76-116
4-Bromofluorobenzene	90	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 11-16-09
Date Analyzed: 11-16-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1116W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1116W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	71-126
Toluene-d8	90	76-116
4-Bromofluorobenzene	90	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 19, 2009
Samples Submitted: November 10, 2009
Laboratory Reference: 0911-069
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 11-16-09
Date Analyzed: 11-16-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB1116W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	10.6	106	10.9	109	70-130	
Benzene	10.0	9.85	99	10.1	101	70-130	
Trichloroethene	10.0	9.98	100	9.97	100	70-123	
Toluene	10.0	9.83	98	9.81	98	77-120	
Chlorobenzene	10.0	10.3	103	10.1	101	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	3	21	
Benzene	3	18	
Trichloroethene	0	18	
Toluene	0	17	
Chlorobenzene	2	18	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

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-napthalene) are present in the sample.

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

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

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.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: Farallon
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Carla Brock
Sampled by: Javan Rusk

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☒ Standard (7 working days)
- ☐ _____ (other)

Laboratory Number: 11-069

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH	% Moisture
1	MW12-110909	11/9/09	1202	W	3					X											
2	MW13-110909	11/9/09	1328	W	3					X											

JR

	Signature	Company	Date	Time
Relinquished by		Farallon	11/9/09	1700
Received by		SPECTRA	11/10/09	11:50
Relinquished by		SPECTRA	11/10/09	1309
Received by		CDE	11/10/09	1309
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

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

March 22, 2010

Carla Brock
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1003-129

Dear Carla:

Enclosed are the analytical results and associated quality control data for samples submitted on March 17, 2010.

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

Case Narrative

Samples were collected on March 15 and 16, 2010 and received by the laboratory on March 17, 2010. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-01
Client ID: MW2-031610

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		2.0
Chloromethane	ND		10
Vinyl Chloride	ND		2.0
Bromomethane	ND		2.0
Chloroethane	ND		10
Trichlorofluoromethane	ND		2.0
1,1-Dichloroethene	ND		2.0
Iodomethane	ND		10
Methylene Chloride	ND		10
(trans) 1,2-Dichloroethene	ND		2.0
1,1-Dichloroethane	ND		2.0
2,2-Dichloropropane	ND		2.0
(cis) 1,2-Dichloroethene	ND		2.0
Bromochloromethane	ND		2.0
Chloroform	ND		2.0
1,1,1-Trichloroethane	ND		2.0
Carbon Tetrachloride	ND		2.0
1,1-Dichloropropene	ND		2.0
1,2-Dichloroethane	ND		2.0
Trichloroethene	ND		2.0
1,2-Dichloropropane	ND		2.0
Dibromomethane	ND		2.0
Bromodichloromethane	ND		2.0
2-Chloroethyl Vinyl Ether	ND		10
(cis) 1,3-Dichloropropene	ND		2.0
(trans) 1,3-Dichloropropene	ND		2.0

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 03-129-01
Client ID: MW2-031610

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		2.0
Tetrachloroethene	270		2.0
1,3-Dichloropropane	ND		2.0
Dibromochloromethane	ND		2.0
1,2-Dibromoethane	ND		2.0
Chlorobenzene	ND		2.0
1,1,1,2-Tetrachloroethane	ND		2.0
Bromoform	ND		10
Bromobenzene	ND		2.0
1,1,2,2-Tetrachloroethane	ND		2.0
1,2,3-Trichloropropane	ND		2.0
2-Chlorotoluene	ND		2.0
4-Chlorotoluene	ND		2.0
1,3-Dichlorobenzene	ND		2.0
1,4-Dichlorobenzene	ND		2.0
1,2-Dichlorobenzene	ND		2.0
1,2-Dibromo-3-chloropropane	ND		10
1,2,4-Trichlorobenzene	ND		2.0
Hexachlorobutadiene	ND		2.0
1,2,3-Trichlorobenzene	ND		2.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	80	71-126
Toluene-d8	77	76-116
4-Bromofluorobenzene	100	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-02
Client ID: MW5-031610

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		1.0
Chloromethane	ND		5.0
Vinyl Chloride	ND		1.0
Bromomethane	ND		1.0
Chloroethane	ND		5.0
Trichlorofluoromethane	ND		1.0
1,1-Dichloroethene	ND		1.0
Iodomethane	ND		5.0
Methylene Chloride	ND		5.0
(trans) 1,2-Dichloroethene	ND		1.0
1,1-Dichloroethane	ND		1.0
2,2-Dichloropropane	ND		1.0
(cis) 1,2-Dichloroethene	ND		1.0
Bromochloromethane	ND		1.0
Chloroform	ND		1.0
1,1,1-Trichloroethane	ND		1.0
Carbon Tetrachloride	ND		1.0
1,1-Dichloropropene	ND		1.0
1,2-Dichloroethane	ND		1.0
Trichloroethene	ND		1.0
1,2-Dichloropropane	ND		1.0
Dibromomethane	ND		1.0
Bromodichloromethane	ND		1.0
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		1.0
(trans) 1,3-Dichloropropene	ND		1.0

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 03-129-02
Client ID: MW5-031610

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		1.0
Tetrachloroethene	160		1.0
1,3-Dichloropropane	ND		1.0
Dibromochloromethane	ND		1.0
1,2-Dibromoethane	ND		1.0
Chlorobenzene	ND		1.0
1,1,1,2-Tetrachloroethane	ND		1.0
Bromoform	ND		5.0
Bromobenzene	ND		1.0
1,1,2,2-Tetrachloroethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0
2-Chlorotoluene	ND		1.0
4-Chlorotoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0
1,4-Dichlorobenzene	ND		1.0
1,2-Dichlorobenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		1.0
Hexachlorobutadiene	ND		1.0
1,2,3-Trichlorobenzene	ND		1.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	77	71-126
Toluene-d8	77	76-116
4-Bromofluorobenzene	98	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-03
Client ID: MW7-031610

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 03-129-03
Client ID: MW7-031610

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	4.6		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	80	71-126
Toluene-d8	77	76-116
4-Bromofluorobenzene	99	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-04
Client ID: MW9-031510

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 03-129-04
Client ID: MW9-031510

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	80	71-126
Toluene-d8	78	76-116
4-Bromofluorobenzene	104	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-05
Client ID: MW10-031610

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 03-129-05
Client ID: MW10-031610

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	81	71-126
Toluene-d8	83	76-116
4-Bromofluorobenzene	104	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-06
Client ID: MW11-031510

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 03-129-06
Client ID: MW11-031510

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	5.7		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	75	71-126
Toluene-d8	79	76-116
4-Bromofluorobenzene	100	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-07
Client ID: MW12-031510

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 03-129-07
Client ID: MW12-031510

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	71	71-126
Toluene-d8	78	76-116
4-Bromofluorobenzene	98	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 03-129-08
Client ID: MW13-031510

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 03-129-08
Client ID: MW13-031510

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	78	71-126
Toluene-d8	78	76-116
4-Bromofluorobenzene	102	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0319W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB0319W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	82	71-126
Toluene-d8	82	76-116
4-Bromofluorobenzene	103	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: March 22, 2010
Samples Submitted: March 17, 2010
Laboratory Reference: 1003-129
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 3-19-10
Date Analyzed: 3-19-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB0319W2

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	12.5	125	12.8	128	70-130	
Benzene	10.0	11.3	113	11.5	115	73-130	
Trichloroethene	10.0	10.1	101	10.6	106	79-122	
Toluene	10.0	10.3	103	10.7	107	80-121	
Chlorobenzene	10.0	9.93	99	10.1	101	83-116	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	2	15	
Benzene	2	14	
Trichloroethene	4	14	
Toluene	3	13	
Chlorobenzene	2	13	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

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-napthalene) are present in the sample.

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

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

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.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

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

Company: Farallon
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Carla Brock
Sampled by: Jason Ruark

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 03-129

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	MW2-031610	3/16/10	1427	W	3					X									
2	MW5-031610	3/16/10	1320	W	3					X									
3	MW7-031610	3/16/10	1055	W	3					X									
4	MW9-031510	3/15/10	1546	W	3					X									
5	MW10-031610	3/16/10	1247	W	3					X									
6	MW11-031510	3/15/10	1710	W	3					X									
7	MW12-031510	3/15/10	1451	W	3					X									
8	MW13-031510	3/15/10	1350	W	3					X									
		JR																	

	Signature	Company	Date	Time
Relinquished by		Farallon	3/17/10	0900
Received by	Eric Furlong	Speedy	3/17/10	12:40
Relinquished by	Eric Furlong	Speedy	3/17/10	12:40
Received by			3/17/10	1240
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Client Copy

OnSite Environmental Inc.

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

July 2, 2010

Carla Brock
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1006-198

Dear Carla:

Enclosed are the analytical results and associated quality control data for samples submitted on June 22, 2010.

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

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

Case Narrative

Samples were collected on June 21 and 22, 2010 and received by the laboratory on June 22, 2010. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	6-25-10
Date Analyzed:	6-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	06-198-01
Client ID:	**062110-MW-13**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-01
Client ID: 062110-MW-13

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	82	71-126
Toluene-d8	82	76-116
4-Bromofluorobenzene	85	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	6-25-10
Date Analyzed:	6-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	06-198-02
Client ID:	**062110-MW-10**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-02
Client ID: 062110-MW-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	83	71-126
Toluene-d8	82	76-116
4-Bromofluorobenzene	86	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	6-25-10
Date Analyzed:	6-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	06-198-03
Client ID:	**062110-MW-12**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-03
Client ID: 062110-MW-12

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	71-126
Toluene-d8	83	76-116
4-Bromofluorobenzene	86	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 6-25-10
Date Analyzed: 6-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 06-198-04
Client ID: 062110-MW-9

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-04
Client ID: 062110-MW-9

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	86	71-126
Toluene-d8	84	76-116
4-Bromofluorobenzene	87	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 6-25-10
Date Analyzed: 6-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 06-198-05
Client ID: 062210-MW-11

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-05
Client ID: 062210-MW-11

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	4.3		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	71-126
Toluene-d8	83	76-116
4-Bromofluorobenzene	84	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	6-25-10
Date Analyzed:	6-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	06-198-06
Client ID:	**062210-MW-5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.40
Chloromethane	ND		2.0
Vinyl Chloride	ND		0.40
Bromomethane	ND		0.40
Chloroethane	ND		2.0
Trichlorofluoromethane	ND		0.40
1,1-Dichloroethene	ND		0.40
Iodomethane	ND		2.0
Methylene Chloride	ND		2.0
(trans) 1,2-Dichloroethene	ND		0.40
1,1-Dichloroethane	ND		0.40
2,2-Dichloropropane	ND		0.40
(cis) 1,2-Dichloroethene	ND		0.40
Bromochloromethane	ND		0.40
Chloroform	ND		0.40
1,1,1-Trichloroethane	ND		0.40
Carbon Tetrachloride	ND		0.40
1,1-Dichloropropene	ND		0.40
1,2-Dichloroethane	ND		0.40
Trichloroethene	ND		0.40
1,2-Dichloropropane	ND		0.40
Dibromomethane	ND		0.40
Bromodichloromethane	ND		0.40
2-Chloroethyl Vinyl Ether	ND		2.0
(cis) 1,3-Dichloropropene	ND		0.40
(trans) 1,3-Dichloropropene	ND		0.40

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-06
Client ID: 062210-MW-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.40
Tetrachloroethene	60		0.40
1,3-Dichloropropane	ND		0.40
Dibromochloromethane	ND		0.40
1,2-Dibromoethane	ND		0.40
Chlorobenzene	ND		0.40
1,1,1,2-Tetrachloroethane	ND		0.40
Bromoform	ND		2.0
Bromobenzene	ND		0.40
1,1,2,2-Tetrachloroethane	ND		0.40
1,2,3-Trichloropropane	ND		0.40
2-Chlorotoluene	ND		0.40
4-Chlorotoluene	ND		0.40
1,3-Dichlorobenzene	ND		0.40
1,4-Dichlorobenzene	ND		0.40
1,2-Dichlorobenzene	ND		0.40
1,2-Dibromo-3-chloropropane	ND		2.0
1,2,4-Trichlorobenzene	ND		0.40
Hexachlorobutadiene	ND		0.40
1,2,3-Trichlorobenzene	ND		0.40

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	79	71-126
Toluene-d8	83	76-116
4-Bromofluorobenzene	80	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 6-25-10
Date Analyzed: 6-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 06-198-07
Client ID: 062210-MW-7

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-07
Client ID: 062210-MW-7

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	4.5		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	86	71-126
Toluene-d8	83	76-116
4-Bromofluorobenzene	85	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 6-25-10
Date Analyzed: 6-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 06-198-08
Client ID: 062210-MW-2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		2.0
Chloromethane	ND		10
Vinyl Chloride	ND		2.0
Bromomethane	ND		2.0
Chloroethane	ND		10
Trichlorofluoromethane	ND		2.0
1,1-Dichloroethene	ND		2.0
Iodomethane	ND		10
Methylene Chloride	ND		10
(trans) 1,2-Dichloroethene	ND		2.0
1,1-Dichloroethane	ND		2.0
2,2-Dichloropropane	ND		2.0
(cis) 1,2-Dichloroethene	ND		2.0
Bromochloromethane	ND		2.0
Chloroform	ND		2.0
1,1,1-Trichloroethane	ND		2.0
Carbon Tetrachloride	ND		2.0
1,1-Dichloropropene	ND		2.0
1,2-Dichloroethane	ND		2.0
Trichloroethene	ND		2.0
1,2-Dichloropropane	ND		2.0
Dibromomethane	ND		2.0
Bromodichloromethane	ND		2.0
2-Chloroethyl Vinyl Ether	ND		10
(cis) 1,3-Dichloropropene	ND		2.0
(trans) 1,3-Dichloropropene	ND		2.0

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-08
Client ID: 062210-MW-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		2.0
Tetrachloroethene	230		2.0
1,3-Dichloropropane	ND		2.0
Dibromochloromethane	ND		2.0
1,2-Dibromoethane	ND		2.0
Chlorobenzene	ND		2.0
1,1,1,2-Tetrachloroethane	ND		2.0
Bromoform	ND		10
Bromobenzene	ND		2.0
1,1,2,2-Tetrachloroethane	ND		2.0
1,2,3-Trichloropropane	ND		2.0
2-Chlorotoluene	ND		2.0
4-Chlorotoluene	ND		2.0
1,3-Dichlorobenzene	ND		2.0
1,4-Dichlorobenzene	ND		2.0
1,2-Dichlorobenzene	ND		2.0
1,2-Dibromo-3-chloropropane	ND		10
1,2,4-Trichlorobenzene	ND		2.0
Hexachlorobutadiene	ND		2.0
1,2,3-Trichlorobenzene	ND		2.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	81	71-126
Toluene-d8	84	76-116
4-Bromofluorobenzene	83	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	6-25-10
Date Analyzed:	6-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	06-198-09
Client ID:	**KO H20**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 06-198-09
Client ID: KO H20

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	71-126
Toluene-d8	88	76-116
4-Bromofluorobenzene	90	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 6-25-10
Date Analyzed: 6-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0625W2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB0625W2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	71-126
Toluene-d8	87	76-116
4-Bromofluorobenzene	83	70-123

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: July 2, 2010
Samples Submitted: June 22, 2010
Laboratory Reference: 1006-198
Project: 663-010

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 6-25-10
Date Analyzed: 6-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB0625W2

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	11.0	110	11.0	110	70-130	
Benzene	10.0	9.95	100	10.3	103	73-130	
Trichloroethene	10.0	10.5	105	10.2	102	79-122	
Toluene	10.0	9.97	100	9.95	100	80-121	
Chlorobenzene	10.0	9.89	99	9.99	100	83-116	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	0	15	
Benzene	3	14	
Trichloroethene	2	14	
Toluene	0	13	
Chlorobenzene	1	13	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

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-napthalene) 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.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

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

Company: Farallon
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Carla Brock
Sampled by: R. Hiles

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 06-198

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	062110-MW-13	6-21-10	1215	W	3					X									
2	062110-MW-10	6-21-10	1325	W	3					X									
3	062110-MW-12	6-21-10	1440	W	3					X									
4	062110-MW-9	6-21-10	1542	W	3					X									
5	062210-MW-11	6-22-10	0825	W	3					X									
6	062210-MW-5	6-22-10	0925	W	3					X									
7	062210-MW-7	6-22-10	~~1400~~ 1137	W	3					X									
8	062210-MW-2	6-22-10	1225	W	3					X									
9	KO 1/20	6-22-10	1245	W	3					X									

	Signature	Company	Date	Time
Relinquished by	Ryan Hiles	Farallon	6-22-10	1620
Received by		OSE	6/22/10	1620
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Client Copy