FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Bend | Baker City
California
Oakland | Sacramento | Irvine

CLEANUP ACTION PROGRESS REPORT
JUNE 2012 TO DECEMBER 2017

ALLISON'S NORGE VILLAGE (AKA EASTSIDE LAUNDRY)
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON
VCP NO. SW0370

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

Farallon PN: 663-010

February 9, 2018

Prepared by:



Donald Lance, L.G., L.H.G.
Senior Geologist

Reviewed by:



Jeffrey Kaspar, L.G., L.H.G.
Principal Geologist

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1
1.1 PROPERTY DESCRIPTION AND BACKGROUND 1-1
1.2 REPORT ORGANIZATION 1-3

2.0 SUBSURFACE SOIL SAMPLING 2-1
2.1 SCOPE OF WORK 2-1
2.2 RESULTS 2-1

3.0 REMEDIAL SOIL EXCAVATION AND SVE WELL INSTALLATION . 3-1
3.1 SCOPE OF WORK 3-1
3.1.1 Structural Evaluation 3-1
3.1.2 Contained-In Determination 3-1
3.1.3 Limited Demolition 3-2
3.1.4 SVE Well Decommissioning 3-2
3.1.5 Soil Excavation and Disposal 3-2

4.0 SVE SYSTEM OPERATIONS AND MAINTENANCE 4-1

5.0 SUBSLAB DEPRESSURIZATION PILOT TEST 5-1

6.0 GROUNDWATER MONITORING EVENTS 6-1
6.1 SCOPE OF WORK 6-1
6.2 RESULTS 6-2
6.2.1 December 2012 6-2
6.2.2 February 2016 6-2
6.2.3 August 2016 6-2
6.2.4 February/March 2017 6-3
6.2.5 Groundwater Flow Direction 6-3

7.0 IN-SITU GROUNDWATER TREATMENT 7-1

8.0 CONCLUSIONS 8-1

9.0 LIMITATIONS 9-1

FIGURES

Figure 1 *Property Vicinity Map*
Figure 2 *Property Plan*
Figure 3 *2012 Interior Excavation Locations and Compliance Soil Analytical Results*
Figure 4 *Property Plan Showing Groundwater Analytical Results*
Figure 5 *Groundwater Elevation Contour Map for August 22, 2016*
Figure 6 *Groundwater Elevation Contour Map for February 22, 2017*

TABLES

Table 1 *Summary of Soil Analytical Results for PCE and its Degradation Products*
Table 2 *Well Construction Summary*
Table 3 *Groundwater Elevation Data Summary*
Table 4 *Summary of Groundwater Analytical Results for PCE and its Degradation Products*
Table 5 *Summary of Groundwater Analytical Results for Manganese*
Table 6 *Summary of Soil Vapor Extraction System Operations*

APPENDICES

Appendix A Boring Logs
Appendix B Laboratory Analytical Reports
Appendix C Underground Injection Control Program Registration Letter

ABBREVIATIONS AND ACRONYMS

bfs	below floor slab
bgs	below ground surface
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
ISCO	in situ chemical oxidation
µg/l	micrograms per liter
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act Cleanup Regulation
$NaMnO_4$	sodium permanganate
OnSite Environmental	OnSite Environmental, Inc.
O&M	operation and maintenance
PCE	tetrachloroethene
PQLs	practical quantitation limits
Progress Report	*Cleanup Action Closure Report June 2012 to December 2017, Allison's Norge Village,120 Northeast Turner Street* dated January 24, 2018, prepared by Farallon Consulting, L.L.C. (this report)
Property	the property at 120 Northeast Turner Street in Olympia, Washington
Property building	A single-story brick masonry building constructed in the early 1960s consisting of four separate tenant suites
Saybr Contractors	Saybr Contractors, Inc.
Sitts & Hill	Sitts & Hill Engineers, Inc.
SSD	subslab depressurization
SVE	soil vapor extraction
TOC	top of the monitoring well casing
UIC	underground injection control
WAC	Washington Administrative Code

1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Cleanup Action Progress Report (Progress Report) for the former Allison's Norge Village Dry Cleaners, also known as Eastside Laundry, at 120 Northeast Turner Street in Olympia, Washington (herein referred to as the Property) (Figure 1). The dry cleaning solvent tetrachloroethene (PCE) has been detected at concentrations exceeding Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels in soil and groundwater on the Property. Cleanup activities were initiated in 2007 and are ongoing. This report summarizes the cleanup activities conducted at the Property between June 2012 and December 2017 and includes:

- Subsurface soil sampling conducted at the Property in September 2012;
- Subslab depressurization pilot testing conducted at the Property in October 2012;
- Remedial soil excavation and soil vapor extraction (SVE) well installations conducted at the Property in December 2012 and January 2013;
- Compliance groundwater monitoring events conducted in December 2012, February and August 2016, and February and March 2017;
- Intermittent operation of the SVE system during the reporting period; and
- Groundwater treatment by in situ chemical oxidation (ISCO) conducted at the Property in May 2017.

The cleanup action at the Property is being conducted in accordance with MTCA as an independent remedial action under the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program. Cleanup action activities at the Property primarily have consisted of operation and maintenance of the SVE system and compliance groundwater monitoring. As discussed in this Progress Report, additional cleanup actions include excavation and disposal of soil containing high concentrations of PCE from beneath the former dry cleaner suite, and injecting a chemical oxidant into selected groundwater monitoring wells to reduce PCE concentrations in groundwater.

1.1 PROPERTY DESCRIPTION AND BACKGROUND

The Property currently is developed with a single-story brick masonry building constructed in the early 1960s that consists of four separate tenant suites (Property building) (Figure 2). The two interior suites are occupied by a barbershop and an insurance broker. The northern and southern suites previously were occupied by Eastside Laundry, and currently are occupied by a pharmacy and juice bar, respectively. Dry cleaning operations were conducted at the Property from approximately 1962 until early 2012, when the dry cleaning operations were shut down and the dry cleaner suite was vacated. Historical dry cleaning operations were located only in the northern suite. The southern suite was used for laundry pick-up and drop-off.

Remedial investigations completed at the Property by Farallon and others identified PCE in soil and groundwater at concentrations exceeding the MTCA Method A cleanup level. The primary source area of PCE was associated with former dry cleaning equipment in the former dry cleaner suite at the northern end of the Property building (Figure 2). Two minor source areas identified southeast and southwest of the Property building were related to historical outside surface releases of dry cleaning wastewater and sludge. A majority of PCE contamination at the Property was localized in an area of relatively high concentration in shallow soil beneath the primary source area.

The SVE system was installed at the Property in 2006 and began operation in April 2007 to reduce concentrations of PCE in soil and thereby reduce the source of PCE to groundwater. Several previous cleanup action reports for the Property were prepared by Farallon:

- 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;
- Cleanup action activities conducted between September 2007 and January 2008 were summarized in the *Cleanup Action Status Report – September 2007 through January 2008, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington* dated March 26, 2008;
- Cleanup action activities conducted between February and May 2008 were summarized in the *Cleanup Action Progress Report February through May 2008, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington* dated July 29, 2008;
- A summary of additional remedial investigation and cleanup action activities was presented in the *Cleanup Action Progress Report June 2008 to June 2010, Allison's Norge Village (aka Eastside Laundry), 120 Northeast Turner Street, Olympia, Washington* dated October 25, 2010; and
- A summary of progress soil sampling and cleanup action activities was presented in the *Cleanup Action Progress Report March 2011 to May 2012, Allison's Norge Village (aka Eastside Laundry), 120 Northeast Turner Street, Olympia, Washington* dated August 21, 2012.

These documents should be referenced for additional background information and specific details pertaining to the cleanup action.

1.2 REPORT ORGANIZATION

This Progress Report includes the following sections:

- **Section 2, Subsurface Soil Sampling,** provides a summary of the scope of work and results for subsurface soil sampling conducted inside the Property building in September 2012;
- **Section 3, SubSlab Depressurization Pilot Test,** describes the subslab depressurization (SSD) pilot test conducted inside the Property building in October 2012;
- **Section 4, Remedial Soil Excavation and SVE Well Installation,** provides a summary for the remedial excavation and supporting activities conducted inside the former dry cleaner suite between September 2012 and January 2012, including performing a Property building structural evaluation, obtaining a Contained-In determination for soil disposal, conducting a limited demolition to provide interior access, conducting the remedial excavation and soil disposal, and installing two SVE supplemental extraction wells;
- **Section 5, Groundwater Monitoring Events,** provides a summary of the scope of work and results for the groundwater compliance monitoring events conducted at the Property between December 2012 and February 2017;
- **Section 6, SVE System Operations and Maintenance,** describes the SVE system operation and maintenance (O&M) activities conducted at the Property between September 2012 and February 2017, including the tasks performed for each O&M event, the SVE system operational history, modifications made to the SVE system, and the SVE system performance results;
- **Section 7, In-Situ Groundwater Treatment,** describes the ISCO injection activities conducted at the Property in May 2017 to remediate groundwater;
- **Section 8, Conclusions,** presents conclusions for the activities conducted during the reporting period; and
- **Section 6, Limitations,** provides Farallon's standard limitations.

Information supporting this report is provided in accompanying Figures 1 through 6, Tables 1 through 6, and Appendices A through C.

2.0 SUBSURFACE SOIL SAMPLING

This section presents a summary of the subsurface soil sampling activities conducted in September 2012 inside the Property building in the former dry cleaner and barber shop suites. The subsurface soil sampling was conducted to evaluate the remaining extent of PCE in soil inside the Property building and assess the feasibility of implementing a remedial excavation to remove shallow soil with PCE concentrations exceeding the MTCA Method A cleanup level.

2.1 SCOPE OF WORK

Borings IB-7 through IB-12 were advanced inside the former dry cleaner suite on September 6, 2012, and borings IB-13 through IB-17 were advanced inside the barber shop suite on September 7, 2012 (Figure 2). Prior to advancing the borings, Farallon coordinated access with the Property owner Stormans, Inc. and retained APS, Inc. of North Bend, Washington to locate utility lines beneath the concrete floor slab.

Drilling was conducted by ESN Northwest, Inc. of Olympia, Washington using a limited-access direct-push rig. Soil samples were collected continuously to the total depth of each boring, which varied between 14.5 and 20 feet below the floor slab (bfs). The drilling operations were observed by a Farallon Scientist. The soil samples were logged and described in accordance with the Unified Soil Classification System and observed for visual or olfactory evidence of contamination, and volatile organic vapors were measured using a photoionization detector. Soil samples were retained for laboratory analysis where field evidence indicated the presence of contamination. In absence of evidence of contamination, soil samples were collected from predetermined depth intervals of 5, 10, 15, and 20 feet bfs or until drilling refusal was met.

Soil samples were collected and handled in accordance with procedures for U.S. Environmental Protection Agency (EPA) Method 5035 for sampling and analysis of volatile organic compounds. Following collection, the samples were placed on ice in a cooler and transported to the laboratories of OnSite Environmental, Inc. (OnSite Environmental) of Redmond, Washington under standard chain-of-custody protocols for analysis for PCE only by EPA Method 8260C.

2.2 RESULTS

In the former dry cleaner suite, PCE was detected at concentrations exceeding the MTCA Method A soil cleanup level of 0.05 milligrams per kilogram (mg/kg) in soil samples collected from boring IB-7 at a depth of 5 feet bfs; from boring IB-8 at a depth of 20 feet bfs; from boring IB-11 at depths of 5, 16, and 19.5 feet bfs; and from boring IB-12 at a depth of 19.5 feet bfs. In the barber shop suite, PCE was detected at a concentration exceeding the MTCA Method A soil cleanup level only in the soil sample collected from boring IB-16 at a depth of 2 feet bfs. For all other samples collected from the borings for analysis, PCE either was detected at concentrations less than the MTCA Method A cleanup level or was not detected at concentrations exceeding the laboratory practical quantitation limits (PQLs). The results indicated that PCE at concentrations exceeding

the MTCA Method A cleanup level were present in borings IB-7 and IB-11, and in adjacent previous borings IB-2 and IB-6, at shallow depths accessible for excavation (Figure 3).

The laboratory analytical results for soil samples collected from borings IB-7 through IB-17 are summarized on Figure 3 and provided in Table 1. Boring logs are provided in Appendix A. The laboratory analytical reports are provided in Appendix B.

3.0 REMEDIAL SOIL EXCAVATION AND SVE WELL INSTALLATION

This section presents a summary of the remedial soil excavation, new SVE well installation, and associated activities conducted between September 2012 and January 2013 inside the former dry cleaner suite. The remedial excavation was conducted to remove and dispose of accessible soil containing PCE at concentrations exceeding the MTCA Method A cleanup level based on the results of the September 2012 subsurface soil sampling inside the Property building. The removal of these areas of elevated PCE concentration was expected to reduce the demand on the SVE system and shorten the restoration time required to complete the cleanup action at the Property. The soil excavation and related activities were conducted in conjunction with a major renovation of the Property building by the owner.

3.1 SCOPE OF WORK

Results of the subsurface soil investigation conducted by Farallon inside the former dry cleaner and barber shop suites in September 2012 identified four localized shallow areas of elevated PCE accessible for soil excavation (Figure 3). Three of the areas were inside the former dry cleaner suite and were associated with soil sample results obtained from borings IB-6, IB-7, and IB-11. The fourth area was inside the barber shop suite and was associated with soil sample results obtained from boring IB-16. The areas of elevated PCE inside the former dry cleaner suite were removed to the extent practicable as dictated by the internal structural constraints of the Property building. The barber shop suite was not included in the renovation plans for the Property building and remained open for business. Consequently, the PCE source inside the barber shop could not be practicably excavated for removal.

The components of the soil excavation and associated activities are described in the sections below.

3.1.1 Structural Evaluation

A structural evaluation of the former dry cleaner suite was conducted by Sitts & Hill Engineers, Inc. of Tacoma, Washington (Sitts & Hill) to assess the need for installation of shoring or other structural support to address potential stresses caused by the excavation. At the request of Sitts & Hill, a small exploratory trench was hand-excavated along the wall between the former dry cleaner suite and the barber shop suite to expose the footing wall for observation. The exploratory trench was excavated by Saybr Contractors, Inc. of Tacoma, Washington (Saybr Contractors) on September 11, 2012 and Sitts & Hill completed the necessary structural observations on that same date. Sitts & Hill subsequently recommended specific excavation set-back distances from the walls and structural support members of the Property building; however, shoring was not required for the planned excavations.

3.1.2 Contained-In Determination

At the request of Farallon, Ecology issued a Contained-In determination on November 20, 2012, allowing PCE-contaminated soil removed from the Property to be disposed of at a regional Subtitle

D landfill, subject to certain conditions. Without the Contained-In determination, Ecology would have required that all soil containing PCE at concentrations exceeding the laboratory PQLs be disposed of as hazardous waste.

3.1.3 Limited Demolition

Saybr Contractors completed limited demolition activities inside the former dry cleaner suite on November 12 and 13, 2012 to remove non-supporting walls and low-hanging ceiling features to facilitate equipment access and mobility. Saybr Contractors also used concrete sawing equipment to remove portions of the floor slab overlying the areas to be excavated.

3.1.4 SVE Well Decommissioning

Interior SVE well SVE-11S (Figure 3) was decommissioned by ESN Northwest, Inc. on December 17, 2012 in preparation for the second phase of soil excavation inside the former dry cleaner suite. The well was decommissioned in-place in accordance with Chapter 173-160 of the Washington Administrative Code (WAC 173-160), Minimum Standards for Construction and Maintenance of Wells, by backfilling the total depth of the well casing with bentonite chips and hydrating the chips to seal the casing. Well SVE-11H, a shallow horizontal extension of well SVE-11S (Figure 3), was removed during the second phase excavation activities discussed below.

3.1.5 Soil Excavation and Disposal

Soil excavation to remove the shallow areas of elevated PCE inside the former dry cleaner suite was conducted in two phases, as described below.

3.1.5.1 First Phase Excavation

Four separate soil excavations were completed by Saybr Contractors on November 13 through 16, 2012 to assess the distribution of PCE in shallow soil inside the former dry cleaner suite. The four excavation areas measuring approximately 5 by 5 feet each were excavated to depths of approximately 5 to 7 feet bfs, which were maximum attainable depths for the small trackhoe excavator being used (Figure 3). Excavated soil was placed in 1-cubic-yard bins, transported outside through an exterior doorway using a small forklift, and emptied into roll-off waste containers.

The four excavation areas were designated as IB-2, IB-6, IB-7, and IB-11, which corresponded to the borings that provided the initial soil analytical data used for positioning the soil excavations. Excavation depths at areas IB-6 and IB-7 were limited to approximately 5.5 feet bfs because of the presence of a concrete slab, which likely was the basement floor of a building that previously occupied a portion of the Property (Figure 3). The full horizontal extent of the slab remains unknown. The slab appeared to act as a barrier in limiting the vertical extent of PCE soil contamination in the north-central portion of the former dry cleaner suite. The excavation depth at areas IB-2 and IB-11 was limited to approximately 7 feet bfs, based on the maximum downward reach of the excavator bucket.

The size of the excavator and other equipment used during the excavation activities was constrained by the dimensions of the exterior doorway for the former dry cleaner suite.

After reaching the depth limits of the excavations, performance soil samples were collected from the bottom and sidewalls of each excavation and delivered to Libby Environmental, Inc. in Olympia, Washington for analysis of PCE by EPA Method 8260C. To collect bottom samples from excavation areas IB-6 and IB-7, sidewall shoring was installed, a core was cut through the concrete slab, and a hand auger was used to collect soil samples from beneath the concrete slab. The laboratory analytical results for the performance and confirmational soil samples for the first phase excavation are summarized on Figure 3 and provided in Table 1. The laboratory analytical reports are presented in Appendix B.

The performance sample analytical results showed that PCE was detected at concentrations exceeding the MTCA Method A cleanup level in all four sidewall samples collected from excavation areas IB-6 and IB-7; in the northern, eastern, and southern sidewall samples collected at excavation area IB-2; and in the bottom and southern sidewall samples collected at excavation area IB-11.

3.1.5.2 Second Phase Excavation

Saybr Contractors completed the second phase of excavation inside the former dry cleaner suite on December 17 through 21, 2012 to remove additional volumes of PCE-contaminated soil, thereby substantially enlarging the excavation area and enveloping excavation areas IB-2, IB-6, and IB-7. The final limits of the second phase excavation are shown on Figure 3. Additional soil also was removed from the southern sidewall of excavation area IB-11. The second phase excavation was successful in removing most of the remaining shallow and accessible soil with PCE concentrations exceeding the MTCA Method A cleanup level from the former dry cleaner suite. An exception was the area along the eastern side of the excavation final limits that could not be removed because of the proximity of critical roof supports for the Property building. The laboratory analytical results for the performance and confirmational soil samples for the second phase excavation are summarized on Figure 3 and provided in Table 1. The laboratory analytical reports are presented in Appendix B.

3.1.5.3 Soil Disposal

A total of approximately 140 tons of PCE-contaminated soil was removed to depths of 5.5 to 7 feet bfs during the two phases of soil excavation. The soil was transported off the Property for Subtitle D landfill disposal in accordance with the Ecology Contained-In determination. Approximately 100 tons of soil was transported to the Waste Management, Inc. Columbia Ridge Landfill in Arlington, Oregon, and, due to a shortage of transport containers provided by Waste Management, Inc., approximately 40 tons of soil was transported to the Republic Services, Inc. Roosevelt Regional Landfill in Klickitat County, Washington.

3.1.5.4 Interior SVE Well Installation and Excavation Restoration

New supplemental SVE wells SVE-19S and SVE-20S were installed inside the former dry cleaner suite to replace decommissioned well SVE-11S and horizontal well SVE-11H, which were removed during the second phase excavation, and to facilitate removal of residual concentrations of PCE in soil not accessible during the interior soil excavations (Figure 3). The SVE wells were drilled and installed on January 15 and 16, 2013 by Geologic Drill Exploration, Inc. of Spokane, Washington using a limited access hollow-stem auger drill rig. The borings for the wells were drilled to a total depth of 30 feet bfs and soil samples were collected at intervals of 5 feet to a depth of 25 feet bfs for laboratory analysis. The laboratory analytical results for the soil samples are summarized on Figure 3 and provided in Table 1. Logs for SVE wells SVE-19S and SVE-20S are provided in Appendix A. The laboratory analytical report is presented in Appendix B.

SVE wells SVE-19S and SVE-20S were constructed in accordance with WAC 173-160, using 2-inch, Schedule 40 polyvinyl chloride well casing and 0.020-inch slotted well screen set between depths of 5 and 25 feet bfs. The well construction logs are provided in Appendix A. Saybr Contractors excavated a shallow trench through the floor slab between the new wells and the western wall of the former dry cleaner suite and routed extraction piping through the wall to connect the new wells to the SVE system.

Following completion of the soil excavation activities, the open excavations were partially backfilled with controlled-density fill while new SVE wells SVE-19S and SVE-20S were installed and the trenching and extraction piping installation activities were completed. Controlled-density fill then was used to complete the excavation backfilling, and Saybr Contractors restored the concrete floor slab to its former configuration. The use of controlled-density fill was most practicable for backfilling given the difficulty of placing and compacting structural fill within the constricted interior of the former dry cleaner suite.

4.0 SVE SYSTEM OPERATIONS AND MAINTENANCE

This section describes the SVE system O&M activities, summarizes the history of the SVE system operation, describes modifications to the SVE system during the reporting period, and summarizes the SVE system performance.

Farallon conducted quarterly O&M for the SVE system during intermittent operation through the period of this Progress Report. O&M events were conducted in September 2012; February, May, August, and November 2016; and February 2017 (Table 6). Typical tasks performed during each O&M event included:

- Measuring and recording the following data:
  - System run time;
  - System vacuum;
  - System air flow rates and 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 using granular activated carbon.
- Inspecting the SVE system for visible evidence of damage and wear;
- Adjusting the flow rate for individual wells to optimize performance;
- Monitoring the volume of condensate water generated and sampling and analyzing the condensate water for disposal; and
- Cleaning the SVE system enclosure.

The SVE system operated from April 2007 until October 2008 before it was shut down for changeout of the carbon media in the treatment canister. The SVE system did not operate between October 2008 and September 2009, but was restarted in September 2009 and operated nearly continuously until September 2010. The SVE system was shut down on September 10, 2010 after a measureable concentration of PCE was detected in an air sample from the effluent of the primary carbon treatment canister. The carbon treatment canister was replaced on August 15, 2011, and the SVE system was restarted on August 18, 2011 and operated until October 29, 2012, when the regenerative blower for the SVE system failed. Following an extended period during which project funding was not available, the blower was rebuilt in August 2015 and the SVE system was restarted on October 22, 2015. With the exception of periodic shutdowns due to local power fluctuations, the SVE system operated nearly continuously until May 2, 2017, when the system shut down due to an electrical problem. The problem proved difficult to resolve, but eventually was traced to a failed cooling fan motor in the SVE blower housing. The cooling fan was replaced and the SVE system was restarted on October 5, 2017.

The SVE system was prone to frequent automatic shutdown events caused by excessive volumes of condensate water generated during the local rainy season. A modification to mitigate this problem was installed on December 2, 2015. The modification consisted of two 330-gallon storage tanks, which replaced the original single 55-gallon storage tank. The new storage tanks include air-sparging rings connected to an external air compressor to strip and remove residual PCE from the condensate water. The treated water subsequently is sampled to confirm that PCE concentrations comply with the discharge authorization permit from LOTT Clean Water Alliance, operator of the local publicly owned treatment works. The water is then discharged to the sanitary sewer system.

Other substantive modifications to the SVE system during this reporting period included:

- Installation of a remote information pad as a safety feature on the SVE system to allow retrieval of operational data without having to open the energized control panel; and
- Design and installation of a suppressor to attenuate noise generated by the SVE system dilution air intake valve.

The SVE system has been registered with the Olympic Region Clean Air Agency as Source No. 2378 from the time of approval of the Notice of Construction in December 2006. The registration is renewed annually.

A summary of the cumulative performance data recorded during the SVE system O&M events is provided in Table 6. The SVE system continues to extract PCE from the vadose zone soil and has achieved the following results:

- Removal of a calculated total of 603.5 pounds, or 44.7 gallons, of PCE from soil through February 2017; and
- Reduction of the mass flux of PCE from soil and soil vapor to groundwater.

The system will be operated continuously until asymptotic trends are observed in the PCE mass removal from the subsurface. Optimization of the SVE system performance is performed following evaluation of the operations data from each O&M event. These adjustments maximize the PCE mass removal rates and focus treatment on areas where contamination remains.

5.0 SUBSLAB DEPRESSURIZATION PILOT TEST

This section summarizes the scope of work and results for conducting a SSD pilot test in the former dry cleaner suite. The purpose of the pilot test was to evaluate the potential radius of influence of potential SSD extraction wells and to develop assumptions for the design of a SSD system appropriate for the Property building to address the potential that low concentrations of residual PCE may remain in the subsurface following shut down of the SVE system.

Farallon conducted the field work for the SSD pilot test on October 25, 2012. Interior well SVE-11H/SVE-11S was connected to a vacuum blower and used as a negative-pressure soil vapor extraction point to induce air flow beneath the floor slab. Two monitoring point probes were installed through the floor slab: one near the northeastern corner of the former dry cleaner suite approximately 43 feet from the extraction point; and the other in the storeroom in the southwestern corner of the barber shop suite approximately 29 feet from the extraction point. Flow and vacuum were recorded through the extraction point, and the vacuum response was recorded at the two monitoring points. The applied vacuum and flow response at the extraction point were adjusted using an air bypass valve. The extraction vacuum was varied between -6.0 and -15.0 inches of water, and the corresponding extraction flow rate varied between 32.4 and 67.5 standard cubic feet per minute.

The SSD pilot test results demonstrated that an effective negative pressure field developed beneath the floor slab in the former dry cleaner suite but did not develop beneath the barber shop suite. Farallon assumes that the concrete footing wall, approximately 35-inches deep and located in the subsurface between the former dry cleaner and barber shop suites, effectively blocked shallow subslab air flow and prevented the negative pressure field from developing.

The SSD pilot test results indicated that the shallow soil beneath the former dry cleaner suite floor slab is sufficiently transmissive to support a radius of influence in excess of 40 feet using an applied vacuum of 10 to 15 inches of water. The vacuum would result in a flow rate of approximately 45 to 65 standard cubic feet per minute at each extraction point. This radius of influence suggests that an SSD system would be effective in mitigating potential residual PCE vapors beneath the former dry cleaner suite. Because the concrete footing wall acts as a subsurface flow barrier, one or more extraction points would need to be separately installed in the barber shop suite to mitigate potential PCE vapors beneath that tenant space.

6.0 GROUNDWATER MONITORING EVENTS

This section summarizes the seven compliance groundwater monitoring events conducted at the Property between December 2012 and March 2017. The monitoring well construction details, groundwater level measurements and calculated groundwater elevations, and groundwater sample analytical results are presented in Tables 2 through 4, respectively. The analytical results also are summarized on Figure 4. The laboratory analytical reports are provided in Appendix B.

6.1 SCOPE OF WORK

Each compliance groundwater monitoring event conducted at the Property consisted of gauging monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-9 through MW-13; and collecting groundwater samples from monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13.

Upon each arrival at the Property, Farallon personnel opened the monitoring wells to allow equilibration with atmospheric pressure and then measured the groundwater levels relative to the top of the monitoring well casings (TOC) using an electronic water-level meter. All groundwater level measurements were obtained within a 2-hour period.

The groundwater monitoring events were conducted in general accordance with the EPA guidance document *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* dated July1996 and revised January 2010. Well purging and sampling were 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 sampled. During purging, water quality parameters for temperature, pH, specific conductance, oxidation-reduction potential, and dissolved oxygen were monitored using a multi-function water quality meter equipped with a flow-through cell. The wells were purged until the temperature, pH, and specific conductance values stabilized. Following purging, groundwater samples were collected directly from the pump discharge tubing and transferred into laboratory-supplied containers, placed on ice in a cooler, and transported to OnSite Environmental under standard chain-of-custody protocols. The samples were analyzed for PCE and its degradation products (i.e., trichloroethene, cis-1,2-dichlorethene, trans-1,2-dichloroethene, and vinyl chloride) by EPA Method 8260C.

Purge water generated during the groundwater sampling events was placed in appropriately labeled 55-gallon steel drums and temporarily stored on the Property for profiling and disposal off the Property. Following modification of the SVE condensate collection system in December 2015, as discussed in Section 6.0, SVE System Operations and Maintenance, purge water was placed in the SVE condensate storage tanks and treated by air sparging prior to discharge to the sanitary sewer system.

6.2 RESULTS

Results of the groundwater monitoring events are summarized in the following sections.

6.2.1 December 2012

Groundwater levels measured on December 26, 2012 ranged from 78.98 feet below the TOC in monitoring well MW-9 to 83.88 feet below the TOC in monitoring well MW-7, with calculated groundwater surface elevations, measured relative to an arbitrary datum of 200 feet, ranging from 117.14 feet in monitoring well MW-12 to 118.81 feet in monitoring well MW-2 (Table 3).

The December 2012 groundwater monitoring event included collection and laboratory analysis of groundwater samples from monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13. PCE was detected at concentrations of 340, 140, and 6.1 micrograms per liter (µg/l) in groundwater samples collected from monitoring wells MW-2, MW-5, and MW-7, respectively, exceeding the MTCA Method A groundwater cleanup level of 5 µg/l (Table 4; Figure 4). PCE was detected at a concentration less than the MTCA Method A cleanup level in the groundwater sample collected from monitoring well MW-11. PCE was not detected at concentrations exceeding the laboratory PQL in the groundwater samples collected from monitoring wells MW-9, MW-10, MW-12, or MW-13.

6.2.2 February 2016

Groundwater levels measured on February 2, 2016 ranged from 71.63 feet below the TOC in monitoring well MW-2 to 75.01 feet below the TOC in monitoring well MW-7, with calculated groundwater surface elevations ranging from 125.45 feet in monitoring well MW-12 to 128.82 feet in monitoring well MW-9 (Table 3). The groundwater level was not measured in monitoring well MW-8 because of an obstruction in the well casing.

The February 2016 groundwater monitoring event included collection and laboratory analysis of groundwater samples from monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13. PCE was detected at concentrations of 140 and 130 µg/l in groundwater samples collected from monitoring wells MW-2 and MW-5, respectively, exceeding the MTCA Method A groundwater cleanup level of 5 µg/l (Table 4; Figure 4). PCE was detected at concentrations of 3.0 and 0.88 µg/l in the groundwater samples collected from monitoring wells MW-7 and MW-11, respectively, which were less than the MTCA Method A cleanup level. PCE was not detected at concentrations exceeding the laboratory PQL in the groundwater samples collected from monitoring wells MW-9, MW-10, MW-12, or MW-13.

6.2.3 August 2016

Groundwater levels measured on August 22, 2016 ranged from 78.55 feet below the TOC in monitoring well MW-9 to 82.61 feet below the TOC in monitoring well MW-7, with calculated groundwater surface elevations ranging from 118.26 feet in monitoring well MW-12 to 119.96

feet in monitoring well MW-2 (Table 3). The groundwater level was not measured in monitoring well MW-8 because of an obstruction in the well casing.

The August 2016 groundwater monitoring event included collection and laboratory analysis of groundwater samples from monitoring wells MW-2, MW-5, MW-7, and MW-9 through MW-13. PCE was detected at concentrations of 190 and 73 µg/l in groundwater samples collected from monitoring wells MW-2 and MW-5, respectively, exceeding the MTCA Method A groundwater cleanup level of 5 µg/l (Table 4; Figure 3). PCE was detected at concentrations of 4.7 and 1.3 µg/l in the groundwater samples collected from monitoring wells MW-7 and MW-11, respectively, which were less than the MTCA Method A cleanup level. PCE was not detected at concentrations exceeding the laboratory PQL in the groundwater samples collected from monitoring wells MW-9, MW-10, MW-12, or MW-13.

6.2.4 February/March 2017

Groundwater levels measured on February 22, 2017 ranged from 72.98 feet below the TOC in monitoring well MW-9 to 76.90 feet below the TOC in monitoring well MW-7, with calculated groundwater surface elevations ranging from 123.07 feet in monitoring well MW-12 to 125.90 feet in monitoring well MW-2 (Table 3). The groundwater level was not measured in monitoring well MW-8 because of an obstruction in the well casing.

Groundwater samples were collected for analysis on March 2, 2017 from monitoring wells MW-2, MW-5, MW-7, and MW-10 through MW-13. Monitoring well MW-9 was obstructed by collapsed dedicated sampling tubing and could not be sampled. The collapsed tubing was removed from the well in May 2017. The monitoring wells were sampled 8 days after the measurement of groundwater levels due to failure of the sampling pump. PCE was detected at concentrations of 230, 63, and 5.1 µg/l in groundwater samples collected from monitoring wells MW-2, MW-5, and MW-7, respectively, exceeding the MTCA Method A groundwater cleanup level of 5 µg/l (Table 4; Figure 4). PCE was detected at concentrations of 1.5 µg/l in the groundwater sample collected from monitoring well MW-11, which was less than the MTCA Method A cleanup level. PCE was not detected at concentrations exceeding the laboratory PQL in the groundwater samples collected from monitoring wells MW-10, MW-12, or MW-13.

6.2.5 Groundwater Flow Direction

Groundwater at the Property flows generally westward with northwestern and southwestern flow components. Hydraulic gradients range between approximately 0.010 and 0.004 foot per foot. Calculated groundwater elevation contours with estimated flow directions are presented on Figures 5 and 6 for representative dry-season and wet-season groundwater monitoring events conducted by Farallon in August 2016 and February 2017.

7.0 IN-SITU GROUNDWATER TREATMENT

This section summarizes the scope of work for implementing ISCO for remediation of PCE in groundwater as part of the cleanup action at the Property.

Performance soil sampling was conducted at the Property in August 2011 to evaluate the progress of soil cleanup resulting from operation of the SVE system. Results from the performance soil sampling are presented in the *Cleanup Action Progress Report, March 2011 to May 2012, Allison's Norge Village (Aka Eastside Laundry), 120 Northeast Turner Street, Olympia, Washington* dated August 21, 2012, prepared by Farallon. Soil samples were collected from four 2011 borings at depth intervals matching those of prior borings drilled in 2001 and 2004. This allowed a comparison of PCE concentrations in soil prior to installation of the SVE system and after approximately 5 years of intermittent SVE system operation. The comparison showed significant reductions in PCE concentrations for each soil sample interval compared, which confirmed that operation of the SVE system was effective in reducing PCE mass in soil across the Property.

Based on the results of the 2011 performance soil sampling and the subsequent 2012 remedial soil excavation discussed above, the PCE mass in the main source area beneath the former dry cleaner suite has been substantially reduced and no longer represents a continuing source of PCE to groundwater. However, PCE has been detected at concentrations consistently exceeding the MTCA Method A cleanup level in groundwater samples collected from monitoring wells MW-2 and MW-5, suggesting that residual PCE associated with releases from the main source area remain proximate to both monitoring wells (Figure 4).

Farallon prepared a technical memorandum to Ecology regarding In-Situ Chemical Oxidation, Remediation of Tetrachloroethene in Groundwater, Allison's Norge Village, 120 Northeast Turner Street, Olympia, Washington dated May 16, 2017 proposing the injection of the oxidant sodium permanganate ($NaMnO_4$) as a safe and effective method for remediating elevated concentrations of PCE proximate to monitoring wells MW-2 and MW-5. Upon receiving concurrence from Ecology, Farallon obtained registration with the Ecology Underground Injection Control (UIC) Program for a one-time injection of $NaMnO_4$ at the Property. A copy of the Ecology UIC registration letter is provided in Appendix C.

The $NaMnO_4$ injection field activities were conducted from May 23 through 25, 2017 with Cascade Technical Service, Inc. of Clackamas, Oregon providing the equipment and personnel for the field services. Approximately 4,000 gallons of 6.3 percent $NaMnO_4$ solution were injected into each of monitoring wells MW-2 and MW-5 (i.e., a total of approximately 8,000 gallons) at injection pressures varying between 5 and 20 pounds per square inch and flow rates varying between 2 and 14 gallons per minute. This volume of $NaMnO_4$ was intended to treat the groundwater-bearing zone between depths of approximately 80 and 115 feet below ground surface (bgs) and within an estimated radius of 10 to 15 feet surrounding the two monitoring wells. Hepure Technologies Inc. of Flemington, New Jersey supplied the $NaMnO_4$ reagent as a 40 percent

remediation-grade solution and provided recommendations for field dilution appropriate for the application.

As required by the Ecology UIC Program, performance groundwater monitoring was conducted following the injection event to assess the distribution and persistence of $NaMnO_4$ in groundwater by visually examining groundwater samples for the characteristic purple to pink water coloration of $NaMnO_4$ and by analyzing groundwater samples for manganese by EPA Method 6010C. Background groundwater samples were collected on February 3, 2016 and performance groundwater samples were collected on July 7, August 3, and September 5, 2017 from monitoring wells MW-2 and MW-5 for visual inspection, and collected from down-gradient monitoring wells MW-9 through MW-13 for analysis for manganese (Table 5). The visual inspections, including an additional inspection conducted on November 1, 2017, indicated gradual dispersal of $NaMnO_4$ in groundwater proximate to monitoring well MW-2; however, little dispersal was observed in groundwater proximate to monitoring well MW-5. The slow dispersal likely reflects the high density of the soil and very low to flat groundwater gradient in the vicinity of the Property. The concentration of manganese in groundwater samples collected from the down-gradient monitoring wells following the $NaMnO_4$ injection did not vary significantly from the concentration of manganese in baseline groundwater samples collected prior to the $NaMnO_4$ injection.

8.0 CONCLUSIONS

Subsurface soil sampling was performed in September 2012 to evaluate the extent of residual PCE in soil beneath the former dry cleaner and barber shop suites inside the Property building. Borings IB-7 through IB-17 were advanced to depths varying between 14.5 and 20 feet bfs and soil samples collected for analysis. PCE was detected at concentrations exceeding the MTCA Method A cleanup level at shallow depths potentially accessible for removal by excavation in four locations in the former dry cleaner suite and one location in the barber shop suite.

Based on the results of subsurface soil sampling conducted inside the former dry cleaner suite in September 2012, a remedial excavation was undertaken to remove accessible shallow soil containing concentrations of PCE exceeding the MTCA Method A cleanup level. A shallow localized area of PCE soil contamination that was not accessible for excavation remains beneath the southwestern portion of the barber shop suite.

The soil excavation required two phases of excavation, which were performed in December 2012 and January 2013. Approximately 140 tons of PCE-contaminated soil was excavated and transported off the Property for Subtitle D landfill disposal. At the conclusion of soil excavation activities, residual concentrations of PCE exceeding the MTCA Method A cleanup level remained primarily in the southern portion of the former dry cleaner suite at depths between approximately 10 and 25 feet bfs (Figure 3). New SVE extraction wells SVE-19S and SVE-20S were installed inside the former dry cleaner suite and screened from 5 to 25 feet bfs. These SVE wells were connected to the SVE system to facilitate removal of the PCE remaining beneath the former dry cleaner suite. The progress of the cleanup will be based on the PCE mass removal data associated with the ongoing SVE operation.

The SVE system was restarted in October 2015 following a prolonged shut-down period that was initiated by the failure of the regenerative blower in October 2012. The SVE system has run intermittently from October 2015 to March 2017 and has removed approximately 603.5 pounds, or 44.6 gallons, of PCE from the vadose zone soil through February 2017. Continued operation of the SVE system will be required to further reduce concentrations of PCE in soil to less than the MTCA Method A cleanup level. The SVE system will be monitored, optimized periodically in response to the O&M data collected, and continuously operated until asymptotic trends are observed in the mass of PCE removal. Once asymptotic conditions are achieved, a scope of work for soil sampling will be developed to evaluate whether soil cleanup levels have been achieved. Groundwater data trends will also be used in conjunction with the SVE performance data to evaluate when the source(s) of PCE in soil affecting groundwater are likely remediated.

An SSD pilot test was conducted in October 2012 to provide data for designing an SSD system to mitigate potential residual PCE vapors beneath the Property building following shut down of the SVE system, if necessary. The results of the SSD pilot test indicated that shallow subslab soil will sustain a radius of influence of over 40 feet at a vacuum of 10 to 15 inches of water, which would

be adequate to address the potential intrusion of PCE vapors into the Property building. Although not directly confirmed during the SSD pilot test, soil beneath the barber shop suite is expected to be similarly transmissive.

PCE was detected at concentrations exceeding the MTCA Method A groundwater cleanup level in groundwater samples collected from monitoring wells MW-2, MW-5, and MW-7 during one or more of the sampling events conducted between December 2012 and March 2017 (Figure 4). The groundwater analytical results are similar to results of previous groundwater monitoring events for each of the monitoring wells (Table 4). The extent of concentrations of PCE in groundwater exceeding the MTCA Method A cleanup level is bounded down-gradient to the northwest, west, and southwest of the known source areas by monitoring wells MW-9, MW-10, MW-12, and MW-13 (Figure 4). Injection of $NaMnO_4$ proximate to the western side of the former dry cleaner suite in May 2017 is expected to significantly reduce PCE concentrations detected in groundwater samples collected from monitoring wells MW-2 and MW-5. The injection was designed to treat PCE in soil and groundwater in the zone surrounding monitoring wells MW-2 and MW-5 at depths between approximately 80 and 115 feet bgs. Approximately 8,000 gallons of a 6.3 percent solution of $NaMnO_4$ was successfully injected into monitoring wells MW-2 and MW-5. At the conclusion of this reporting period, obvious concentrations of $NaMnO_4$ continued to persist in monitoring wells MW-2 and MW-5. Sampling of groundwater for PCE will resume at the Property following completion of the reaction and dispersal of the $NaMnO_4$ from monitoring wells MW-2 and MW-5.

9.0 LIMITATIONS

The conclusions 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. The conclusions contained herein are subject to the following inherent limitation:

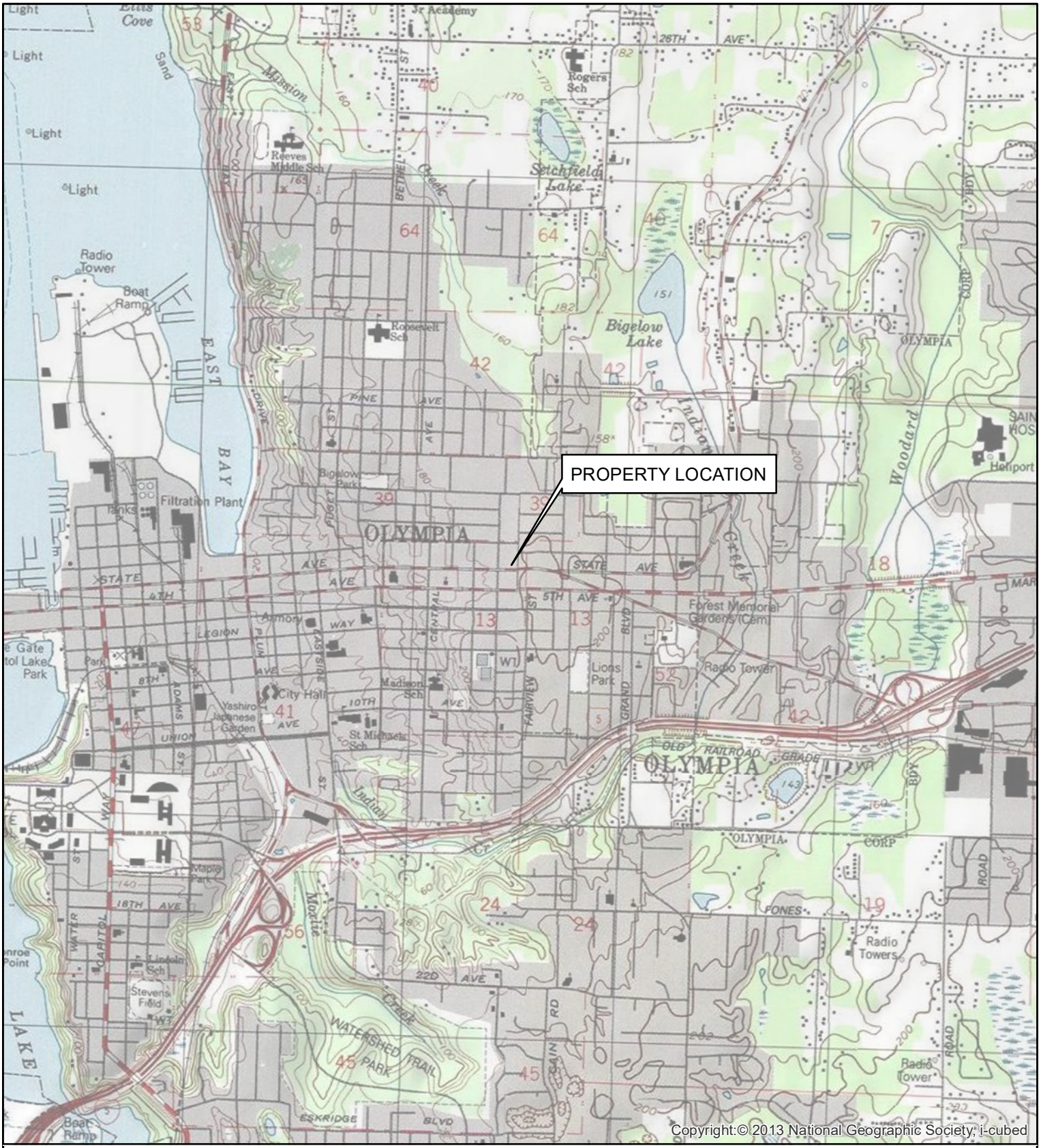
> **Accuracy of Information.** Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

Farallon cannot and does not warrant or guarantee that the Property is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions can be considered valid only as of the date of the report hereof. No warranties, representations, or certifications are made. Any use, interpretation, or reliance upon this report/assessment by any third party for commercial or business purpose is at the sole risk of the third party, and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

FIGURES

CLEANUP ACTION PROGRESS REPORT
JUNE 2012 TO DECEMBER 2017
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010



REFERENCE: 7.5 MINUTE USGS QUADRANGLE NORTH SEATTLE, WASHINGTON, DATED 2011



0 2,000
SCALE IN FEET

N

FARALLON CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

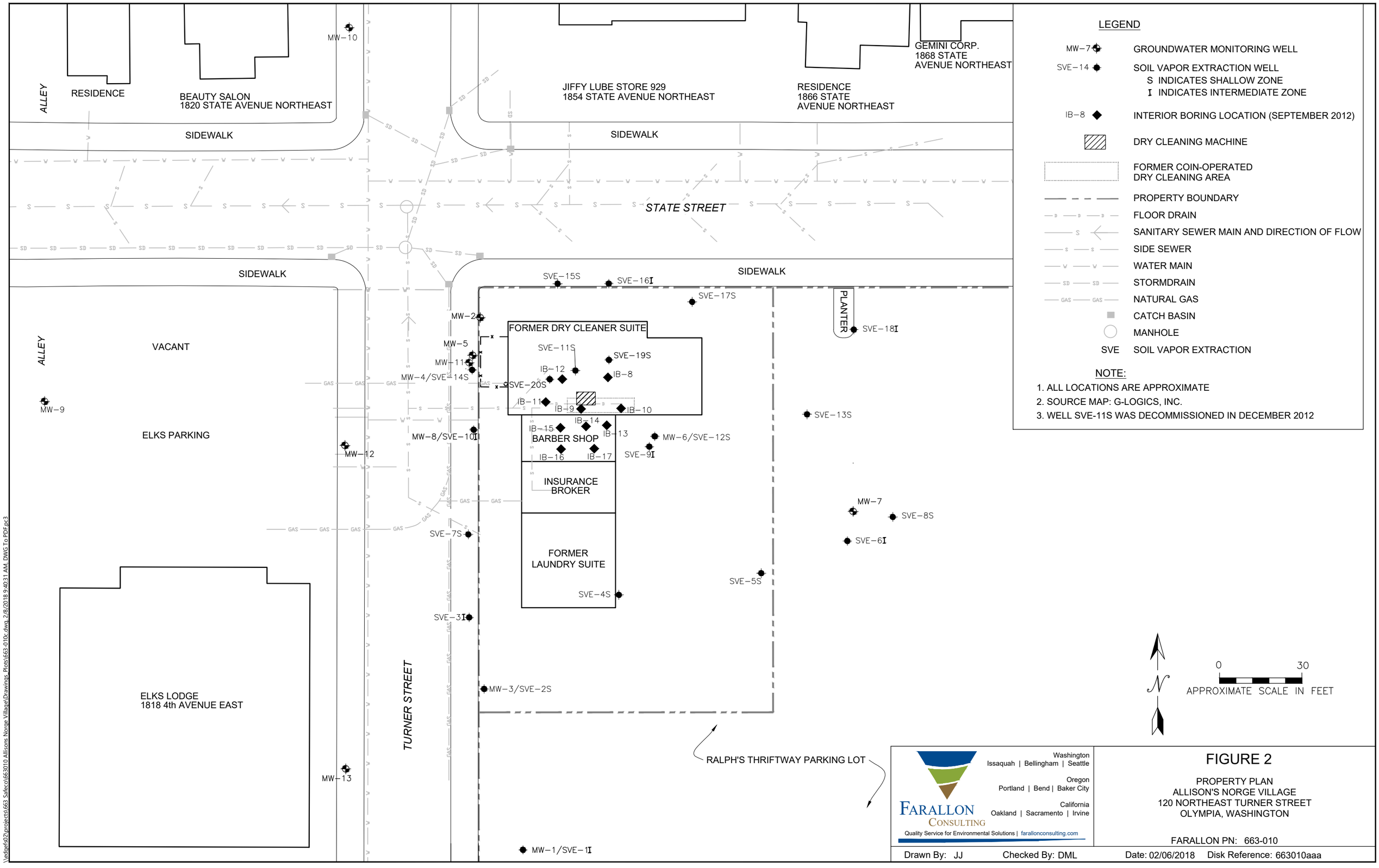
FIGURE 1

PROPERTY VICINITY MAP
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: jjones Checked By: TC Date: 1/22/2018 Disc Reference:

Document Path: Q:\Projects\663_Safeco\Mapfiles\Figure-1_PropertyVicinity.mxd



\\edgefs02\projects\663 Safeco\663010 Allisons Norge Village\Drawings_Plots\663-010c.dwg, 2/8/2018 9:40:31 AM, DWG To PDF.pc3

FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

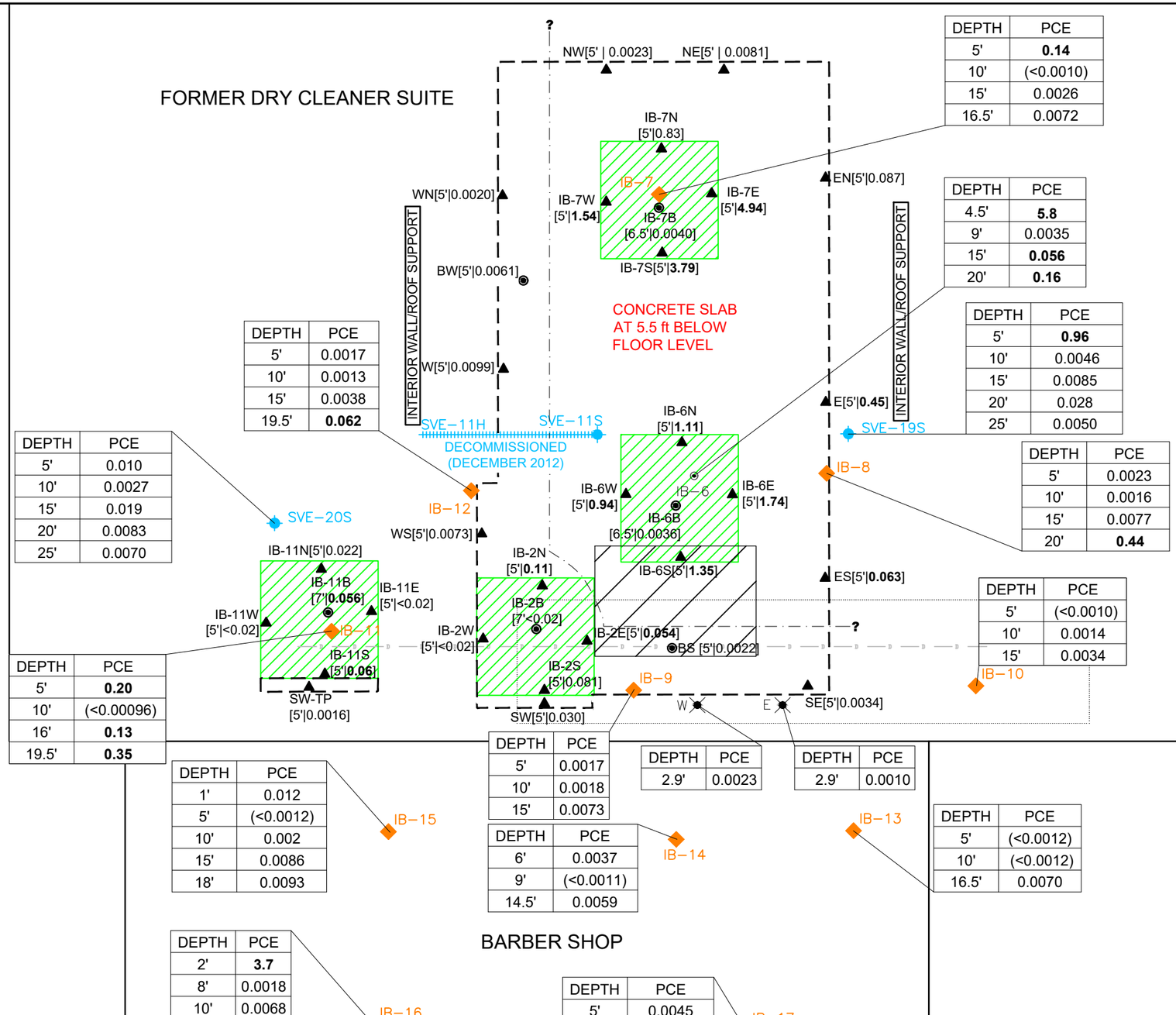
California
Oakland | Sacramento | Irvine

FIGURE 2

PROPERTY PLAN
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: JJ | Checked By: DML | Date: 02/06/2018 | Disk Reference: 663010aaa



DEPTH	PCE
5'	**0.14**
10'	(<0.0010)
15'	0.0026
16.5'	0.0072

DEPTH	PCE
4.5'	**5.8**
9'	0.0035
15'	**0.056**
20'	**0.16**

DEPTH	PCE
5'	**0.96**
10'	0.0046
15'	0.0085
20'	0.028
25'	0.0050

DEPTH	PCE
5'	0.0023
10'	0.0016
15'	0.0077
20'	**0.44**

DEPTH	PCE
5'	(<0.0010)
10'	0.0014
15'	0.0034

DEPTH	PCE
5'	0.0017
10'	0.0013
15'	0.0038
19.5'	**0.062**

DEPTH	PCE
5'	0.010
10'	0.0027
15'	0.019
20'	0.0083
25'	0.0070

DEPTH	PCE
5'	**0.20**
10'	(<0.00096)
16'	**0.13**
19.5'	**0.35**

DEPTH	PCE
1'	0.012
5'	(<0.0012)
10'	0.002
15'	0.0086
18'	0.0093

DEPTH	PCE
5'	0.0017
10'	0.0018
15'	0.0073

DEPTH	PCE
2.9'	0.0023

DEPTH	PCE
2.9'	0.0010

DEPTH	PCE
6'	0.0037
9'	(<0.0011)
14.5'	0.0059

DEPTH	PCE
5'	(<0.0012)
10'	(<0.0012)
16.5'	0.0070

DEPTH	PCE
2'	**3.7**
8'	0.0018
10'	0.0068
17'	0.0076

DEPTH	PCE
5'	0.0045
10'	(<0.0011)
14.5'	0.0032

LEGEND

- IB–7 — INTERIOR BORING LOCATION (SEPTEMBER 2012)
- SVE–11 — SOIL VAPOR EXTRACTION WELL
  - S INDICATES SHALLOW ZONE VERTICAL WELL
  - H INDICATES HORIZONTAL WELL
- IB–6 — INTERIOR BORING LOCATION (AUGUST 2011)
- W — GRAB SAMPLE LOCATION (SEPTEMBER 2012)
- FORMER DRY CLEANING MACHINE
- NW[5'|0.0023] — SOIL EXCAVATION BOUNDARY (DECEMBER 2012) SHOWING COMPLIANCE SOIL SAMPLE DEPTH AND RESULTS FOR PCE
- IB-7B[6.5'|0.0040] — COMPLIANCE SOIL SAMPLE FROM EXCAVATION BOTTOM SHOWING SAMPLE DEPTH AND RESULTS FOR PCE
- IB-7N[5'|0.83] — SOIL EXCAVATION (NOVEMBER 2012) SHOWING COMPLIANCE SOIL SAMPLE DEPTH AND RESULTS FOR PCE
- ?—·—·—? — EXTENT OF SUBSURFACE CONCRETE SLAB AT DEPTH OF 5.5 FEET BELOW FLOOR LEVEL
- FORMER COIN-OPERATED DRY CLEANING AREA

ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)

PCE = TETRACHLOROETHENE

BOLD = DENOTES PCE CONCENTRATIONS EXCEEDING THE MODEL TOXICS CONTROL ACT CLEANUP REGULATION METHOD A SOIL CLEANUP LEVEL (0.05 mg/kg)

ND = NOT DETECTED AT OR EXCEEDING THE LABORATORY PRACTICAL QUANTITATION LIMIT (PROVIDED IN PARENTHESES)

NOTE:

1. ALL LOCATIONS ARE APPROXIMATE

0 5

APPROXIMATE SCALE IN FEET

FARALLON CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

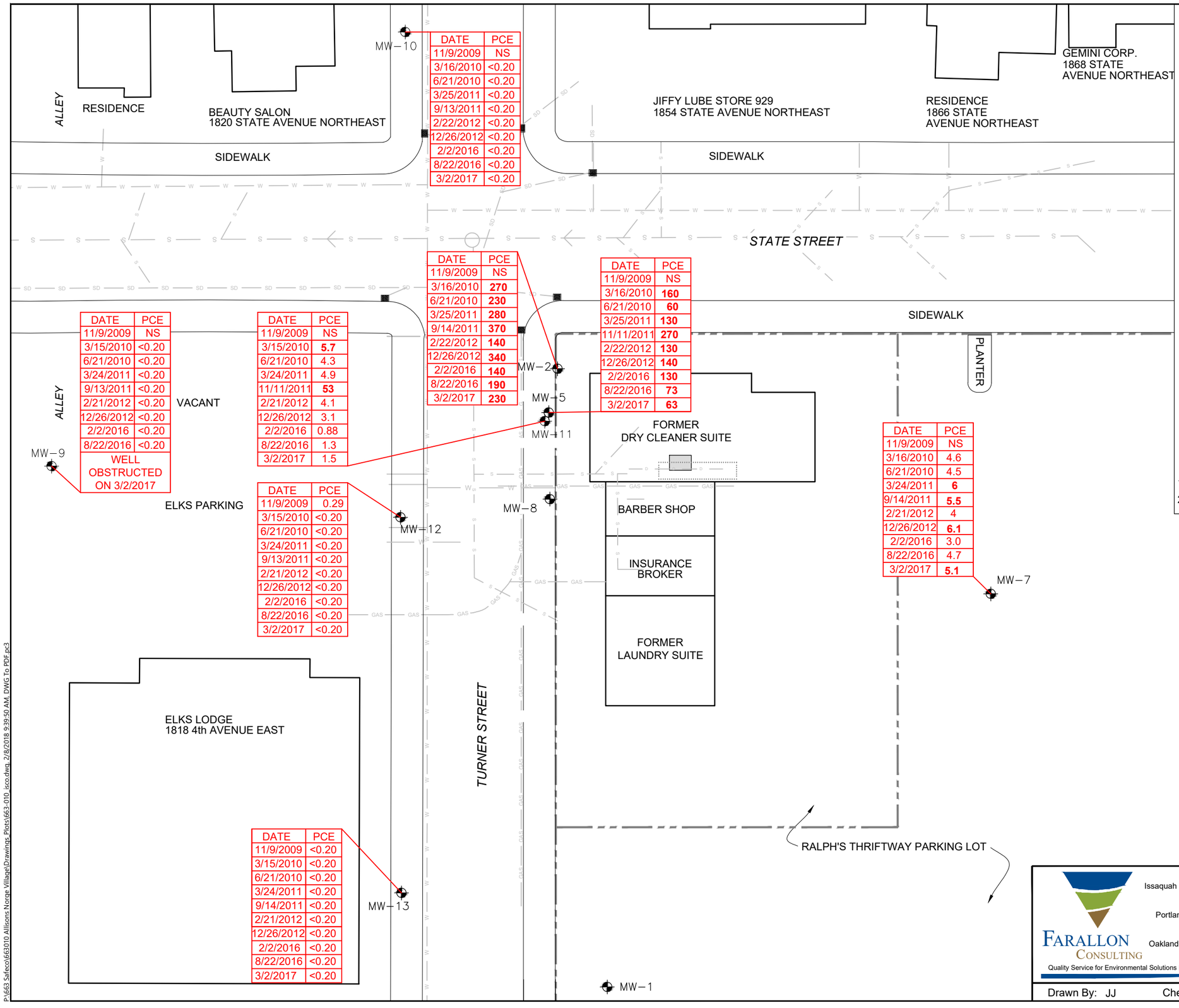
FIGURE 3

2012 INTERIOR EXCAVATION LOCATIONS
AND COMPLIANCE SOIL ANALYTICAL RESULTS
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: JJ Checked By: DML Date: 02/16/2018 Disk Reference: 663010a

\\edgefs02\projects\663 Safeco\663010 Allisons Norge Village\Drawings Plots\663-010c.dwg, 2/6/2018 1:43:44 PM, DWG To PDF.pc3



LEGEND

- MW-7 — GROUNDWATER MONITORING WELL
- DRY CLEANING MACHINE
- FORMER COIN-OPERATED DRY CLEANING AREA
- PROPERTY BOUNDARY
- 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 (µg/l)
PCE = TETRACHLOROETHENE

BOLD = DENOTES CONCENTRATIONS EXCEEDING THE MODEL TOXICS CONTROL ACT CLEANUP REGULATION METHOD A CLEANUP LEVEL FOR PCE (5 µg/L)

< = INDICATES PCE NOT DETECTED AT OR EXCEEDING THE INDICATED LABORATORY PRACTICAL QUANTITATION LIMIT

NS = NOT SAMPLED

NOTE:

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

0 30
APPROXIMATE SCALE IN FEET

FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

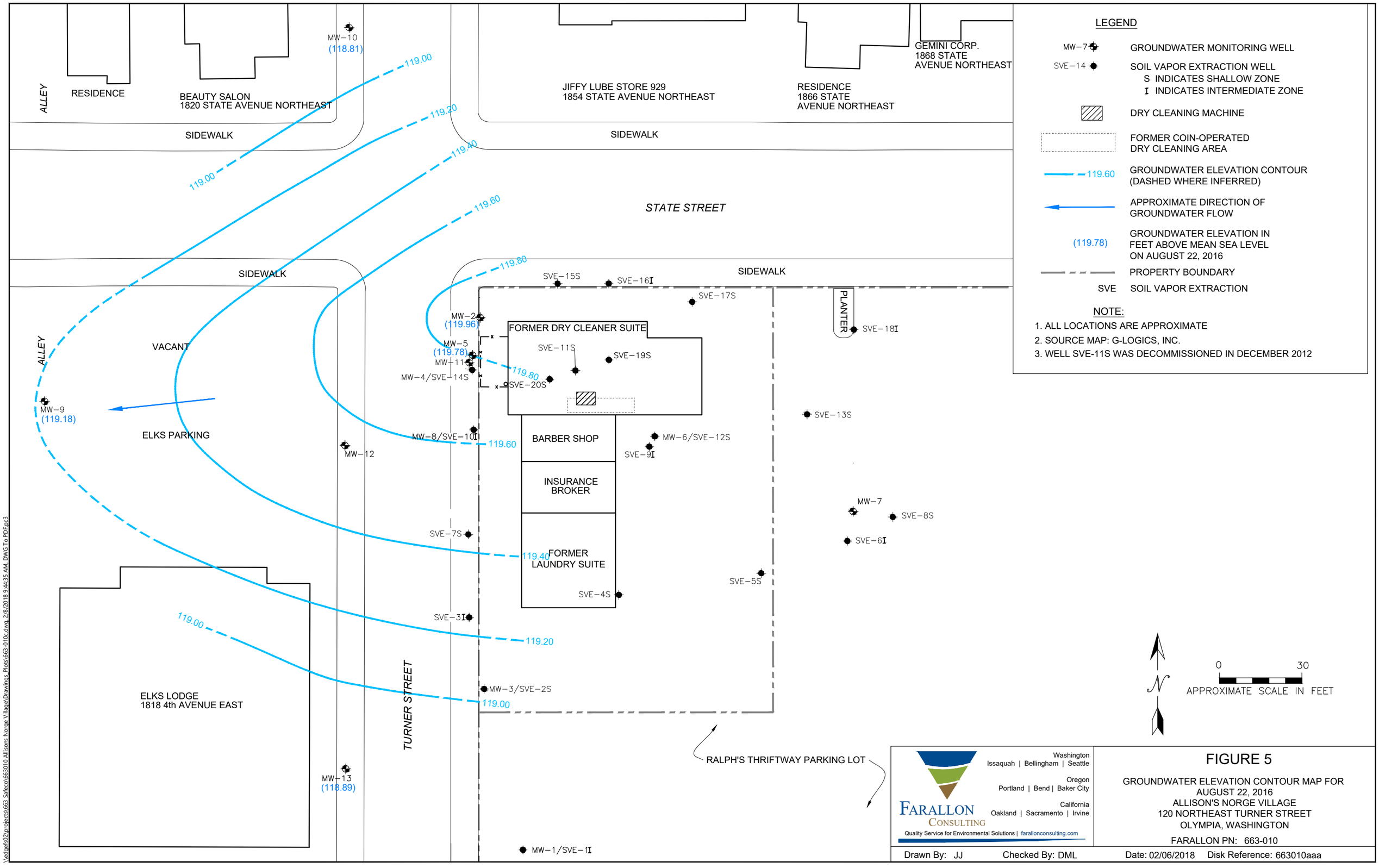
FIGURE 4

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

FARALLON PN: 663-010

Drawn By: JJ | Checked By: DML | Date: 02/06/18 | Disk Reference: 663-010_isco.dwg

P:\663 Safeco\663010 Allisons Norge Village\Drawings Plots\663-010_isco.dwg, 2/8/2018 9:39:50 AM, DWG To PDF.pc3



\\edgefs02\projects\663 Safeco\663010 Allisons Norge Village\Drawings Plots\663-010c.dwg, 2/8/2018 9:44:35 AM, DWG To PDF.pc3

FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

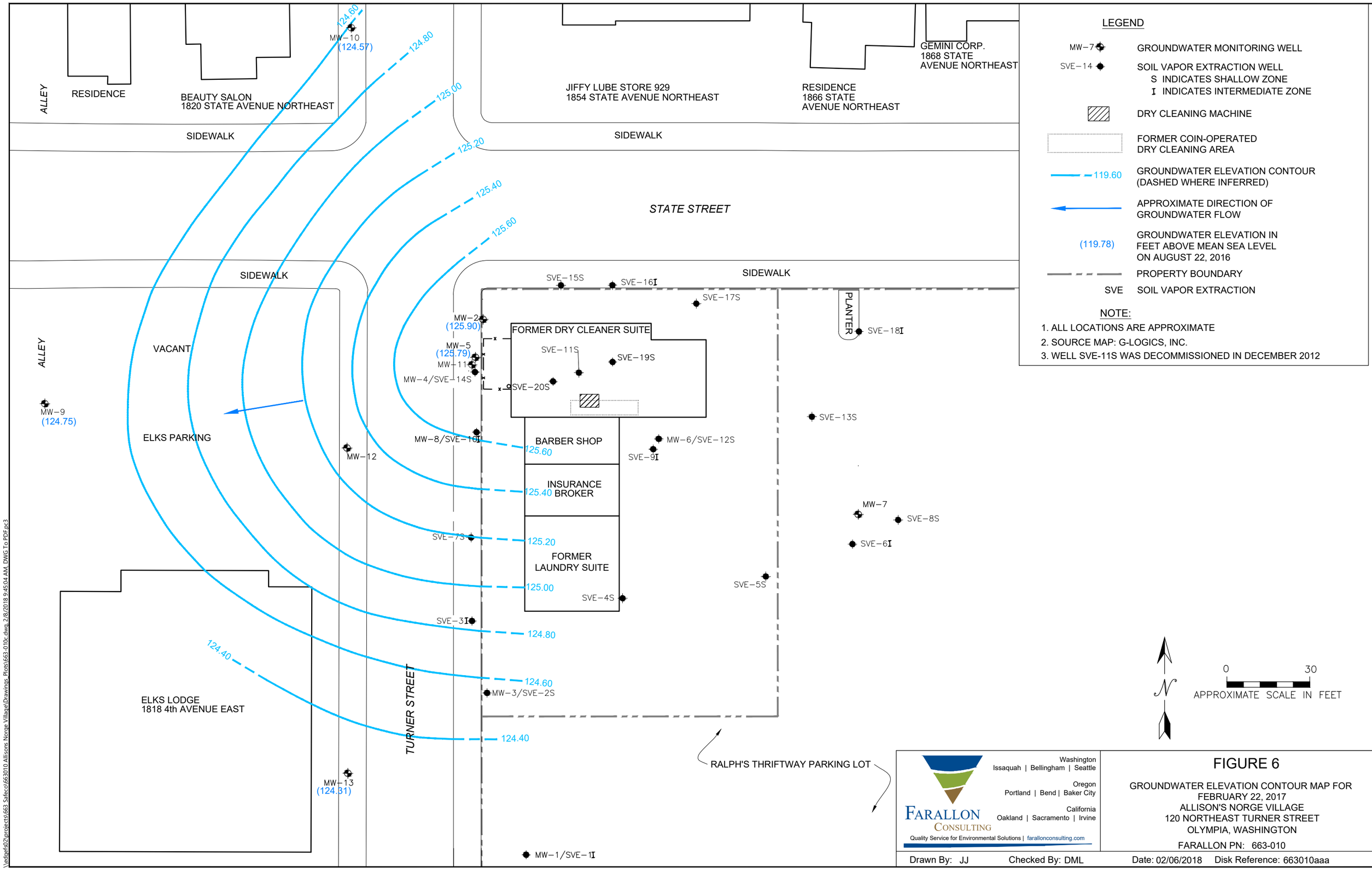
California
Oakland | Sacramento | Irvine

FIGURE 5

GROUNDWATER ELEVATION CONTOUR MAP FOR
AUGUST 22, 2016
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: JJ Checked By: DML Date: 02/06/2018 Disk Reference: 663010aaa



\\edoef\d2\projects\663 Safeco\663010 Allisons Norge Village\Drawings Plots\663-010c.dwg 2/8/2018 9:45:04 AM DWG To PDF.pc3

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Bend | Baker City
California
Oakland | Sacramento | Irvine
FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 6

GROUNDWATER ELEVATION CONTOUR MAP FOR
FEBRUARY 22, 2017
ALLISON'S NORGE VILLAGE
120 NORTHEAST TURNER STREET
OLYMPIA, WASHINGTON

FARALLON PN: 663-010

Drawn By: JJ Checked By: DML Date: 02/06/2018 Disk Reference: 663010aaa

TABLES

CLEANUP ACTION PROGRESS REPORT
JUNE 2012 TO DECEMBER 2017
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

Table 1
Summary of Soil Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Location Identification	Sample Identification	Date Sampled	Sampled By	Depth (feet)[1]	Analytical Results (milligrams per kilogram)				
					PCE[2]	TCE[2]	cis-1,2-Dichloroethene[2]	trans-1,2-Dichloroethene[2]	Vinyl Chloride[2]
Farallon Interior Borings									
IB-7	IB-7-5.0	9/6/2012	Farallon	5	**0.14**	--	--	--	--
	IB-7-10.0	9/6/2012	Farallon	10	0.001	--	--	--	--
	IB-7-15.0	9/6/2012	Farallon	15	0.0026	--	--	--	--
	IB-7-16.5	9/6/2012	Farallon	16.5	0.0072	--	--	--	--
IB-8	IB-8-5.0	9/6/2012	Farallon	5	0.0023	--	--	--	--
	IB-8-10.0	9/6/2012	Farallon	10	0.0016	--	--	--	--
	IB-15.0	9/6/2012	Farallon	15	0.0077	--	--	--	--
	IB-20.0	9/6/2012	Farallon	20	**0.44**	--	--	--	--
IB-9	IB-9-5.0	9/6/2012	Farallon	5	0.0017	--	--	--	--
	IB-9-10.0	9/6/2012	Farallon	10	0.0018	--	--	--	--
	IB-9-15.0	9/6/2012	Farallon	15	0.0073	--	--	--	--
IB-10	IB-10-5.0	9/6/2012	Farallon	5	<0.0010	--	--	--	--
	IB-10-10.0	9/6/2012	Farallon	10	0.0014	--	--	--	--
	IB-10-15.0	9/6/2012	Farallon	15	0.0034	--	--	--	--
IB-11	IB-11-5.0	9/6/2012	Farallon	5	**0.2**	--	--	--	--
	IB-11-10.0	9/6/2012	Farallon	10	<0.00096	--	--	--	--
	IB-11-16.0	9/6/2012	Farallon	16	**0.13**	--	--	--	--
	IB-11-19.5	9/6/2012	Farallon	19.5	**0.35**	--	--	--	--
IB-12	IB-12-5.0	9/6/2012	Farallon	5	0.0017	--	--	--	--
	IB-12-10.0	9/6/2012	Farallon	10	0.0013	--	--	--	--
	IB-12-15.0	9/6/2012	Farallon	15	0.0038	--	--	--	--
	IB-12-19.5	9/6/2012	Farallon	19.5	**0.062**	--	--	--	--
IB-13	IB-13-5.0	9/6/2012	Farallon	5	<0.0012	--	--	--	--
	IB-13-10.0	9/6/2012	Farallon	10	<0.0012	--	--	--	--
	IB-13-15.0	9/6/2012	Farallon	15	0.007	--	--	--	--
MTCA Cleanup Levels for Soil					**0.05[3]**	**0.03[3]**	**160[4]**	**1,600[4]**	**240[4] / 87.5[5]**

Table 1
Summary of Soil Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Location Identification	Sample Identification	Date Sampled	Sampled By	Depth (feet)[1]	Analytical Results (milligrams per kilogram)				
					PCE[2]	TCE[2]	cis-1,2-Dichloroethene[2]	trans-1,2-Dichloroethene[2]	Vinyl Chloride[2]
IB-14	IB-14-6.0	9/6/2012	Farallon	6	0.0037	--	--	--	--
	IB-14-9.0	9/6/2012	Farallon	9	<0.0011	--	--	--	--
	IB-14-14.5	9/6/2012	Farallon	14.5	0.0059	--	--	--	--
IB-15	IB-15-1.0	9/7/2012	Farallon	1	0.012	--	--	--	--
	IB-15-5.0	9/7/2012	Farallon	5	<0.0012	--	--	--	--
	IB-15-10.0	9/7/2012	Farallon	10	0.002	--	--	--	--
	IB-15-15.0	9/7/2012	Farallon	15	0.0086	--	--	--	--
	IB-15-18.0	9/7/2012	Farallon	18	0.0093	--	--	--	--
IB-16	IB-16-2.0	9/7/2012	Farallon	2	**3.7**	--	--	--	--
	IB-16-8.0	9/7/2012	Farallon	8	0.0018	--	--	--	--
	IB-16-10.0	9/7/2012	Farallon	10	0.0068	--	--	--	--
	IB-16-17.0	9/7/2012	Farallon	17	0.0076	--	--	--	--
IB-17	IB-17-5.0	9/7/2012	Farallon	5	0.0045	--	--	--	--
	IB-17-10.0	9/7/2012	Farallon	10	<0.0011	--	--	--	--
	IB-17-14.5	9/7/2012	Farallon	14.5	0.0032	--	--	--	--
Farallon SVE Wells									
SVE-19S	SVE-19S-5.0	1/15/2013	Farallon	5	**0.96**	--	--	--	--
	SVE-19S-10.0	1/15/2013	Farallon	10	0.0046	--	--	--	--
	SVE-19S-15.0	1/15/2013	Farallon	15	0.0085	--	--	--	--
	SVE-19S-20.0	1/15/2013	Farallon	20	0.028	--	--	--	--
	SVE-19S-25.0	1/15/2013	Farallon	15	0.005	--	--	--	--
SVE-20S	SVE-20S-5.0	1/15/2013	Farallon	5	0.01	--	--	--	--
	SVE-20S-10.0	1/15/2013	Farallon	10	0.0027	--	--	--	--
	SVE-20S-15.0	1/15/2013	Farallon	15	0.019	--	--	--	--
	SVE-20S-20.0	1/15/2013	Farallon	20	0.0083	--	--	--	--
	SVE-20S-25.0	1/15/2013	Farallon	15	0.007	--	--	--	--
MTCA Cleanup Levels for Soil					**0.05[3]**	**0.03[3]**	**160[4]**	**1,600[4]**	**240[4] / 87.5[5]**

Table 1
Summary of Soil Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Location Identification	Sample Identification	Date Sampled	Sampled By	Depth (feet)[1]	Analytical Results (milligrams per kilogram)				
					PCE[2]	TCE[2]	cis-1,2-Dichloroethene[2]	trans-1,2-Dichloroethene[2]	Vinyl Chloride[2]
Farallon Internal Soil Excavation Areas - Performance and Confirmational Samples									
Area IB-2	IB-2N	11/14/2012	Farallon	5	**0.11**	--	--	--	--
	IB-2S	11/14/2012	Farallon	5	**0.081**	--	--	--	--
	IB-2W	11/14/2012	Farallon	5	<0.02	--	--	--	--
	IB-2E	11/14/2012	Farallon	5	**0.054**	--	--	--	--
	IB-2B-7.0	11/14/2012	Farallon	7	<0.02	--	--	--	--
Area IB-6	IB-6N	11/14/2012	Farallon	5	**1.11**	--	--	--	--
	IB-6S	11/14/2012	Farallon	5	**1.35**	--	--	--	--
	IB-6W	11/14/2012	Farallon	5	**0.94**	--	--	--	--
	IB-6E	11/14/2012	Farallon	5	**1.74**	--	--	--	--
	IB-6B-6.5	11/14/2012	Farallon	6.5	0.0036	--	--	--	--
Area IB-7	IB-7N	11/14/2012	Farallon	5	**0.83**	--	--	--	--
	IB-7S	11/14/2012	Farallon	5	**3.79**	--	--	--	--
	IB-7W	11/14/2012	Farallon	5	**1.54**	--	--	--	--
	IB-7E	11/14/2012	Farallon	5	**4.94**	--	--	--	--
	IB-7B-6.5	11/14/2012	Farallon	6.5	0.004	--	--	--	--
Area IB-11	IB-11N	11/14/2012	Farallon	5	0.022	--	--	--	--
	IB-11S	11/14/2012	Farallon	5	**0.06**	--	--	--	--
	IB-11W	11/14/2012	Farallon	5	<0.02	--	--	--	--
	IB-11E	11/14/2012	Farallon	5	<0.02	--	--	--	--
	IB-11B-7.0	11/14/2012	Farallon	7	<0.02	--	--	--	--
Footing Trench	W-2.9-091112	9/11/2012	Farallon	2.9	0.010	--	--	--	--
	E-2.9-091112	9/11/2012	Farallon	2.9	0.0023	--	--	--	--
MTCA Cleanup Levels for Soil					**0.05[3]**	**0.03[3]**	**160[4]**	**1,600[4]**	**240[4] / 87.5[5]**

Table 1
Summary of Soil Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Location Identification	Sample Identification	Date Sampled	Sampled By	Depth (feet)[1]	Analytical Results (milligrams per kilogram)				
					PCE[2]	TCE[2]	cis-1,2-Dichloroethene[2]	trans-1,2-Dichloroethene[2]	Vinyl Chloride[2]
Main Excavation	NE-122112	12/21/2012	Farallon	5	0.0081	--	--	--	--
	NW-121812	12/18/2012	Farallon	5	0.0023	--	--	--	--
	WN-121812	12/18/2012	Farallon	5	0.002	--	--	--	--
	BW-121812	12/18/2012	Farallon	5	0.0061	--	--	--	--
	W-121812	12/18/2012	Farallon	5	0.0099	--	--	--	--
	WS-121812	12/18/2012	Farallon	5	0.0073	--	--	--	--
	SW-121812	12/18/2012	Farallon	5	0.03	--	--	--	--
	BS-122112	12/21/2012	Farallon	5	0.0022	--	--	--	--
	SE-122112	12/21/2012	Farallon	5	0.0034	--	--	--	--
	ES-122112	12/21/2012	Farallon	5	**0.063**	--	--	--	--
	E-122112	12/21/2012	Farallon	5	**0.45**	--	--	--	--
	EN-122112	12/21/2012	Farallon	5	**0.087**	--	--	--	--
	SW-TP-121812	12/18/2012	Farallon	5	0.0016	--	--	--	--
MTCA Cleanup Levels for Soil					**0.05[3]**	**0.03[3]**	**160[4]**	**1,600[4]**	**240[4] / 87.5[5]**

NOTES:

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

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

-- indicates analyte was not reported.

PCE = tetrachloroethene

SVE = soil vapor extraction

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 Non-Carcinogenic Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only). https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx

[5]Cleanup Levels and Risk Calculations, Standard Method C Carcinogenic Formula Values for Soil (Industrial Land Use) - Direct Contact (Adult Only Exposure). 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-1	8/2/2001	200.46	60.0	2.0	50-60
MW-2	8/22/2001	199.60	95.2	2.0	80-105
MW-5	12/10/2005	199.77	97.7	2.0	85-100
MW-7	12/14/2005	201.88	97.5	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	114.0	2.0	109-114
MW-11	8/22/2006	199.55	116.0	2.0	110-115
MW-12	10/15/2009	199.66	109.0	2.0	104-109
MW-13	10/13/2009	199.83	103.0	2.0	98-103
Shallow Zone SVE Wells					
SVE-2S (MW-3)	12/8/2004	—	19.8	4	4-20
SVE-4S	9/14/2006	—	20.0	4	3-20
SVE-5S	9/14/2006	—	20.0	4	3-20
SVE-7S	9/15/2006	—	20.0	4	3-20
SVE-8S	9/14/2006	—	20.0	4	3-20
SVE-11H/SVE-11S[3]	Unknown	—	20.0	4	3-20
SVE-12S (MW-6)	12/8/2004	—	24.3	4	7.5-12.5
SVE-13S	9/20/2006	—	20.0	4	3-20
SVE-14S (MW-4)	12/8/2004	—	12.8	4	8-24
SVE-15S	9/18/2006	—	20.0	4	3-20
SVE-17S	9/18/2006	—	20.0	4	3-20
SVE-19S	1/15/2013	—	30.0	2	5-25
SVE-20S	1/15/2013	—	30.0	2	5-25
Intermediate Zone SVE Wells					
SVE-1I (MW-1)	8/2/2004	200.46	60.4	2	50-60
SVE-3I	9/15/2006	—	60.0	4	25-60
SVE-6I	9/19/2006	—	60.0	4	25-60
SVE-9I	9/15/2006	—	60.0	4	25-60
SVE-10I (MW-8)	6/22/2005	—	60.6	4	35-60
SVE-16I	9/18/2006	—	60.0	4	25-60
SVE-18I	9/19/2006	—	60.0	4	25-60

NOTES:

— denotes casing elevation not surveyed

SVE = soil vapor extraction

[1]Elevation of top of casing using assumed vertical datum of 200.00 feet. Elevation survey performed by Professional Land Surveyors, Inc. on December 23, 2004, September 21, 2006, and December 1, 2009.

[2]Depth below top of well casing.

[3]Wells SVE-11H/SVE-11S were interconnected horizontal and vertical wells located inside the former dry cleaner suite. Both wells were decommissioned in December 2012.

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

Well Identification	Date Measured	Top of 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
	3/24/2011			59.02	141.44
	9/13/2011			NM	NC
	2/21/2012			59.22	141.24
	12/26/2012			50.57	149.89
	2/2/2016		60.40	59.56	140.90
	8/22/2016		60.43	59.62	140.84
	2/22/2017		59.69	59.16	141.30
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
	3/24/2011			69.56	130.04
	9/13/2011			79.32	120.28
	2/21/2012			78.29	121.31
	12/26/2012			80.79	118.81
	2/2/2016		100.50	71.63	127.97
	8/22/2016		100.15	79.64	119.96
	2/22/2017		98.37	73.70	125.90
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
	3/24/2011			NE	NC
	9/13/2011			NE	NC
	12/26/2012			NE	NC
	2/2/2016			NE	NC

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

Well Identification	Date Measured	Top of Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
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
	3/24/2011			NE	NC
	9/13/2011			NE	NC
	12/26/2012			NE	NC
	2/2/2016			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
	3/24/2011			69.89	129.88
	9/13/2011			NM[5]	NC
	11/10/2011			83.34	116.43
	2/21/2012			78.52	121.25
	12/26/2012			81.04	118.73
	2/2/2016		96.95	71.93	127.84
	8/22/2016		98.26	79.99	119.78
	2/22/2017		96.79	73.98	125.79
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
	3/24/2011			12.75	NC
	9/13/2011			NM	NC
	12/26/2012			NE	NC
	2/2/2016			NE	NC

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

Well Identification	Date Measured	Top of Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
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
	3/24/2011			72.87	129.01
	9/13/2011			82.44	119.44
	2/21/2012			81.44	120.44
	12/26/2012			83.88	118.00
	2/2/2016		97.00	75.01	126.87
	8/22/2016		98.80	82.61	119.27
	2/22/2017		98.19	76.9	124.98
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
	3/24/2011			59.81	NC
	9/13/2011			NM	NC
	12/26/2012			NM	NC
	2/2/2016			NM	NC
	8/22/2016			NM	NC
	2/22/2017			NM	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
	3/24/2011			69.45	132.43
	9/13/2011			78.44	119.29
	2/21/2012			76.82	120.91
	12/26/2012			78.98	118.75
	2/2/2016		116.50	70.91	126.82
	8/22/2016		117.35	78.55	119.18
	2/22/2017		115.98	72.98	124.75

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

Well Identification	Date Measured	Top of Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
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
	3/24/2011			70.55	131.33
	9/13/2011			80.15	119.03
	2/21/2012			79.07	120.11
	12/26/2012			81.56	117.62
	2/2/2016		113.70	72.62	126.56
	8/22/2016		115.10	80.37	118.81
	2/22/2017		115.03	74.61	124.57
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
	3/24/2011			71.03	128.52
	9/13/2011			NM[5]	NC
	11/10/2011			83.70	115.85
	2/21/2012			79.47	120.08
	12/26/2012			81.71	117.84
	2/2/2016		116.00	73.03	126.52
	8/22/2016		117.24	80.53	119.02
	2/22/2017		115.12	75.00	124.55
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
	3/24/2011			72.94	128.94
	9/13/2011			81.30	118.36
	2/21/2012			80.33	119.33
	12/26/2012			82.52	117.14
	2/2/2016		108.50	74.21	125.45
	8/22/2016		110.80	81.40	118.26
	2/22/2017		108.45	76.59	123.07

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

Well Identification	Date Measured	Top of Casing Elevation (feet)[1]	Total Well Depth (feet)[2]	Depth to Groundwater (feet)[2]	Potentiometric Surface (feet)[3]
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
	3/24/2011			73.26	128.62
	9/13/2011			80.51	119.32
	2/21/2012			80.01	119.82
	12/26/2012			82.05	117.78
	2/2/2016		102.75	73.68	126.15
	8/22/2016		105.19	80.94	118.89
	2/22/2017		102.80	75.52	124.31

NOTES:

— denotes casing elevation not surveyed.

NC = not calculated

NE = not encountered

NM = not measured

[1]Elevation of top of casing using an assumed 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 accumulated in the well caps and is not

[5]Wells MW-5 and MW-11 were not monitored or sampled on September 13, 2011 due to obstructions over the wells.

Table 4
Summary of Groundwater Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Monitoring Well	Sample Date	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
	3/25/2011	Farallon		**280**	<2.0	<2.0	<2.0	<2.0
	9/14/2011	Farallon		**370**	<2.0	<2.0	<2.0	<2.0
	2/22/2012	Farallon		**140**	<1.0	<1.0	<1.0	<1.0
	12/27/2012	Farallon		**340**	<2.0	<2.0	<2.0	<2.0
	2/3/2016	Farallon		**140**	<1.0	<1.0	<1.0	<1.0
	8/22/2016	Farallon		**190**	<1.0	<1.0	<1.0	<1.0
	3/2/2017	Farallon		**230**	<1.0	<1.0	<1.0	<1.0
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
	3/25/2011	Farallon		**130**	<0.20	<0.20	<0.20	<0.20
	11/11/2011	Farallon		**270**	<2.0	<2.0	<2.0	<2.0
	2/22/2012	Farallon		**130**	<1.0	<1.0	<1.0	<1.0
	12/27/2012	Farallon		**140**	<1.0	<1.0	<1.0	<1.0
	2/3/2016	Farallon		**130**	<1.0	<1.0	<1.0	<1.0
	8/22/2016	Farallon		**73**	<0.4	<0.4	<0.4	<0.4
	3/2/2017	Farallon		**63**	<1.0	<1.0	<1.0	<1.0
MTCA Cleanup Levels for Groundwater				**5[4]**	**5[4]**	**80[5]**	**160[5]**	**0.2[4]**

Table 4
Summary of Groundwater Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Monitoring Well	Sample Date	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-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
	3/24/2011	Farallon		**6**	<0.20	<0.20	<0.20	<0.20
	9/14/2011	Farallon		**5.5**	<0.20	<0.20	<0.20	<0.20
	2/21/2012	Farallon		4	<0.20	<0.20	<0.20	<0.20
	12/27/2012	Farallon		**6.1**	<0.20	<0.20	<0.20	<0.20
	2/3/2016	Farallon		3	<0.20	<0.20	<0.20	<0.20
	8/22/2016	Farallon		4.7	<0.20	<0.20	<0.20	<0.20
	3/2/2017	Farallon		**5.1**	<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
	3/24/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	9/13/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/21/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	12/26/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/2/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	8/22/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/2/2017	Farallon		Well was obstructed and not sampled				
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
	3/25/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	9/13/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/22/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	12/26/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/2/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	8/22/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/2/2017	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]**

Table 4
Summary of Groundwater Analytical Results for PCE and its Degradation Products
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Monitoring Well	Sample Date	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
	3/24/2011	Farallon		4.9	<0.20	<0.20	<0.20	<0.20
	11/11/2011	Farallon		**53**	<4.0	<4.0	<4.0	<4.0
	2/21/2012	Farallon		4.1	<0.20	<0.20	<0.20	<0.20
	12/27/2012	Farallon		3.1	<0.20	<0.20	<0.20	<0.20
	2/3/2016	Farallon		0.88	<0.20	<0.20	<0.20	<0.20
	8/22/2016	Farallon		1.3	0.30	2.0	<0.20	<0.20
	3/2/2017	Farallon		1.5	<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
	3/15/2010	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/24/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	9/13/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/21/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	12/26/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/2/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	8/22/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/2/2017	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
	3/24/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	9/14/2011	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/21/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	12/26/2012	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	2/2/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	8/22/2016	Farallon		<0.20	<0.20	<0.20	<0.20	<0.20
	3/2/2017	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 exceeding 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 Groundwater Analytical Results for Manganese
Allison's Norge Village
Olympia, Washington
Farallon PN: 663-010

Sample Location	Sample Date	Sample Identification	Analytical Results (micrograms per liter)[1]
			Manganese
Baseline Sampling - Pre-ISCO Injections			
MW-2	2/3/2016	MW-2-020316	180
MW-5	2/3/2016	MW-5-020316	790
MW-9	2/2/2016	MW-9-020216	530
MW-10	2/2/2016	MW-10-020216	110
MW-11	2/3/2016	MW-11-020316	270
MW-12	2/2/2016	MW-12-020216	450
Post-ISCO Injection Sampling			
MW-9	7/7/2017	MW-9-070717	750
	8/3/2017	MW-9-080317	380
	9/5/2017	MW-9-090117	1,200
MW-10	7/7/2017	MW-10-070717	84
	8/3/2017	MW-10-080317	170
	9/5/2017	MW-10-090117	14
MW-11	7/7/2017	MW-11-070717	120
	8/3/2017	MW-11-080317	310
	9/5/2017	MW-11-090117	220
MW-12	7/7/2017	MW-12-070717	250
	8/3/2017	MW-12-080317	970
	9/5/2017	MW-12-090117	330
MW-13	7/7/2017	MW-13-070717	170
	8/3/2017	MW-13-080317	33
	9/5/2017	MW-13-090117	22
MTCA Cleanup Levels for Groundwater[2]			**2,240**

NOTES:

[1]Analyzed by U.S. Environmental Protection Agency Method 6010C.

[2]Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Groundwater,

ISCO = in situ chemical oxidation

Table 6
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 (pounds)	Total Amount PCE Removed to Date (pounds)
SVE-1I	9/11/2012		13.0	0.003	3.20	0.10	0.10	0.69	0.03	0.01
SVE-2S	9/11/2012		13	0.34	34.50	0.10	0.10	0.69	0.04	0.01
SVE-3I	9/11/2012		13	0.003	3.20	0.10	0.10	0.69	0.31	0.10
SVE-4S	9/11/2012		13	0.004	3.70	0.00	0.00	0.00	0.00	0.00
SVE-5S	9/11/2012		11.3	0.291	31.90	0.10	0.10	0.69	0.56	0.18
SVE-6I	9/11/2012		11.3	0.003	3.20	0.00	0.00	0.00	0.00	0.00
SVE-7S	9/11/2012		13	0.418	38.20	0.00	0.00	0.00	0.00	0.00
SVE-8S	9/11/2012		11.3	0.003	3.20	0.10	0.10	0.69	0.31	0.10
SVE-9I	9/11/2012		11.4	0.005	4.20	0.10	0.10	0.69	0.06	0.02
SVE-10I	9/11/2012	23.0	13.1	0.288	31.80	0.10	0.10	0.69	0.50	0.16
SVE-11S	9/11/2012		12.6	0.011	6.20	0.00	0.00	0.00	0.00	0.00
SVE-11H	9/11/2012		12.3	0.734	50.80	0.00	0.00	0.00	0.00	0.00
SVE-12S	9/11/2012		11.4	0.005	4.20	0.10	0.10	0.69	0.29	0.09
SVE-13S	9/11/2012		11.3	0.349	35.00	0.00	0.00	0.00	0.00	0.00
SVE-14S	9/11/2012		6.8	0.254	29.90	0.00	0.00	0.00	0.00	0.00
SVE-15S	9/11/2012		11.2	0.714	50.00	0.00	0.00	0.00	0.00	0.00
SVE-16I	9/11/2012		11.4	0.556	43.90	0.10	0.10	0.69	0.19	0.06
SVE-17S	9/11/2012		11.3	0.358	35.50	0.00	0.00	0.00	0.00	0.71
SVE-18I	9/11/2012		9.1	0.106	19.40	0.10	0.69	0.19	0.06	1.03
									TOTAL REMOVE THROUGH 9/11/2012	**593.87**

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

Field Measurements:

Total SVE System Pre-Carbon PCE = 0.0 ppmv
Mid Carbon PCE = 0.0 ppmv
Post Carbon = 0.0 ppmv
Days of Operation Since Last Site Visit = 112
Run Time = 19,200 hours

Table 6
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 (pounds)	Total Amount PCE Removed to Date (pounds)
SVE-1I	2/2/2016	23.0	23.0	0.000	0.00	0.00	0.00	0.00	0.00	2.58
SVE-2S	2/2/2016		21.9	0	0.00	0.00	0.00	0.00	0.00	2.91
SVE-3I	2/2/2016		21.9	0	0.00	0.00	0.00	0.00	0.00	81.58
SVE-4S	2/2/2016		23.4	0	0.00	0.00	0.00	0.00	0.00	12.32
SVE-5S	2/2/2016		20.2	0.000	0.00	0.00	0.00	0.00	0.00	11.29
SVE-6I	2/2/2016		20.4	0	0.00	0.00	0.00	0.00	0.00	2.70
SVE-7S	2/2/2016		23.7	0	0.00	NS	--	0.00	--	75.66
SVE-8S	2/2/2016		20.3	0	0.00	0.00	0.00	0.00	0.00	0.12
SVE-9I	2/2/2016		20.5	0.691	49.22	1.20	8.27	5.77	1.70	50.47
SVE-10I	2/2/2016		23.2	0.454	39.90	NS	--	0.78	--	38.17
SVE-11S	2/2/2016		Decommissioned	--	--	--	--	--	--	32.97
SVE-11H	2/2/2016		Decommissioned	--	--	--	--	--	--	93.43
SVE-12S	2/2/2016		19.8	0.000	0.00	0.00	0.00	0.00	0.00	46.23
SVE-13S	2/2/2016		20.7	0	0.00	0.00	0.00	0.00	0.00	1.66
SVE-14S	2/2/2016		21.3	1.912	81.88	0.20	1.38	2.40	0.71	86.21
SVE-15S	2/2/2016		21.3	1.455	71.43	0.00	0.00	0.00	0.00	20.14
SVE-16I	2/2/2016		20.6	0.525	42.91	NS	--	0.00	--	35.86
SVE-17S	2/2/2016		20.9	0.978	58.56	NS	--	0.00	--	0.69
SVE-18I	2/2/2016		20.4	0.088	17.57	NS	--	0.34	--	0.95
SVE-19S	2/2/2016		--	--	--	--	--	--	--	0.71
SVE-20S	2/2/2016		--	--	--	--	--	--	--	1.03
									TOTAL REMOVE THROUGH 2/2/2016	**597.70**

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

Field Measurements:

Total SVE System Pre-Carbon PCE = 0.0 ppmv

Mid Carbon PCE = 0.0 ppmv

Post Carbon = 0.0 ppmv

Days of Operation Since Last Site Visit = 1239

Run Time = 21,432 hours

Table 6
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 (pounds)	Total Amount PCE Removed to Date (pounds)
SVE-1I	5/24/2016	25.0	18.2	1'/min	0.02	0.00	0.00	0.00	0.00	2.58
SVE-2S	5/24/2016		18.0	3'/min	0.07	0.20	1.38	0.00	0.00	2.92
SVE-3I	5/24/2016		18.0	3'/min	0.07	1.00	6.89	0.01	0.00	81.58
SVE-4S	5/24/2016		18.0	2'/min	0.04	0.00	0.00	0.00	0.00	12.32
SVE-5S	5/24/2016		16.1	10'/min	0.22	0.00	0.00	0.00	0.00	11.29
SVE-6I	5/24/2016		16.1	2'/min	0.04	0.00	0.00	0.00	0.00	2.70
SVE-7S	5/24/2016		18.2	3'/min	0.07	0.60	4.13	0.01	0.00	75.66
SVE-8S	5/24/2016		16.1	1'/min	0.02	0.00	0.00	0.00	0.00	0.12
SVE-9I	5/24/2016		16.2	77'/min	1.69	0.00	0.00	0.20	0.06	50.53
SVE-10I	5/24/2016		17.8	0.472	40.68	0.80	5.51	6.35	2.03	40.20
SVE-11S	5/24/2016		Decommissioned	--	--	--	--	--	--	32.97
SVE-11H	5/24/2016		Decommissioned	--	--	--	--	--	--	93.43
SVE-12S	5/24/2016		16.2	2'/min	0.04	0.00	0.00	0.00	0.00	46.23
SVE-13S	5/24/2016		16.1	2'/min	0.04	0.00	0.00	0.00	0.00	1.66
SVE-14S	5/24/2016		16.0	1.008	61.54	0.00	0.00	1.20	0.38	86.60
SVE-15S	5/24/2016		15.2	1.065	61.11	0.00	0.00	0.00	0.00	20.14
SVE-16I	5/24/2016		15.3	0.682	48.90	0.00	0.00	0.00	0.00	35.86
SVE-17S	5/24/2016		15.5	0.662	48.18	0.00	0.00	0.00	0.00	0.69
SVE-18I	5/24/2016		16.0	2'/min	0.04	0.00	0.00	0.00	0.00	0.95
SVE-19S	5/24/2016		17.2	0.432	38.92	0.00	0.00	0.00	0.00	0.71
SVE-20S	5/24/2016		17.4	0.387	36.84	0.00	0.00	0.00	0.00	1.03
									TOTAL REMOVE THROUGH 5/24/2016	**600.18**

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

Field Measurements:

Total SVE System Pre-Carbon PCE = 0.0 ppmv

Mid Carbon PCE = 0.0 ppmv

Post Carbon = 0.0 ppmv

Days of Operation Since Last Site Visit = 112

Run Time = 23,842 hours

Table 6
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 (pounds)	Total Amount PCE Removed to Date (pounds)
SVE-1I	8/25/2016	9.0	4.0	139.4'/min	1.94	0.00	0.00	0.00	0.00	2.58
SVE-2S	8/25/2016		4.1	124.2'/min	1.73	0.00	0.00	0.03	0.01	2.92
SVE-3I	8/25/2016		4.1	137.8'/min	1.91	0.00	0.00	0.19	0.05	81.63
SVE-4S	8/25/2016		4.1	135.2'/min	1.88	0.00	0.00	0.00	0.00	12.32
SVE-5S	8/25/2016		0.485	35.4'/min	0.49	0.00	0.00	0.00	0.00	11.29
SVE-6I	8/25/2016		0.995	35.8'/min	0.50	0.00	0.00	0.00	0.00	2.70
SVE-7S	8/25/2016		4.082	144.5'/min	2.01	0.00	0.00	0.12	0.03	75.69
SVE-8S	8/25/2016		Closed	--	--	--	--	--	--	0.120
SVE-9I	8/25/2016		1.019	185.0'/min	2.57	1.00	6.89	0.25	0.06	50.60
SVE-10I	8/25/2016		4.054	0.060	14.50	1.50	10.34	3.26	0.79	40.99
SVE-11S	8/25/2016		Decommissioned	--	--	--	--	--	--	32.970
SVE-11H	8/25/2016		Decommissioned	--	--	--	--	--	--	93.430
SVE-12S	8/25/2016		1.016	38.6'/min	0.54	0.00	0.00	0.00	0.00	46.23
SVE-13S	8/25/2016		Closed	--	--	--	--	--	--	1.660
SVE-14S	8/25/2016		2.5	0.040	11.84	0.40	2.76	0.46	0.11	86.71
SVE-15S	8/25/2016		2.2	0.048	12.97	0.10	0.69	0.13	0.03	20.17
SVE-16I	8/25/2016		2.1	0.035	11.08	0.00	0.00	0.00	0.00	35.86
SVE-17S	8/25/2016		Closed	--	--	--	--	--	--	0.690
SVE-18I	8/25/2016		1.4	59.1'/min	0.82	0.00	0.00	0.00	0.00	0.95
SVE-19S	8/25/2016		4.1	0.040	11.84	0.50	3.45	0.58	0.14	0.85
SVE-20S	8/25/2016		4.1	0.039	11.69	0.50	3.45	0.57	0.14	1.17
									TOTAL REMOVE THROUGH 8/25/2016	**601.53**

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

Field Measurements:

Total SVE System Pre-Carbon PCE = 0.0 ppmv

Mid Carbon PCE = 0.0 ppmv

Post Carbon = 0.0 ppmv

Days of Operation Since Last Site Visit = 93

Run Time = 25,679 hours

Table 6
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 (pounds)	Total Amount PCE Removed to Date (pounds)
SVE-1I	11/29/2016		3.9	188.4'/min	16.41	0.00	0.00	0.00	0.00	2.58
SVE-2S	11/29/2016		3.9	0.003	3.24	0.00	0.00	0.00	0.00	2.92
SVE-3I	11/29/2016		3.9	0.003	3.24	0.00	0.00	0.00	0.00	81.63
SVE-4S	11/29/2016		3.9	0.004	3.75	0.00	0.00	0.00	0.00	12.32
SVE-5S	11/29/2016		1.055	43.5'/min	3.80	0.00	0.00	0.00	0.00	11.29
SVE-6I	11/29/2016		1.038	39.9'/min	3.48	0.00	0.00	0.00	0.00	2.70
SVE-7S	11/29/2016		4.018	172.7'/min	15.08	0.00	0.00	0.00	0.00	75.69
SVE-8S	11/29/2016		Closed	--	--	--	--	--	--	0.120
SVE-9I	11/29/2016		1.036	0.011	6.21	1.10	7.58	1.27	0.38	50.98
SVE-10I	11/29/2016		3.972	0.004	3.75	0.00	0.00	0.55	0.16	41.15
SVE-11S	11/29/2016	8.7	Decommissioned	--	--	--	--	--	--	32.970
SVE-11H	11/29/2016		Decommissioned	--	--	--	--	--	--	93.430
SVE-12S	11/29/2016		1.065	45.4'/min	3.96	0.00	0.00	0.00	0.00	46.23
SVE-13S	11/29/2016		Closed	--	--	--	--	--	--	1.660
SVE-14S	11/29/2016		2.443	0.016	7.49	0.30	2.07	0.51	0.15	86.86
SVE-15S	11/29/2016		2.377	103.9'/min	9.07	0.00	0.00	0.09	0.03	20.20
SVE-16I	11/29/2016		2.179	110.2'/min	9.62	0.00	0.00	0.00	0.00	35.86
SVE-17S	11/29/2016		Closed	--	--	--	--	--	--	0.690
SVE-18I	11/29/2016		1.530	119.0'/min	10.39	0.00	0.00	0.00	0.00	0.95
SVE-19S	11/29/2016		4.200	0.046	12.70	0.10	0.69	0.74	0.22	1.07
SVE-20S	11/29/2016		4.204	0.045	12.56	0.20	1.38	0.86	0.26	1.42
									TOTAL REMOVE THROUGH 11/29/2016	**602.73**

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

Field Measurements:

Total SVE System Pre-Carbon PCE = 0.0 ppmv

Mid Carbon PCE = 0.0 ppmv

Post Carbon = 0.0 ppmv

Days of Operation Since Last Site Visit = 96

Run Time = 27,935 hours

Table 6
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 (pounds)	Total Amount PCE Removed to Date (pounds)
SVE-1I	2/22/2017		4.207	<0.003	1.62	0.00	0.00	0.00	0.00	2.58
SVE-2S	2/22/2017		4.156	<0.003	1.62	0.00	0.00	0.00	0.00	2.92
SVE-3I	2/22/2017		4.090	<0.003	1.62	0.00	0.00	0.00	0.00	81.63
SVE-4S	2/22/2017		4.215	<0.003	1.62	0.00	0.00	0.00	0.00	12.32
SVE-5S	2/22/2017		1.260	<0.003	1.62	0.00	0.00	0.00	0.00	11.29
SVE-6I	2/22/2017		1.059	<0.003	1.62	0.00	0.00	0.00	0.00	2.70
SVE-7S	2/22/2017		4.154	<0.003	1.62	0.00	0.00	0.00	0.00	75.69
SVE-8S	2/22/2017		Closed	--	--	--	--	--	--	0.120
SVE-9I	2/22/2017		1.175	<0.003	1.62	0.10	0.69	0.19	0.05	51.03
SVE-10I	2/22/2017		4.204	<0.003	1.62	0.00	0.00	0.00	0.00	41.15
SVE-11S	2/22/2017	7.7	Decommissioned	--	--	--	--	--	--	32.97
SVE-11H	2/22/2017		Decommissioned	--	--	--	--	--	--	93.43
SVE-12S	2/22/2017		1.188	<0.003	1.62	0.00	0.00	0.00	0.00	46.23
SVE-13S	2/22/2017		Closed	--	--	--	--	--	--	1.66
SVE-14S	2/22/2017		2.641	0.016	7.49	0.20	1.38	0.37	0.10	86.96
SVE-15S	2/22/2017		2.482	<0.003	1.62	0.00	0.00	0.00	0.00	20.20
SVE-16I	2/22/2017		2.395	<0.003	1.62	0.00	0.00	0.00	0.00	35.86
SVE-17S	2/22/2017		Closed	--	--	--	--	--	--	0.69
SVE-18I	2/22/2017		1.635	<0.003	1.62	0.00	0.00	0.00	0.00	0.95
SVE-19S	2/22/2017		4.412	0.042	12.14	0.90	6.20	1.19	0.31	1.38
SVE-20S	2/22/2017		4.154	0.046	12.70	0.70	4.82	1.12	0.29	1.72
									TOTAL REMOVE THROUGH 2/22/2017	**603.48**

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

Field Measurements:

Total SVE System Pre-Carbon PCE = 0.0 ppmv

Mid Carbon PCE = 0.0 ppmv

Post Carbon = 0.0 ppmv

Days of Operation Since Last Site Visit = 85

Run Time = ~29,925 hours

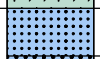
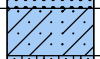
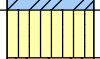
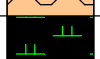
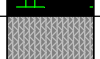
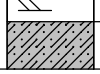
APPENDIX A
BORING LOGS

CLEANUP ACTION PROGRESS REPORT
JUNE 2012 TO DECEMBER 2017
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

FARALLON CONSULTING

USCS Classification and Graphic Legend

Major Divisions			USCS Graphic Symbol	USCS Letter Symbol	Lithologic Description
Coarse-Grained Soil (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well graded GRAVEL, well graded GRAVEL with sand
				GP	Poorly graded GRAVEL, GRAVEL with sand
		GRAVEL WITH FINES (Appreciable amount of fines)		GP-GM	Poorly graded GRAVEL - GRAVEL with sand and silt
				GM	Silty GRAVEL
				GC	Clayey GRAVEL
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		SW	Well graded SAND
				SP	Poorly graded SAND
		SAND WITH FINES (Appreciable amount of fines)		SP-SM	Poorly graded SAND - silty SAND
				SM	Silty SAND
				SC	Clayey SAND
				SM-ML	SILT - Silty SAND
Fine-Grained Soil (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			ML	SILT
				CL	CLAY
				OL	Organic SILT
	SILT AND CLAY (Liquid limit greater than 50)			MH	Inorganic SILT
				CH	Inorganic CLAY
				OH	Organic CLAY
		Highly Organic Soil		PT	Peat
OTHER MATERIALS	PAVEMENT			AC	Asphalt concrete
				CO	Concrete
	OTHER			RK	Bedrock
				WD	Wood Debris
				DB	Debris (Miscellaneous)
				PC	Portland cement

Legend

- Sample Interval
- G — Grab Sample Interval
- Water level at time of drilling
- Water level at time of sampling
- Blank Casing
- Screened Casing
- Cement Grout
- Bentonite
- Sand Pack
- Well Cap
- _____ Solid line indicates sharp contact between units well defined.
- - - - - - - Dashed line indicates gradational contact between units.

feet bgs = feet below ground surface
NE = Not Encountered
NA = Not Applicable
PID = Photoionization Detector
PN = Project Number
*ppm = parts per million total organic vapors in isobutylene equivalents using a 10.6 electron volt lamp
USCS = Unified Soil Classification System

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-7

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 0930	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1040	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	16.5
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.3 Concrete.	CO							
		0.3-1.0 Poorly graded GRAVEL with sand (60% gravel, 40% sand), fine gravel, fine to coarse sand, light brown, dry, no odor.	GP							
		1.0-1.3 Asphalt debris.	AC							
		1.6-1.6 Poorly graded GRAVEL with sand (60% gravel, 40% sand), fine gravel, fine to coarse sand, light brown, dry, no odor.	GP							
		1.6-3.3 Sandy SILT (70% silt, 30% sand), fine to coarse sand, brown, moist, no odor.	ML		75	NA				
		3.3-4.0 No Recovery.								
		4.0-4.1 Sandy SILT (70% silt, 30% sand), fine to coarse sand, brown, moist, no odor.	ML							
		4.1-4.6 Poorly graded SAND with gravel (70% sand, 30% gravel), fine to coarse sand, fine gravel, light grey, dry, no odor.	SP							
5		4.6-5.6 Sandy SILT (70% silt, 30% sand), fine to coarse sand, brown, moist, no odor.	ML		85	NA	5.0	IB-7-5.0 @ 1000	X	
		5.6-5.7 Poorly graded GRAVEL with sand (65% gravel, 35% sand), fine to coarse sand, fine to coarse gravel, light grey, dry, no odor.	GP							
		5.7-6.7 Poorly graded SAND (100% sand), fine sand, light brown, moist, no odor.	SP							
		6.7-6.8 SILT (100% silt), light brown, moist, no odor.	ML						X	
		6.8-7.3 Poorly graded SAND (100% sand), fine to medium sand, grey to brown, moist, no odor.	SP							
		7.3-8.0 No recovery.								
		8.0-9.4 Poorly graded GRAVEL with sand (70% gravel, 30% sand), fine to coarse sand, fine to coarse gravel, light grey, dry, no odor.	GP							
		9.4-9.9 Silty SAND (80% sand, 20% silt), fine sand, brown, moist, no odor.	SM							
10										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-7

Client: Wilbur Allison
Project: Allison's Norge Village
Location: Olympia, Washington
Farallon PN: 663-010
Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 0930	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1040	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	16.5
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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
10		9.9-10.8 Poorly graded SAND (100% sand), fine to medium sand, grey to brown, moist, no odor.	SP		95	NA	2.7	IB-7-10.0 @ 1012		
		10.8-11.0 No recovery.	GP							
		11.0-11.2 Poorly graded GRAVEL with sand (65% gravel, 35% sand), fine to coarse sand, fine to coarse gravel, light grey, dry, no odor.	SP							
		11.2-13.0 Poorly graded SAND (100% sand), fine to medium sand, grey to brown, moist, no odor, 0.1 silt lense.								
		13.0-14.5 Poorly graded SAND with gravel (85% sand, 15% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor.			100	NA				
		14.5-15.8 Poorly graded SAND (100% sand), fine to medium sand, grey to brown, moist, no odor.			10	NA	3.0	IB-7-15.0 @ 1034	X	
15		15.8-16.0 SILT (100% silt), light brown, moist, no odor.	ML							
		16.0-16.5 SILT (80% silt, 20% clay), wet.					2.5	IB-7-16.5 @ 1049	X	
		Refusal @ 16.5								
20										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA
Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Boring Abandonment: Bentonite
Surveyed Location: **X:** NA **Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-8

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 1050	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1210	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	16.9
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	20.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.3 Concrete.	CO							
		0.3-0.6 Poorly graded SAND (95% sand, 5% gravel), fine to medium sand, fine gravel, brown, moist, no odor.	SP							
		0.6-0.7 Ashphalt debris.	AC							
		0.7-1.3 Poorly graded GRAVEL with sand (70% gravel, 30% sand), fine to coarse gravel, fine to coarse sand, brown, moist, no odor.	GP							
		1.3-2.8 Poorly graded SAND with gravel (85% sand, 15% gravel), fine to coarse sand, coarse gravel, brown, moist, no odor.	SP		75	NA				
		2.8-4.0 No Recovery								
		4.0-4.9 Poorly graded SAND with gravel (85% sand, 15% gravel), fine to coarse sand, coarse gravel, brown, moist, no odor.	SP							
5		4.9-5.0 Wood Debris	WD		80	NA	3.3	IB-8-5.0 @ 1118	X	
		5.0-5.3 Poorly graded GRAVEL with sand (85% gravel, 15% sand), fine to coarse gravel, fine to coarse sand, light gray, dry, no odor.	GP							
		5.3-5.8 SILT (100% silt), light brown, moist, no odor, grades to sand down hole.	ML							
		5.8-7.2 Poorly graded SAND (100% sand), fine to medium sand, brown, moist, no odor.	SP							
		7.2-8.0 No Recovery	ML							
		8.0-8.6 Poorly graded SAND with gravel (85% sand, 15% gravel), fine to coarse sand, coarse gravel, brown, moist, no odor.	SP							
		8.6-11.0 Poorly graded SAND (100% sand), fine to medium sand, brown, moist, no odor.	SP							
10										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-8

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 1050	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1210	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	16.9
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	20.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
10				100	NA	2.9	IB-8-10.0 @ 1132	X
		11.0-12.0 Poorly graded GRAVEL with sand (70% gravel, 30% sand), fine to coarse gravel, fine to coarse sand, brown, moist, no odor.	GP					
		12.0-12.1 SILT (100% silt), brown, moist, no odor.	ML					
		12.1-13.6 Poorly graded SAND (98% sand, 2% gravel), fine to medium sand, fine gravel, gray, moist, no odor, gravel increases down hole.	SP	100	NA			
		13.6-14.0 Poorly graded SAND with gravel (75% sand, 25% gravel), fine to medium sand, fine gravel, grey, dry, no odor.	SP					
		14.0-14.5 Poorly graded SAND with gravel (75% sand, 25% gravel), fine to medium sand, fine gravel, grey, dry, no odor.	SP					
			ML					
15		14.5-16.0 SILT (100% silt), light brown, moist, no odor.		100	NA	3.2	IB-8-15.0 @ 1156	X
		16.0-18.7 SILT (100% silt), light brown, moist to wet, no odor, saturated from 16.9'-18.5' bgs.	ML	90	NA			
						3.9	Soil Screen @ 18.0' bgs	
		18.7-19.0 No Recovery						
		19.0-20.0 SILT (100% silt), light brown, moist, minor gravel at 19.8' bgs (less than 10%).	ML			5.4	Soil Screen @ 19.0' bgs	
20				100	NA	30.7	IB-7-20 @	X

Water Level

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Boring Abandonment:**	Bentonite
Screened Interval (ft bgs):	NA			**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-9

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 1230	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1400	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	16.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.3 Concrete, gray.	CO							
		0.3-0.8 Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine sand, fine gravel, brown, moist, no odor.	SM				2.1	Soil Screen @ 1.0' bgs		
		0.8-2.0 SILT (100% silt), brown, moist, no odor.	ML		50	NA	2.2	Soil Screen @ 2.0' bgs		
		2.0-4.0 No Recovery								
		4.0-6.0 SILT (100% silt), brown, moist, no odor.	ML				2.4	Soil Screen @ 3.0' bgs		
5							3.4	IB-9-5.0 @ 1300	X	
		6.0-6.4 Poorly graded SAND (95% sand, 5% silt), fine sand, grey, moist, no odor.	SP		50	NA	2.0	Soil Screen @ 6.0' bgs		
		6.4-8.0 No Recovery								
		8.0-11.6 Poorly graded SAND (95% sand, 5% gravel), fine sand, grey, moist, no odor, 5% gravel at 10.0' bgs, silt increases at depth.	SP				2.1	Soil Screen @ 8.0' bgs		
							2.1	Soil Screen @ 9.0' bgs		
10					80	NA	2.3	IB-9-10.0 @ 1338	X	
							1.9	Soil Screen @ 11.0' bgs		
		11.6-12.0 No Recovery								
		12.0-13.0 Poorly graded SAND (100% sand) fine sand, grey, moist, no odor.	SP				4.1	Soil Screen @ 12.0' bgs		
		13.0-13.5 Pooryly graded SAND with gravel (85% sand, 15% gravel), fine sand, fine gravel, grey, moist, no odor.	SP				3.4	Soil Screen @ 13.0' bgs		
			SM		80	NA	3.0	Soil Screen @ 14.0 bgs		
15		13.5-15.0 Silty SAND (60% sand, 40% silt), fine sand, grey, moist, no odor.					3.7	IB-9-15.0 @ 1357	X	
		15.0-16.0 No Recovery								
		Refusal @ 16.0' bgs								

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Boring Abandonment:**	Bentonite
Screened Interval (ft bgs):	NA			**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-10

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 1405	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1450	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	16
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.3 Concrete	CO							
		0.3-0.8 Poorly graded GRAVEL with sand (60% gravel, 40% sand), fine gravel, fine to coarse sand, dark brown, moist, no odor.	GP				2.6	Soil Screen @1.0' bgs		
		0.8-2.8 SILT (95% silt, 5% sand), fine sand, light brown, moist, no odor.	ML		70	NA	1.3	Soil Screen @2.0' bgs		
		2.8-4.0 No Recovery								
		4.0-6.0 SILT (95% silt, 5% sand), fine sand, light brown, moist, no odor.	ML				1.7	Soil Screen @4.0' bgs		
5							3.0	IB-10-5.0 @ 1420	X	
		6.0-6.9 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor.	SP		72	NA	1.8	Soil Screen @6.0' bgs		
		6.9-8.0 No Recovery					1.6	Soil Screen @7.0' bgs		
		8.0-11.0 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor.	SP				1.9	Soil Screen @9.0' bgs		
10					75	NA	3.1	IB-10-10.0 @ 1437	X	
		11.0-12.0 No Recovery					2.4	Soil Screen @11.0' bgs		
		12.0-13.9 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor.	SP				3.0	Soil Screen @12.0' bgs		
							3.3	Soil Screen @13.0' bgs		
		13.9-14.9 SILT (100% silt), brownish gray, moist, no odor.	ML		72	NA	2.0	Soil Screen @14.0' bgs		
15		14.9-16.0 No Recovery					2.4	IB-10-15.0 @ 1445	X	
		Refusal @ 16.0' due to drill base bolts becoming loose								

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-11

Client: Wilbur Allison
Project: Allison's Norge Village
Location: Olympia, WA
Farallon PN: 663-010
Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 1500	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1559	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	18.1-19.4
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	19.5
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0	0.0-0.3 Concrete	CO					
	0.3-1.0 Poorly graded GRAVEL with sand (60% Gravel, 40% Sand), fine to coarse gravel, fine to coarse sand, brown, moist, no odor.	GP					
	1.0-2.6 SILT (95% silt, 5% sand), rust brown to brown at 2.0', moist, no odor.	ML	65	NA			
	2.6-4.0 No Recovery	ML					
5	4.0-6.0 SILT (100% silt), brown, moist, no odor, <0.5" sand lense @ 4.6' bgs.				2.4	IB-11-5.0 @ 1520	X
	6.0-6.5 Poorly graded SAND (100% sand), fine sand, brownish gray, moist, no odor.	SP	63	NA	2.4	Soil Screen @6.0' bgs	
	6.5-8.0 No Recovery	ML			2.8	Soil Screen @8.0' bgs	
	8.0-8.8 SILT (95% silt, 5% sand), brown, moist, no odor.	SP			3.1	Soil Screen @9.0' bgs	
10	8.8-11.0 Poorly graded SAND (100% sand), fine sand, brownish gray, moist, no odor.		75	NA	4.8	IB-11-10.0 @1527	X
	11.0-12.0 No Recovery				3.4	Soil Screen @11.0' bgs	
	12.0-14.0 Poorly graded SAND (100% sand), fine sand, brownish gray, moist, no odor, 0.1' thick sandy gravel lense @ 13.2' bgs.	SP			3.2	Soil Screen @12.0' bgs	
					2.2	Soil Screen @13.0' bgs	
	14.0-14.5 SILT (95% silt, 5% sand), brown, moist, no odor.	ML	63	NA	3.8	Soil Screen @14.0' bgs	
15	14.5-16.0 No Recovery						
	16.0-19.5 SILT (95% silt, 5% sand), brown, moist, perched saturated zone @ 18.1' through 19.4' bgs, no odor.	ML			3.0	IB-11-16.0 @ 1557	X
					1.7	Soil Screen @17.0' bgs	
				NA	3.4	Soil Screen @18.0' bgs	
20	19.5-20.0 No Recovery				5.7	IB-11-19.5 @ 1600	X

Water Level

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Boring Abandonment:**	Bentonite
Screened Interval (ft bgs):	NA			**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-12

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/6/2012 1600	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/6/2012 1730	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	17.3-19.4
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	20.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.3 Concrete	CO					
		0.3-0.6 Poorly graded GRAVEL with sand (60% gravel, 40% sand), fine to coarse gravel, fine to coarse sand, brown, moist, no odor.	GP			2.3	Soil Screen @1.0' bgs	
		0.6-2.8 SILT (100% silt), rusty to brown @ 2.3' bgs, moist, no odor, concrete/ asphalt debris @ 0.8' to 1.0' bgs.	ML	70	NA	2.6	Soil Screen @2.0' bgs	
		2.8-4.0 No Recovery	ML			1.6	Soil Screen @4.0' bgs	
5		4.0-4.9 SILT (100% silt), brown, moist, no odor.	SM			4.3	IB-12-5.0 @1623	X
		4.9-5.8 Silty SAND (50% sand, 50% silt), fine sand, brown, moist, no odor.	ML	72	NA	1.9	Soil Screen @6.0' bgs	
		5.8-6.9 SILT (100% silt), brown, moist, no odor.						
		6.9-8.0 No Recovery	ML			3.6	Soil Screen @8.0' bgs	
		8.0-8.7 SILT (100% silt), brown, moist, no odor.	SP			2.3	Soil Screen @9.0' bgs	
10		8.7-11.1 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor.		78	NA	3.4	IB-12-10.0 @ 1630	X
		11.1-12.0 No Recovery				3.6	Soil Screen @11.0' bgs	
		12.0-12.8 SILT (90% silt, 10% gravel), brownish gray, moist, no odor.	ML			2.8	Soil Screen @12.0' bgs	
		12.8-13.3 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor, bottom contact marked by 0.2' thick lense of gravel.	SP			3.0	Soil Screen @13.0' bgs	
15		13.3-15.5 SILT (90% silt, 10% gravel), brownish gray, moist, no odor.	ML	83	NA	3.5	Soil Screen @14.0' bgs	
		15.5-16.0 No Recovery				2.8	IB-12-15.0 @ 1642	X
		16.0-19.5 SILT (100% silt), brown, moist, saturated perched zone @ 17.3' to 19.4' bgs, no odor.	ML			2.4	Soil Screen @16.0' bgs	
						1.8	Soil Screen @17.0' bgs	
						3.7	Soil Screen @18.0' bgs	
20		19.5-20.0 No Recovery				3.9	IB-12-19.5 @ 1700	X

Boring/Well Construction Details: Water Level

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Boring Abandonment:**	Bentonite
Screened Interval (ft bgs):	NA			**Surveyed Location:** **X:** NA	**Y:** NA

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-13

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/7/2012 0800	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/7/2012 0900	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	18.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.1 Wood Tile	WD							
		0.1-0.4 Concrete, gray	CO				0.7	Soil Screen @1.0' bgs		
		0.4-0.8 Silty SAND (80% sand, 20% silt), fine sand, brown, moist, no odor.	SM		75	NA	0.2	Soil Screen @2.0' bgs		
		0.8-1.0 Poorly graded SAND with gravel (80% sand, 20% gravel), fine to medium sand, fine gravel, brown, moist, no odor.	SP				1.2	Soil Screen @3.0' bgs		
		1.0-3.0 Poorly graded SAND (95% sand, 5% silt), fine sand, brown, moist, no odor.	SP				2.2	Soil Screen @4.0' bgs		
5		3.0-4.0 No Recovery	ML				0.7	IB-13-5.0 @ 0824	X	
		4.0-4.5 SILT (100% silt), brown, moist, no odor.	SM				2.2	Soil Screen @6.0' bgs		
		4.5-6.0 Silty SAND (70% sand, 30% silt), fine sand, brown, moist, no odor.	SP-SM		80	NA	2.2	Soil Screen @8.0' bgs		
		6.0-6.8 Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, moist, no odor.	SP				1.6	Soil Screen @9.0' bgs		
		6.8-8.0 No Recovery	SP				1.8	IB-13-10.0 @ 0830	X	
10		8.0-10.6 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.	SP		75	NA	2.3	Soil Screen @12.0' bgs		
		10.6-12.0 No Recovery	SP				1.6	Soil Screen @13.0' bgs		
		12.0-13.0 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.	SP		50	NA	0.2	Soil Screen @14.0' bgs		
		13.0-14.0 No Recovery	ML				0.9	IB-13-15.0 @ 0853	X	
		14.0-14.8 Poorly graded SAND (90% sand, 10% gravel), fine sand, fine gravel, gray, moist, no odor.	ML		75	NA	0.1	Soil Screen @16.0' bgs	X	
15		14.8-16.8 SILT (100% silt), brown, moist, no odor.					1.2	IB-13-16.5 @ 0857		
		16.8-18.0 No Recovery								

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-14

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/7/2012 0910	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/7/2012 1030	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	16.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.1 Wood Tile	WD					
		0.1-0.4 Concrete, grey	CO			0.6	Soil Screen @1.0' bgs	
		0.4-0.9 SILT (100% silt), brown, moist, no odor.	ML			0.2	Soil Screen @2.0' bgs	
		0.9-1.2 Poorly graded SAND with gravel (80% sand, 20% gravel), fine to medium sand, fine gravel, brown to gray, moist, no odor.	SP	70	NA	0.3	Soil Screen @3.0' bgs	
		1.2-3.0 SILT (100% silt), brown, moist, no odor.	ML			0.9	Soil Screen @4.0' bgs	
		3.0-4.0 No Recovery				1.7	Soil Screen @5.0' bgs	X
5		4.0-6.0 Unable to Describe				3.0	IB-14-6.0 @ 0951	
		6.0-7.0 Silty SAND (60% sand, 40% silt), fine sand, brown, moist, no odor.	SM	72	NA	0.9	Soil Screen @7.0' bgs	
		7.0-8.0 No Recovery				1.7	Soil Screen @8.0' bgs	
		8.0-11.0 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.	SP			1.0	IB-14-10.0 @ 1005	
10				78	NA	0.2	Soil Screen @10.0' bgs	X
		11.0-12.0 No Recovery				0.7	Soil Screen @11.0' bgs	
		12-13.8 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.	SP			0.2	Soil Screen @12.0' bgs	
						0.0	Soil Screen @13.0' bgs	
		13.8-14.0 Poorly graded SAND (85% sand, 10% gravel, 5% silt), fine sand, fine gravel, gray, moist, no odor.	SP	83	NA	0.1	Soil Screen @14.0' bgs	
15		14.0-14.8 Silty SAND (70% sand, 30% silt), fine sand, brown, moist, no odor.	SM			0.2	IB-14-14.5 @ 1028	X
		15.5-16.0 No Recovery						
		Refusal @ 16.0' bgs						

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-15

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/7/2012 1055	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/7/2012 1145	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	19.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.1 Wood Tile	WD					
		0.1-0.3 Concrete, gray.	CO			2.0	IB-15-1.0 @ 1123	X
		0.3-0.9 SILT with gravel (85% silt, 15% gravel), fine gravel, brown, moist, no odor.	ML	70	NA	2.0	Soil Screen @2.0' bgs	
		0.9-1.0 Asphalt, black.	AC			1.1	Soil Screen @3.0' bgs	
		1.0-1.3 Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine to medium sand, fine gravel, brown, moist, no odor.	SM			1.0	Soil Screen @4.0' bgs	
5		1.3-3.0 Silty SAND (60% sand, 40% silt), fine sand, brown, moist, no odor.	SM			0.0	IB-15-5.0 @ 1126	X
		3.0-4.0 No Recovery	ML	72	NA	0.7	Soil Screen @6.0' bgs	
		4.0-4.5 Silty SAND (60% sand, 40% silt), fine sand, brown, moist, no odor.	SM					
		4.5-5.5 SILT (100% silt), brown, moist, no odor.	SP			0.3	Soil Screen @8.0' bgs	
		5.5-6.8 Silty SAND (70% sand, 30% silt), fine sand, brown, moist, no odor.				0.5	Soil Screen @9.0' bgs	
10		6.8-8.0 No Recovery		78	NA	1.0	IB-15-10.0 @ 1130	X
		8.0-11.0 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor.	SP			0.7	Soil Screen @11.0' bgs	
		11.0-12.0 No Recovery	SP			0.1	Soil Screen @12.0' bgs	
		12.0-15.0 Poorly graded SAND (95% sand, 5% gravel), fine sand, fine gravel, gray, moist, no odor, gravel within bottom 0.4'.				0.2	Soil Screen @13.0' bgs	
				83	NA	0.0	Soil Screen @14.0' bgs	
15		15.0-16.0 No Recovery				0.2	IB-15-15.0 @ 1149	X
		16.0-17.0 Poorly graded SAND (100% sand), fine sand, gray, moist, no odor.	SP			0.4	Soil Screen @16.0' bgs	
		17.0-18.0 Silty SAND (70% sand, 30% silt), fine sand, gray, moist, no odor.	SM			0.1	Soil Screen @17.0' bgs	
		18.0-19.0 No Recovery				0.0	IB-15-18.0 @ 1153	X
20								

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-16

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/7/2012 1230	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/7/2012 1350	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	19.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.1 Wood Tile	WD					
		0.1-0.3 Concrete, gray.	CO			3.0	Soil Screen @1.0' bgs	
		0.3-0.8 Poorly graded SAND with gravel (80% sand, 15% gravel, 5% silt), fine to medium sand, fine gravel, brown, moist, no odor.	SP	75	NA	5.7	IB-16-2.0 @ 1300	X
		0.8-0.9 Asphalt, black.	AC					
		0.9-1.3 Silty SAND (70% sand, 20% silt, 10% gravel), fine sand, fine gravel, brown, moist, no odor.	SM			0.6	Soil Screen @4.0' bgs	
5		1.3-2.9 SILT (90% silt, 10% sand), fine sand, brown, moist, no odor.	ML			0.8	Soil Screen @5.0' bgs	
		2.9-4.0 No Recovery	ML	90	NA	2.0	IB-16-6.0 @ 1302	
		4.0-5.8 SILT (90% silt, 10% sand), fine sand, brown, moist, no odor.	SM			2.1	Soil Screen @7.0' bgs	
		5.8-7.2 Silty SAND (85% sand, 15% silt), fine sand, brown, moist, no odor.	SP			2.6	IB-16-8.0 @ 1307	X
		7.2-8.0 No Recovery				0.1	Soil Screen @9.0' bgs	
10		8.0-11.2 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.		85	NA	0.0	IB-16-10.0 @ 1310	X
		11.2-12.0 No Recovery				0.0	Soil Screen @11.0' bgs	
		12.0-14.0 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.	SP			0.6	Soil Screen @12.0' bgs	
		14.0-15.0 No Recovery		70	NA	0.5	Soil Screen @13.0' bgs	
15		15.0-15.8 Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor.	SP			0.7	Soil Screen @14.0' bgs	
		15.8-17.0 Silty SAND (60% sand, 40% silt), fine sand, brown, moist, no odor.	SM			0.5	IB-16-15.0 @ 1347	
		17.0-19.0 No Recovery				0.1	Soil Screen @17.0' bgs	
		Refusal @ 19.0' bgs		50	NA	0.2	IB-16-17.0 @ 1349	X
20								

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON consulting
975 5th Avenue Northwest
Issaquah, Washington 98027

Log of Boring: IB-17

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

Farallon PN: 663-010

Logged By: J. Ruark, D. Kayhan

Date/Time Started:	9/7/2012 1400	**Sampler Type:**	4' Macrocore
Date/Time Completed:	9/7/2012 1500	**Drive Hammer (lbs.):**	Auto
Equipment:	LAR	**Depth of Water ATD (ft bgs):**	NE
Drilling Company:	ESN	**Total Boring Depth (ft bgs):**	16.0
Drilling Foreman:	Chris	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Direct Push		

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		0.0-0.1 Wood Tile	WD							
		0.1-0.3 Concrete, gray.	CO				0.9	Soil Screen @1.0' bgs		
		0.3-1.0 Poorly graded SAND with silt and gravel (65% sand, 20% Gravel, 15% silt), fine to medium sand, fine gravel, brownish gray, moist, no odor.	SP-SM		70	NA	0.0	Soil Screen @2.0' bgs		
			SM							
		1.0-2.8 Silty SAND (60% sand, 40% silt), fine sand, brown, moist, no odor.	ML				0.0	Soil Screen @4.0' bgs		
5		2.8-4.0 No Recovery					0.0	IB-17-5.0 @ 1434	X	
		4.0-5.3 SILT (100% silt), brown, moist, no odor.	SP							
		5.3-7.3 Poorly graded SAND (95% sand, 5% silt), fine sand, brown, moist, no odor, .2' thick silt lenses at 6.0' and 6.7' bgs.			90	NA	0.0	Soil Screen @6.0' bgs		
		7.3-8.0 No Recovery					0.0	Soil Screen @7.0' bgs		
		8.0-10.7 Poorly graded SAND (95% sand, 5% silt), fine sand, brown, moist, no odor.	SP				0.5	Soil Screen @8.0' bgs		
							0.6	Soil Screen @9.0' bgs		
10					75	NA	0.0	IB-17-10.0 @ 1438	X	
		10.7-12.0 No Recovery								
		12.0-13.8 Poorly graded SAND (95% sand, 5% silt), fine sand, brown, moist, no odor.	SP				0.0	IB-17-12.0 @ 1456		
							0.0	Soil Screen @13.0' bgs		
		13.8-14.5 Poorly graded SAND with gravel (80% sand, 20% gravel), fine to medium sand, fine gravel, gray, moist, no odor.	SP		80	NA	0.0	Soil Screen @14.0' bgs		
15			SM				0.0	IB-17-14.5 @ 1459	X	
		14.5-14.8 Silty SAND (60% sand, 40% silt), fine sand, brown, moist, no odor.								
		14.8-16.0 No Recovery								
		Refusal @ 16.0' bgs								
20										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA

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

FARALLON CONSULTING

Log of Boring: SVE-19S

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

Farallon PN: 663-010

Logged By: Ken Scott

Date/Time Started:	1/15/13 @ 0850	**Sampler Type:**	24-inch SPT
Date/Time Completed:	1/15/13 @ 1200	**Drive Hammer (lbs.):**	140
Equipment:	M252 Bobcat	**Depth of Water ATD (ft bgs):**	No Water
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	30.0'
Drilling Foreman:	Wade Betlaf	**Total Well Depth (ft bgs):**	25.0'
Drilling Method:	Hollow Stem		

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		0.0-0.3': Concrete (100% concrete), light gray. Post hole dig to 4-feet bgs to clear utilities (Ok).	CO							Monument
		0.3-1.0': Silty SAND with gravel Fill (50% sand, 30% silt, 20% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen.	SM							Concrete
		1.0-1.4': Asphalt (100% asphalt), black.	AC							
		1.4-5.0': Sandy SILT (70% silt, 30% sand), fine to medium sand, dark brown, moist, no odor, no sheen.	ML		100	NM	3.8			Bentonite Seal
5		5.0-5.5': SILT (90% silt, 10% sand), fine sand, dark brown, hard, moist, no odor, no sheen.	ML		30	2/42/7	1.0	SVE-19S-5.0 @ 1020	X	Sand
		5.5-6.0': Concrete (100% concrete), light gray.	CO							
		6.0-10.0': No Recovery.								
10		10.0-11.5': Poorly graded SAND (95% sand, 5% silt), fine sand, yellowish- brown, medium dense, moist, no odor, no sheen.	SP		100	7/6/7	0.5	SVE-19S-10.0 @ 1040	X	Casing
		11.5-12.0': SILT (100% silt), dark brown, stiff, moist, no odor, no sheen.	ML							
		12.0-15.0': No Recovery.								
15										

Well Construction Information

Monument Type:	Flush mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2-inch	**Surface Seal:**	NA	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.020	**Annular Seal:**	Concrete	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	5 to 25'	**Boring Abandonment:**	NA		**Y:** NA

FARALLON CONSULTING

Log of Boring: SVE-19S

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

Farallon PN: 663-010

Logged By: Ken Scott

Date/Time Started:	1/15/13 @ 0850	**Sampler Type:**	24-inch SPT
Date/Time Completed:	1/15/13 @ 1200	**Drive Hammer (lbs.):**	140
Equipment:	M252 Bobcat	**Depth of Water ATD (ft bgs):**	No Water
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	30.0'
Drilling Foreman:	Wade Betlaf	**Total Well Depth (ft bgs):**	25.0'
Drilling Method:	Hollow Stem		

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
15		15.0-16.5': Silty SAND (60% sand, 40% silt), fine sand, light brown, loose, moist, slight odor, no sheen.	SM		100	4/4/4	1.4	SVE-19S-15.0 @ 1055	X	Screen
		16.5-17.0': Sandy SILT (60% silt, 40% sand), fine sand, light brown, medium stiff, moist, no odor, no sheen.	ML							
		17.0-20.0': No Recovery.								
20		20.0-20.9': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, light gray, very dense, moist, no odor, no sheen.	SP-SM		75	12/35/ 50-5"	2.6	SVE-19S-20.0 @ 1120	X	
		20.9-21.5': Silty SAND with gravel (50% sand, 25% silt, 25% gravel), fine to coarse sand, fine to coarse gravel, brown, very dense, moist, no odor, no sheen. Subrounded to subangular gravel.	SM							
		21.5-25.0': No Recovery.								End cap
25		25.0-25.6': Silty SAND with gravel (50% sand, 20% silt, 30% gravel), fine to medium sand, fine to coarse gravel, brown, very dense, moist, no odor, no sheen. Subrounded to subangular gravel till.	SM		30	25/39/ 50-6"	1.4	SVE-19S-25.0 @ 1150	X	
		25.6-30.0': No Recovery.								Sand
30										

Well Construction Information

Monument Type:	Flush mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2-inch	**Surface Seal:**	NA	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.020	**Annular Seal:**	Concrete	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	5 to 25'	**Boring Abandonment:**	NA		**Y:** NA

Log of Boring: SVE-20S

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

Farallon PN: 663-010

Logged By: Ken Scott

Date/Time Started:	1/15/13 @ 1240	**Sampler Type:**	24-inch SPT
Date/Time Completed:	1/15/13 @ 1430	**Drive Hammer (lbs.):**	140
Equipment:	M252 Bobcat	**Depth of Water ATD (ft bgs):**	No Water
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	30.0'
Drilling Foreman:	Wade Betlaf	**Total Well Depth (ft bgs):**	25.0'
Drilling Method:	Hollow Stem		

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		0.0-0.3': Concrete (100% concrete), light gray. Post hole to 4-feet bgs to clear utilities (Ok).	CO							Monument
			SM							Concrete
		0.3-1.2': Silty SAND with gravel Fill (50% sand, 30% silt, 20% gravel), fine to coarse sand, fine to coarse gravel, brown, moist, no odor, no sheen. Subrounded to rounded gravel.	ML							
		1.2-2.3': Sandy SILT (70% silt, 30% sand), fine to medium sand, dark brown, moist, no odor, no sheen.	ML		100	NM	1.8			Bentonite Seal
		2.3-4.4': SILT (100% silt), yellowish-brown, moist, no odor, no sheen.								
		4.4-5.0': SILT (95% silt, 5% sand), fine to medium sand, brown, medium stiff, moist, no odor, no sheen.	ML							Sand
5		5.0-6.5': Silty SAND (70% sand, 30% silt), fine sand, yellowish-brown, loose, moist, no odor, no sheen.	SM		75	2/42/7	0.8	SVE-20S-5.0 @ 1300	X	
		6.5-10.0': No Recovery.								
10		10.0-12.0': Poorly graded SAND (95% sand, 5% silt), fine sand, brownish-gray, medium dense, moist, no odor, no sheen.	SP		100	7/6/7	1.1	SVE-20S-10.0 @ 1310	X	Casing
		12.0-15.0': No Recovery.								
15										

Well Construction Information

Monument Type: Flush mount
Casing Diameter (inches): 2-inch
Screen Slot Size (inches): 0.020
Screened Interval (ft bgs): 5 to 25'

Filter Pack: 10/20 sand
Surface Seal: NA
Annular Seal: Concrete
Boring Abandonment: NA

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: X: NA, Y: NA

FARALLON CONSULTING

Log of Boring: SVE-20S

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

Farallon PN: 663-010

Logged By: Ken Scott

Date/Time Started:	1/15/13 @ 1240	**Sampler Type:**	24-inch SPT
Date/Time Completed:	1/15/13 @ 1430	**Drive Hammer (lbs.):**	140
Equipment:	M252 Bobcat	**Depth of Water ATD (ft bgs):**	No Water
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	30.0'
Drilling Foreman:	Wade Betlaf	**Total Well Depth (ft bgs):**	25.0'
Drilling Method:	Hollow Stem		

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
15		15.0-17.0': Silty SAND (60% sand, 40% silt), fine sand, tan, loose, moist, no odor, no sheen.	SM		100	4/4/4	1.8	SVE-20S-15.0 @ 1320	X	Screen
		17.0-20.0': No Recovery.								
20		20.0-21.4': Poorly graded SAND (95% sand, 5% silt), fine sand, gray, dense, moist, no odor, no sheen.	SP		75	12/35/ 50-5"	1.6	SVE-20S-20.0 @ 1330	X	
		21.4-21.6': Silty SAND with gravel (55% sand, 25% silt, 20% gravel), fine sand, fine to coarse gravel, brown, dense, moist, no odor, no sheen.	SM							
		21.6-25.0': No Recovery.								End cap
25		25.0-25.6': Silty SAND with gravel (55% sand, 25% silt, 20% gravel), fine sand, fine to coarse gravel, brown, very dense, moist, no odor, no sheen. Round to subrounded gravel.	SM		30	25/39/ 50-6"	2.1	SVE-20S-25.0 @ 1345	X	
		25.6-30.0': No Recovery.								Sand
30										

Well Construction Information

Monument Type:	Flush mount	**Filter Pack:**	10/20 sand
Casing Diameter (inches):	2-inch	**Surface Seal:**	NA
Screen Slot Size (inches):	0.020	**Annular Seal:**	Concrete
Screened Interval (ft bgs):	5 to 25'	**Boring Abandonment:**	NA

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

APPENDIX B
LABORATORY ANALYTICAL REPORTS

CLEANUP ACTION PROGRESS REPORT
JUNE 2012 TO DECEMBER 2017
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

September 2012 – Subsurface Soil Sampling
Laboratory Reports

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

September 13, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1209-050

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on September 7, 2012.

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

Case Narrative

Samples were collected on September 6, 2012 and received by the laboratory on September 7, 2012. 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.

PCE by 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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB7-5.0**					
Laboratory ID:	09-050-01					
Tetrachloroethene	0.14	0.0014	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*91*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB7-10.0**					
Laboratory ID:	09-050-02					
Tetrachloroethene	ND	0.0010	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*63-127*				
Toluene-d8	*100*	*65-129*				
4-Bromofluorobenzene	*98*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB8-5.0**					
Laboratory ID:	09-050-05					
Tetrachloroethene	0.0023	0.00091	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*106*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB8-10.0**					
Laboratory ID:	09-050-06					
Tetrachloroethene	0.0016	0.0011	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB8-20.0**					
Laboratory ID:	09-050-08					
Tetrachloroethene	0.44	0.048	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*96*	*63-127*				
Toluene-d8	*100*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB9-5.0**					
Laboratory ID:	09-050-09					
Tetrachloroethene	0.0017	0.00095	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB9-10.0**					
Laboratory ID:	09-050-10					
Tetrachloroethene	0.0018	0.00096	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*108*	*65-129*				
4-Bromofluorobenzene	*104*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB10-5.0**					
Laboratory ID:	09-050-12					
Tetrachloroethene	ND	0.0010	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB10-10.0**					
Laboratory ID:	09-050-13					
Tetrachloroethene	0.0014	0.0010	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB11-5.0**					
Laboratory ID:	09-050-15					
Tetrachloroethene	0.20	0.0012	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*63-127*				
Toluene-d8	*100*	*65-129*				
4-Bromofluorobenzene	*87*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB11-10.0**					
Laboratory ID:	09-050-16					
Tetrachloroethene	ND	0.00096	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB12-5.0**					
Laboratory ID:	09-050-19					
Tetrachloroethene	0.0017	0.00088	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*97*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB12-10.0**					
Laboratory ID:	09-050-20					
Tetrachloroethene	0.0013	0.0010	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*63-127*				
Toluene-d8	*104*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0910S1					
Tetrachloroethene	ND	0.0010	EPA 8260	9-10-12	9-10-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0911S1					
Tetrachloroethene	ND	0.0010	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*103*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0910S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0518**	**0.0533**	0.0500	0.0500	104	107	65-141	3	15	
Benzene	**0.0490**	**0.0502**	0.0500	0.0500	98	100	69-121	2	15	
Trichloroethene	**0.0461**	**0.0488**	0.0500	0.0500	92	98	75-120	6	15	
Toluene	**0.0472**	**0.0486**	0.0500	0.0500	94	97	75-120	3	15	
Chlorobenzene	**0.0498**	**0.0500**	0.0500	0.0500	100	100	75-120	0	15	
Surrogate:										
Dibromofluoromethane					*99*	*97*	*63-127*			
Toluene-d8					*97*	*97*	*65-129*			
4-Bromofluorobenzene					*95*	*94*	*52-125*			

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0911S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0537**	**0.0542**	0.0500	0.0500	107	108	65-141	1	15	
Benzene	**0.0503**	**0.0511**	0.0500	0.0500	101	102	69-121	2	15	
Trichloroethene	**0.0486**	**0.0486**	0.0500	0.0500	97	97	75-120	0	15	
Toluene	**0.0489**	**0.0496**	0.0500	0.0500	98	99	75-120	1	15	
Chlorobenzene	**0.0514**	**0.0523**	0.0500	0.0500	103	105	75-120	2	15	
Surrogate:										
Dibromofluoromethane					*98*	*99*	*63-127*			
Toluene-d8					*98*	*99*	*65-129*			
4-Bromofluorobenzene					*96*	*97*	*52-125*			

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB7-15.0**					
Laboratory ID:	09-050-03					
Tetrachloroethene	0.0026	0.00095	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB7-16.5**					
Laboratory ID:	09-050-04					
Tetrachloroethene	0.0072	0.00095	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB8-15.0**					
Laboratory ID:	09-050-07					
Tetrachloroethene	0.0077	0.0011	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB9-15.0**					
Laboratory ID:	09-050-11					
Tetrachloroethene	0.0073	0.0010	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB10-15.0**					
Laboratory ID:	09-050-14					
Tetrachloroethene	0.0034	0.0010	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*63-127*				
Toluene-d8	*96*	*65-129*				
4-Bromofluorobenzene	*96*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB11-16.0**					
Laboratory ID:	09-050-17					
Tetrachloroethene	0.013	0.00095	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*110*	*65-129*				
4-Bromofluorobenzene	*104*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB11-19.5**					
Laboratory ID:	09-050-18					
Tetrachloroethene	0.035	0.0011	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*104*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB12-15.0**					
Laboratory ID:	09-050-21					
Tetrachloroethene	0.0038	0.00094	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*63-127*				
Toluene-d8	*98*	*65-129*				
4-Bromofluorobenzene	*97*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB12-19.5**					
Laboratory ID:	09-050-22					
Tetrachloroethene	0.062	0.00099	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*104*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0912S1					
Tetrachloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*63-127*				
Toluene-d8	*106*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

PCE by EPA 8260B
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0912S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0530**	**0.0533**	0.0500	0.0500	106	107	65-141	1	15	
Benzene	**0.0507**	**0.0515**	0.0500	0.0500	101	103	69-121	2	15	
Trichloroethene	**0.0491**	**0.0498**	0.0500	0.0500	98	100	75-120	1	15	
Toluene	**0.0496**	**0.0507**	0.0500	0.0500	99	101	75-120	2	15	
Chlorobenzene	**0.0518**	**0.0509**	0.0500	0.0500	104	102	75-120	2	15	
Surrogate:										
Dibromofluoromethane					*97*	*96*	*63-127*			
Toluene-d8					*99*	*99*	*65-129*			
4-Bromofluorobenzene					*98*	*96*	*52-125*			

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: September 13, 2012
Samples Submitted: September 7, 2012
Laboratory Reference: 1209-050
Project: 663-010

% MOISTURE

Date Analyzed: 9-10-12

Client ID	Lab ID	% Moisture
IB7-5.0	09-050-01	22
IB7-10.0	09-050-02	17
IB7-15.0	09-050-03	4
IB7-16.5	09-050-04	22
IB8-5.0	09-050-05	18
IB8-10.0	09-050-06	6
IB8-15.0	09-050-07	8
IB8-20.0	09-050-08	14
IB9-5.0	09-050-09	11
IB9-10.0	09-050-10	5
IB9-15.0	09-050-11	8
IB10-5.0	09-050-12	19
IB10-10.0	09-050-13	4
IB10-15.0	09-050-14	9
IB11-5.0	09-050-15	20
IB11-10.0	09-050-16	5
IB11-16.0	09-050-17	10
IB11-19.5	09-050-18	25
IB12-5.0	09-050-19	20
IB12-10.0	09-050-20	5
IB12-15.0	09-050-21	10
IB12-19.5	09-050-22	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.

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 3

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Albertsons Yonge Village
Project Manager: Don Lanco
Sampled by: J. Ruark / D. Machan

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days) (TPH analysis 5 Days)
☒ Some 3-day TAT, some std TAT, as marked
(other)

Laboratory Number: 09-050

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B —PCE Only—	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1	IB7-5.0	9/6/12	1000	S	4						X	3-day TAT										
2	IB7-10.0		1012								X	~~std~~ 3 Day TAT DB										
3	IB7-15.0		1034								X	~~3-day TAT~~ STD TAT. DB										
4	IB7-16.5		1049								X	std										
5	IB8-5.0		1118								X	3-day TAT										
6	IB8-10.0		1132								X	~~std~~ 3 Day TAT. DB										
7	IB8-15.0		1156								X	std										
8	IB8-20.0		1220								X	3-day TAT										
9	IB9-5.0		1300								X	3-day TAT										
10	IB9-10.0		1338								X	~~std~~ 3 DAY TAT. DB										

	Signature	Company	Date	Time
Relinquished		Farallon	9/6/12	1925
Received		OSE	9/7/12	1230
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Will call w/ analysis
See note regarding TATs

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

Chain of Custody

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Don Lance
Sampled by: D. Ruark / D. Kaylan

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-050

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B — PCE Only —	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
11	IB9-15.0	9/6/12	1357	S	4						X	~~3-day TAT~~ STD. TAT DB										X
12	IB10-5.0		1420	S	4						X	3-day TAT										
13	IB10-10.0		1437								X	~~std~~ 3 Day TAT DB										
14	IB10-15.0		1448								X	~~3-day TAT~~ STD TAT. DB										
15	IB11-5.0		1520								X	3-day TAT										
16	IB11-10.0		1527								X	~~std~~ 3 DAY TAT. DB										
17	IB11-15.0		1557								X	~~3-day TAT~~ STD. TAT. DB										
18	IB11-19.5		1600								X	std										
19	IB12-5.0		1623								X	3-day TAT										
20	IB12-10.0		1637								X	~~std~~ 3 DAY TAT. DB										

	Signature	Company	Date	Time
Relinquished		Farallon	9/6/12	1925
Received		ONSITE	9/7/12	1230
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Will call w/ analysis

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

Chain of Custody

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allyson's Norge Village
Project Manager: Don Hanco
Sampled by: J. Ruark / D. Kaylan

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-050

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B — PCE Only	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
21	IB12-15.0	9/6/12	1642	S	4						X	~~3-day TAT~~					STD. TAT. DB					10
22	IB12-19.9	9/6/12	1700	S	4						X	Std											11

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Farallon	9/6/12	1925	will call w/ analysis
Received		OSE	9/7/12	1230	
Relinquished					
Received					
Relinquished					
Received					
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

September 13, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1209-054

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on September 8, 2012.

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

Case Narrative

Samples were collected on September 7, 2012 and received by the laboratory on September 8, 2012. 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.

PCE by 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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB13-5.0**					
Laboratory ID:	09-054-01					
Tetrachloroethene	ND	0.0012	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*63-127*				
Toluene-d8	*101*	*65-129*				
4-Bromofluorobenzene	*96*	*52-125*				
Client ID:	**IB13-10.0**					
Laboratory ID:	09-054-02					
Tetrachloroethene	ND	0.0012	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				
Client ID:	**IB14-6.0**					
Laboratory ID:	09-054-05					
Tetrachloroethene	0.0037	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*63-127*				
Toluene-d8	*108*	*65-129*				
4-Bromofluorobenzene	*103*	*52-125*				
Client ID:	**IB14-9.0**					
Laboratory ID:	09-054-06					
Tetrachloroethene	ND	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*101*	*65-129*				
4-Bromofluorobenzene	*97*	*52-125*				

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB15-1.0**					
Laboratory ID:	09-054-09					
Tetrachloroethene	0.012	0.0014	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				
Client ID:	**IB15-5.0**					
Laboratory ID:	09-054-10					
Tetrachloroethene	ND	0.0012	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				
Client ID:	**IB15-10.0**					
Laboratory ID:	09-054-11					
Tetrachloroethene	0.0012	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				
Client ID:	**IB16-2.0**					
Laboratory ID:	09-054-14					
Tetrachloroethene	3.7	0.066	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*96*	*63-127*				
Toluene-d8	*96*	*65-129*				
4-Bromofluorobenzene	*96*	*52-125*				

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB16-10.0**					
Laboratory ID:	09-054-17					
Tetrachloroethene	0.0068	0.00098	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*106*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				
Client ID:	**IB17-5.0**					
Laboratory ID:	09-054-20					
Tetrachloroethene	0.0045	0.0014	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*63-127*				
Toluene-d8	*101*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				
Client ID:	**IB17-10.0**					
Laboratory ID:	09-054-21					
Tetrachloroethene	ND	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB13-16.5**					
Laboratory ID:	09-054-04					
Tetrachloroethene	0.0070	0.0012	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				
Client ID:	**IB14-14.5**					
Laboratory ID:	09-054-08					
Tetrachloroethene	0.0059	0.0010	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				
Client ID:	**IB15-15.0**					
Laboratory ID:	09-054-12					
Tetrachloroethene	0.0086	0.0010	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*96*	*52-125*				
Client ID:	**IB15-18.0**					
Laboratory ID:	09-054-13					
Tetrachloroethene	0.0093	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*98*	*52-125*				

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB16-8.0**					
Laboratory ID:	09-054-16					
Tetrachloroethene	0.0018	0.0010	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				
Client ID:	**IB16-17.0**					
Laboratory ID:	09-054-19					
Tetrachloroethene	0.0076	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				
Client ID:	**IB17-14.5**					
Laboratory ID:	09-054-23					
Tetrachloroethene	0.0032	0.0011	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*98*	*52-125*				

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0911S1					
Tetrachloroethene	ND	0.0010	EPA 8260	9-11-12	9-11-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*103*	*52-125*				
Laboratory ID:	MB0912S1					
Tetrachloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*63-127*				
Toluene-d8	*106*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

PCE by EPA 8260B
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0911S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0537**	**0.0542**	0.0500	0.0500	107	108	65-141	1	15	
Benzene	**0.0503**	**0.0511**	0.0500	0.0500	101	102	69-121	2	15	
Trichloroethene	**0.0486**	**0.0486**	0.0500	0.0500	97	97	75-120	0	15	
Toluene	**0.0489**	**0.0496**	0.0500	0.0500	98	99	75-120	1	15	
Chlorobenzene	**0.0514**	**0.0523**	0.0500	0.0500	103	105	75-120	2	15	
Surrogate:										
Dibromofluoromethane					*98*	*99*	*63-127*			
Toluene-d8					*98*	*99*	*65-129*			
4-Bromofluorobenzene					*96*	*97*	*52-125*			
Laboratory ID:	SB0912S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0530**	**0.0533**	0.0500	0.0500	106	107	65-141	1	15	
Benzene	**0.0507**	**0.0515**	0.0500	0.0500	101	103	69-121	2	15	
Trichloroethene	**0.0491**	**0.0498**	0.0500	0.0500	98	100	75-120	1	15	
Toluene	**0.0496**	**0.0507**	0.0500	0.0500	99	101	75-120	2	15	
Chlorobenzene	**0.0518**	**0.0509**	0.0500	0.0500	104	102	75-120	2	15	
Surrogate:										
Dibromofluoromethane					*97*	*96*	*63-127*			
Toluene-d8					*99*	*99*	*65-129*			
4-Bromofluorobenzene					*98*	*96*	*52-125*			

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: September 13, 2012
Samples Submitted: September 8, 2012
Laboratory Reference: 1209-054
Project: 663-010

% MOISTURE

Date Analyzed: 9-11-12

Client ID	Lab ID	% Moisture
IB13-5.0	09-054-01	10
IB13-10.0	09-054-02	5
IB13-16.5	09-054-04	17
IB14-6.0	09-054-05	15
IB14-9.0	09-054-06	13
IB14-14.5	09-054-08	8
IB15-1.0	09-054-09	10
IB15-5.0	09-054-10	24
IB15-10.0	09-054-11	4
IB15-15.0	09-054-12	3
IB15-18.0	09-054-13	14
IB16-2.0	09-054-14	19
IB16-8.0	09-054-16	14
IB16-10.0	09-054-17	7
IB16-17.0	09-054-19	18
IB17-5.0	09-054-20	21
IB17-10.0	09-054-21	6
IB17-14.5	09-054-23	14

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 3

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Don Lance
Sampled by: J. Ruark

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Days ☒ 3 Days
☐ Standard (7 Days) (TPH analysis 5 Days)
Some samples for 3-day TAT, some for standard TAT - See notes

Laboratory Number: 09-054

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B — PLE Only	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1	IB13-5.0	9/7/12	0824	S	4						X	3-day TAT										X
2	IB13-10.0		0830								X	3-day TAT										X
3	IB13-15.0		0853							Hold												
4	IB13-16.5		0857								X	~~3-day TAT~~ STD. TAT DB										X
5	IB14-6.0		0951								X	3-day TAT										
6	IB14-9.0		1005								X	3-day TAT										
7	IB14-12.0		1025							Hold		~~Std TAT~~										
8	IB14-14.5		1028								X	Std TAT										X
9	IB15-1.0		1123								X	3-day TAT										
10	IB15-5.0		1126								X	~~Std TAT~~ 3-day TAT DB										

	Signature	Company	Date	Time
Relinquished	Don Lance	Farallon Consulting	9/8/12	1035
Received			9/8/12	1035
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

See turnaround time note above.

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

Chain of Custody

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allisons Yonge Village
Project Manager: Don Lance
Sampled by: J. Ruark

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-054

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B — PCE Only —	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664				% Moisture
11	IB15-10.0	9/4/12	1130	S	4						X	3-day TAT													X
12	IB15-15.0		1149								X	std													
13	IB15-18.0		1153								X	std													
14	IB16-2.0		1300								X	3-day TAT													
15	IB16-6.0		1302								~~X~~	Hold													
16	IB16-8.0		1307								X	std													X
17	IB16-10.0		1310								X	3-day TAT													
18	IB16-15.0		1347								~~X~~	~~std~~ Hold													
19	IB16-17.0		1349								X	std													X
20	IB17-5.0		1434	1	1						X	3-day TAT													

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	Don Lance	Farallon Consulting	9/8/12	1035	
Received			9/8/12	1035	
Relinquished					
Received					
Relinquished					
Received					
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

Chain of Custody

Page 3 of 3

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allisons Norge Village
Project Manager: Don Lance
Sampled by: J. Ruark

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-054

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B — RUSH Only	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
21	IB17-10.0	9/7/12	1438	S	4						X	~~STD~~					3-day TAT			D3		X
22	IB17-12.0	↓	1456	↓	↓						Hold											
23	IB12 14.5	↓	1459	↓	↓						X	~~3 day TAT~~					STD TAT.				D3	X

	Signature	Company	Date	Time
Relinquished	Don Lance	Farallon Consulting	9/8/12	1035
Received		OnSite Env	9/8/12	1035
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

September 17, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1209-066

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on September 11, 2012.

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: September 17, 2012
Samples Submitted: September 11, 2012
Laboratory Reference: 1209-066
Project: 663-010

Case Narrative

Samples were collected on September 11, 2012 and received by the laboratory on September 11, 2012. 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.

PCE by 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: September 17, 2012
Samples Submitted: September 11, 2012
Laboratory Reference: 1209-066
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W-2.9-091112**					
Laboratory ID:	09-066-01					
Tetrachloroethene	0.010	0.00097	EPA 8260	9-14-12	9-14-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*110*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: September 17, 2012
Samples Submitted: September 11, 2012
Laboratory Reference: 1209-066
Project: 663-010

PCE by EPA 8260B

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**E-2.9-091112**					
Laboratory ID:	09-066-02					
Tetrachloroethene	0.0023	0.0010	EPA 8260	9-14-12	9-14-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: September 17, 2012
Samples Submitted: September 11, 2012
Laboratory Reference: 1209-066
Project: 663-010

PCE by EPA 8260B
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0914S1					
Tetrachloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: September 17, 2012
Samples Submitted: September 11, 2012
Laboratory Reference: 1209-066
Project: 663-010

PCE by EPA 8260B
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0914S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0542**	**0.0534**	0.0500	0.0500	108	107	65-141	1	15	
Benzene	**0.0512**	**0.0534**	0.0500	0.0500	102	107	69-121	4	15	
Trichloroethene	**0.0490**	**0.0491**	0.0500	0.0500	98	98	75-120	0	15	
Toluene	**0.0482**	**0.0470**	0.0500	0.0500	96	94	75-120	3	15	
Chlorobenzene	**0.0523**	**0.0503**	0.0500	0.0500	105	101	75-120	4	15	
Surrogate:										
Dibromofluoromethane					*100*	*100*	*63-127*			
Toluene-d8					*92*	*95*	*65-129*			
4-Bromofluorobenzene					*98*	*98*	*52-125*			

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: September 17, 2012
Samples Submitted: September 11, 2012
Laboratory Reference: 1209-066
Project: 663-010

% MOISTURE

Date Analyzed: 9-14-12

Client ID	Lab ID	% Moisture
W-2.9-091112	09-066-01	13
E-2.9-091112	09-066-02	11

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allison Norge
Project Manager: Don Lance
Sampled by: David Johnson

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-066

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B PCE only	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1	W-2.9-091112	9/11/12	1025	S	4						X											
2	E-2.9-09112	9/11/12	1030	S	4						X											

	Signature	Company	Date	Time
Relinquished		Farallon Consulting	9/11/12	1435
Received			9/11/12	1435
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

PCE only

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

November/December 2012 – First Phase Excavation Performance and Confirmational Soil Sampling Laboratory Reports

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

ALLISON'S NORGE VILLAGE PROJECT
Farallon Consulting
Olympia, Washington
Libby Project # L121114-5
Client Project # 663-010

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		Method Blank	IB-2-N-5.0	IB-2-S-5.0	IB-2-S-5.0 Dup	IB-2-E-5.0	IB-2-W-5.0
Date Sampled		n/a	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
Date Analyzed	PQL	11/14/12	11/15/12	11/14/12	11/14/12	11/14/12	11/15/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Tetrachloroethene (PCE)	0.02	nd	0.11	0.081	0.11	0.054	nd
Surrogate Recovery							
Dibromofluoromethane		86	79	72	82	79	75
1,2-Dichloroethane-d4		102	68	73	75	82	73
Toluene-d8		82	110	82	100	82	86
4-Bromofluorobenzene		85	68	73	72	77	74

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		IB-2-B-7.0	IB-6-N-5.0	IB-6-S-5.0	IB-6-E-5.0	IB-6-W-5.0	IB-6-B-5.5
Date Sampled		11/14/12	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
Date Analyzed	PQL	11/15/12	11/15/12	11/15/12	11/14/12	11/15/12	11/14/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Tetrachloroethene (PCE)	0.02	nd	1.11	1.35	1.74	0.94	1.30
Surrogate Recovery							
Dibromofluoromethane		75	76	70	82	83	84
1,2-Dichloroethane-d4		74	80	75	73	92	95
Toluene-d8		82	90	82	96	86	80
4-Bromofluorobenzene		79	76	77	81	82	82

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

ALLISON'S NORGE VILLAGE PROJECT
Farallon Consulting
Olympia, Washington
Libby Project # L121114-5
Client Project # 663-010

QA/QC Data - EPA 8260C Analyses

Sample Identification: IB-2-W-5.0

	Matrix Spike			Matrix Spike Dup			RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	
1,1-Dichloroethene	0.50	0.38	76	0.50	0.40	80	5.1
Chlorobenzene	0.50	0.50	100	0.50	0.52	104	3.9
Trichloroethene (TCE	0.50	0.39	78	0.50	0.43	86	9.8
Surrogate Recovery							
Dibromofluoromethane			75			81	
1,2-Dichloroethane-d4			71			85	
Toluene-d8			90			87	
4-Bromofluorobenzene			73			79	

Laboratory Control Sample

	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
1,1-Dichloroethene	0.50	0.40	80
Chlorobenzene	0.50	0.48	96
Trichloroethene (TCE	0.50	0.41	82
Surrogate Recovery			
Dibromofluoromethane			84
1,2-Dichloroethane-d4			86
Toluene-d8			93
4-Bromofluorobenzene			85

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

OnSite Environmental Inc.

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

December 4, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1212-005

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on December 3, 2012.

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: December 4, 2012
Samples Submitted: December 3, 2012
Laboratory Reference: 1212-005
Project: 663-010

Case Narrative

Samples were collected on December 3, 2012 and received by the laboratory on December 3, 2012. 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.

PCE by EPA 8260C 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: December 4, 2012
Samples Submitted: December 3, 2012
Laboratory Reference: 1212-005
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB-7-B-6.5**					
Laboratory ID:	12-005-01					
Tetrachloroethene	0.0040	0.0014	EPA 8260C	12-3-12	12-3-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*114*	*63-127*				
Toluene-d8	*110*	*65-129*				
4-Bromofluorobenzene	*103*	*52-125*				

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: December 4, 2012
Samples Submitted: December 3, 2012
Laboratory Reference: 1212-005
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB-6-B-6.5**					
Laboratory ID:	12-005-03					
Tetrachloroethene	0.0036	0.0013	EPA 8260C	12-3-12	12-3-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*114*	*63-127*				
Toluene-d8	*111*	*65-129*				
4-Bromofluorobenzene	*103*	*52-125*				

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: December 4, 2012
Samples Submitted: December 3, 2012
Laboratory Reference: 1212-005
Project: 663-010

PCE by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1203S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	12-3-12	12-3-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: December 4, 2012
Samples Submitted: December 3, 2012
Laboratory Reference: 1212-005
Project: 663-010

PCE by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1203S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0557**	**0.0557**	0.0500	0.0500	111	111	65-141	0	15	
Benzene	**0.0509**	**0.0513**	0.0500	0.0500	102	103	69-121	1	15	
Trichloroethene	**0.0526**	**0.0528**	0.0500	0.0500	105	106	75-120	0	15	
Toluene	**0.0518**	**0.0518**	0.0500	0.0500	104	104	75-120	0	15	
Chlorobenzene	**0.0498**	**0.0503**	0.0500	0.0500	100	101	75-120	1	15	
Surrogate:										
Dibromofluoromethane					*104*	*105*	*63-127*			
Toluene-d8					*104*	*105*	*65-129*			
4-Bromofluorobenzene					*96*	*98*	*52-125*			

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: December 4, 2012
Samples Submitted: December 3, 2012
Laboratory Reference: 1212-005
Project: 663-010

% MOISTURE

Date Analyzed: 12-3-12

Client ID	Lab ID	% Moisture
IB-7-B-6.5	12-005-01	20
IB-6-B-6.5	12-005-03	15

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

Z -

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

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.
Analytical Laboratory Testing Services
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: DON LANCE
Sampled by: Ken Scott

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 12-005

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	PCE only				% Moisture
1	IB-7-B-6.5	12/3/12	930	S	4																	X				X
2	IB-7-B-7.5	"	945	S	4																					
3	IB-6-B-6.5	"	1000	S	4																	X				X
4	IB-6-B-7.5	"	1015	S	4																					

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	12/3/12	1310
Received		OnSite	12/3/12	1310
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

RUN both IB-7-B-6.5, & IB-6-B-6.5 ON 1-DAY TURN. CALL DON LANCE ASAP @ Verbal ANALYTICAL results. HOLD remaining 2 soil SAMPLES.

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

November 20, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1211-148

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on November 16, 2012.

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

Case Narrative

Samples were collected on November 16, 2012 and received by the laboratory on November 16, 2012. 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.

PCE EPA 8260C 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: November 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB-7-S-5.0-111612**					
Laboratory ID:	11-148-02					
Tetrachloroethene	0.21	0.0015	EPA 8260C	11-16-12	11-16-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*97*	*52-125*				
Client ID:	**IB-7-E-5.0-111612**					
Laboratory ID:	11-148-03					
Tetrachloroethene	1.2	0.080	EPA 8260C	11-17-12	11-17-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*93*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*104*	*52-125*				
Client ID:	**IB-6-S-5.0-111612**					
Laboratory ID:	11-148-06					
Tetrachloroethene	0.10	0.0020	EPA 8260C	11-16-12	11-16-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*63-127*				
Toluene-d8	*106*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				
Client ID:	**IB-6-E-5.0-111612**					
Laboratory ID:	11-148-07					
Tetrachloroethene	0.18	0.0016	EPA 8260C	11-16-12	11-16-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*63-127*				
Toluene-d8	*108*	*65-129*				
4-Bromofluorobenzene	*91*	*52-125*				

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

PCE by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1116S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	11-16-12	11-16-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*63-127*				
Toluene-d8	*110*	*65-129*				
4-Bromofluorobenzene	*112*	*52-125*				
Laboratory ID:	MB1117S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	11-17-12	11-17-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*110*	*52-125*				

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

PCE by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1116S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0424**	**0.0411**	0.0500	0.0500	85	82	65-141	3	15	
Benzene	**0.0473**	**0.0459**	0.0500	0.0500	95	92	69-121	3	15	
Trichloroethene	**0.0483**	**0.0451**	0.0500	0.0500	97	90	75-120	7	15	
Toluene	**0.0502**	**0.0490**	0.0500	0.0500	100	98	75-120	2	15	
Chlorobenzene	**0.0522**	**0.0502**	0.0500	0.0500	104	100	75-120	4	15	
Surrogate:										
Dibromofluoromethane					*97*	*97*	*63-127*			
Toluene-d8					*103*	*102*	*65-129*			
4-Bromofluorobenzene					*104*	*102*	*52-125*			
Laboratory ID:	SB1117S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0408**	**0.0414**	0.0500	0.0500	82	83	65-141	1	15	
Benzene	**0.0457**	**0.0475**	0.0500	0.0500	91	95	69-121	4	15	
Trichloroethene	**0.0463**	**0.0476**	0.0500	0.0500	93	95	75-120	3	15	
Toluene	**0.0498**	**0.0507**	0.0500	0.0500	100	101	75-120	2	15	
Chlorobenzene	**0.0507**	**0.0527**	0.0500	0.0500	101	105	75-120	4	15	
Surrogate:										
Dibromofluoromethane					*96*	*96*	*63-127*			
Toluene-d8					*104*	*104*	*65-129*			
4-Bromofluorobenzene					*102*	*103*	*52-125*			

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**IB-7-N-5.0-111612**					
Laboratory ID:	11-148-01					
Tetrachloroethene	0.0083	0.0014	EPA 8260C	11-19-12	11-19-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*108*	*52-125*				
Client ID:	**IB-7-W-5.0-111612**					
Laboratory ID:	11-148-04					
Tetrachloroethene	0.072	0.0013	EPA 8260C	11-19-12	11-19-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*108*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				
Client ID:	**IB-6-N-5.0-111612**					
Laboratory ID:	11-148-05					
Tetrachloroethene	0.050	0.0014	EPA 8260C	11-19-12	11-19-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*107*	*52-125*				
Client ID:	**IB-6-W-5.0-111612**					
Laboratory ID:	11-148-08					
Tetrachloroethene	0.063	0.0018	EPA 8260C	11-19-12	11-19-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

PCE by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1119S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	11-19-12	11-19-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*117*	*52-125*				

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

PCE by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1119S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0405**	**0.0400**	0.0500	0.0500	81	80	65-141	1	15	
Benzene	**0.0452**	**0.0457**	0.0500	0.0500	90	91	69-121	1	15	
Trichloroethene	**0.0473**	**0.0462**	0.0500	0.0500	95	92	75-120	2	15	
Toluene	**0.0496**	**0.0487**	0.0500	0.0500	99	97	75-120	2	15	
Chlorobenzene	**0.0525**	**0.0504**	0.0500	0.0500	105	101	75-120	4	15	
Surrogate:										
Dibromofluoromethane					*94*	*97*	*63-127*			
Toluene-d8					*100*	*102*	*65-129*			
4-Bromofluorobenzene					*102*	*104*	*52-125*			

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 20, 2012
Samples Submitted: November 16, 2012
Laboratory Reference: 1211-148
Project: 663-010

% MOISTURE

Date Analyzed: 11-16&19-12

Client ID	Lab ID	% Moisture
IB-7-N-5.0-111612	11-148-01	17
IB-7-S-5.0-111612	11-148-02	20
IB-7-E-5.0-111612	11-148-03	20
IB-7-W-5.0-111612	11-148-04	20
IB-6-N-5.0-111612	11-148-05	22
IB-6-S-5.0-111612	11-148-06	21
IB-6-E-5.0-111612	11-148-07	23
IB-6-W-5.0-111612	11-148-08	23

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

Z -

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

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.
Analytical Laboratory Testing Services
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: DON LANCE
Sampled by: Ken Smith

Turnaround Request (in working days)

(Check One)

- [x] Same Day
- [ ] 1 Day
- [ ] 2 Days
- [ ] 3 Days
- [ ] Standard (7 Days) (TPH analysis 5 Days)
- [ ] _____ (other)

Laboratory Number: 11-148

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	PCE only 8260C			% Moisture
1	IB-7-N-5.0-111612	11/16/12	1015	S	4																	X			X
2	IB-7-S-5.0-111612		1020	S	4																	X			X
3	IB-7-E-5.0-111612		1025	S	4																	X			X
4	IB-7-W-5.0-111612		1030	S	4																	X			X
5	IB-6-N-5.0-111612		1040	S	4																	X			X
6	IB-6-S-5.0-111612		1045	S	4																	X			X
7	IB-6-E-5.0-111612		1055	S	4																	X			X
8	IB-6-W-5.0-111612	↓	1105	S	4																	X			X

	Signature	Company	Date	Time
Relinquished	Ken Smith	FARALLON	11/16/12	1545
Received		OSE	11/16/12	1545
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Call Don Lance @ Verbal Analytical results ASAP. RUN SAME day turnaround.

X Added 11/19/12. DB (SAME DAY)

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

ALLISON'S NORGE VILLAGE PROJECT
Farallon Consulting
Olympia, Washington
Libby Project # L121114-1
Client Project # 663-010

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		Method Blank	IB-11-N-5.0	IB-11-S-5.0	IB-11-E-5.0	IB-11-W-5.0	IB-11-W-5.0 Dup
Date Sampled		n/a	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
Date Analyzed	PQL	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Tetrachloroethene (PCE)	0.02	nd	0.022	0.060	nd	nd	nd
Surrogate Recovery							
Dibromofluoromethane		96	94	87	90	82	79
1,2-Dichloroethane-d4		103	71	81	80	83	72
Toluene-d8		87	123	90	108	92	91
4-Bromofluorobenzene		86	74	84	80	85	83

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Specific Halogenated and Aromatic Hydrocarbons by EPA 8260C in Soil

Sample Description		IB-11-B-7.0	IB-7-N-5.0	IB-7-S-5.0	IB-7-E-5.0	IB-7-W-5.0	IB-7-B-5.5
Date Sampled		11/14/12	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
Date Analyzed	PQL	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Tetrachloroethene (PCE)	0.02	0.056	0.83	3.79	4.94	1.54	1.93
Surrogate Recovery							
Dibromofluoromethane		83	79	75	77	88	81
1,2-Dichloroethane-d4		88	76	69	75	94	85
Toluene-d8		85	89	92	83	88	89
4-Bromofluorobenzene		85	82	75	81	83	79

"nd" Indicates not detected at listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

4139 Libby Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@aol.com

ALLISON'S NORGE VILLAGE PROJECT
Farallon Consulting
Olympia, Washington
Libby Project # L121114-1
Client Project # 663-010

QA/QC Data - EPA 8260C Analyses

Sample Identification: IB-7-N-5.0							
	Matrix Spike			Matrix Spike Dup			RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	
1,1-Dichloroethene	0.50	0.38	76	0.50	0.35	70	8.2
Chlorobenzene	0.50	0.37	74	0.50	0.45	90	19.5
Trichloroethene (TCE	0.50	0.35	70	0.50	0.35	70	0.0
Surrogate Recovery							
Dibromofluoromethane			90			80	
1,2-Dichloroethane-d4			113			85	
Toluene-d8			88			84	
4-Bromofluorobenzene			82			82	

Laboratory Control Sample			
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
1,1-Dichloroethene	0.50	0.38	76
Chlorobenzene	0.50	0.38	76
Trichloroethene (TCE	0.50	0.37	74
Surrogate Recovery			
Dibromofluoromethane			95
1,2-Dichloroethane-d4			92
Toluene-d8			101
4-Bromofluorobenzene			92

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%
ACCEPTABLE RPD IS 35%

ANALYSES PERFORMED BY: Paul Burke

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 11/14/12 Page: 1 of 1

Client: FARALLON
Project Manager: DON LANCE
Address: 975 5th Avenue NW
Project Name: Allison's Ridge Village
City: Issaquah State: WA Zip: 98027
Location: Olympia City, State: WA
Phone: 425-295-0800 Fax: 425-295-0850
Collector: Ken Smith Date of Collection: 11/14/12
Client Project # 663-010
Email: DLANCE@FARALLONCONSULTING.COM

	Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals	PCE and TCE 8260C	Field Notes
1	IB-2-N-5.0	5.0	1255	S	4oz + VOAs											X		
2	IB-2-S-5.0	5.0	1300	S												X		
3	IB-2-E-5.0	5.0	1305	S												X		
4	IB-2-W-5.0	5.0	1310	S												X		
5	IB-2-B-7.0	7.0	1315	S												X		
6	IB-6-N-5.0	5.0	1440	S												X		
7	IB-6-S-5.0	5.0	1445	S												X		
8	IB-6-E-5.0	5.0	1450	S												X		
9	IB-6-W-5.0	5.0	1455	S												X		
10	IB-6-B-5.5	5.5	1500	S	✓											X		
11																		
12																		
13																		
14																		
15																		
16																		
17																		

Relinquished by:	Date / Time	Received by:	Date / Time
Ken Smith	11/14/12 @ 1540		1540
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt:

Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks:
RUN SAMPLES ON RUSH
SAME DAY TURN.
CALL DON LANCE
ASAP @ verbal
analytical results

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a court of law.*

Distribution: White - Lab, Yellow - File, Pink - Originator

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 11/14/12 Page: 1 of 1

Client: FARALLON

Project Manager: DON LANCE

Address: 975 5th Avenue NW

Project Name: Allison's Norge Village

City: ISSAQUAH State: WA Zip: 98027

Location: OLYMPIA City, State: WA

Phone: 425-295-0800 Fax: 425-295-0850

Collector: Ken Scott Date of Collection: 11/14/12

Client Project # 663-010

Email: DLANCE@FARALLONCONSULTING.COM

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals	PCE only 8260C	Field Notes
1 IB-11-N-5.0	5.0	915	S	4oz jar/Ac											X		
2 IB-11-S-5.0	5.0	920	S												X		
3 IB-11-E-5.0	5.0	925	S												X		
4 IB-11-W-5.0	5.0	930	S												X		
5 IB-11-B-7.0	7.0	935	S												X		
6 IB-7-N-5.0	5.0	1130	S												X		
7 IB-7-S-5.0	5.0	1135	S												X		
8 IB-7-E-5.0	5.0	1140	S												X		
9 IB-7-W-5.0	5.0	1145	S												X		
10 IB-7-B-5.5	5.5	1150	S												X		
11																	
12																	
13																	
14																	
15																	
16																	
17																	

Relinquished by:	Date / Time	Received by:	Date / Time
Ken Scott	11/14/12 @ 1205	Tope	11/14/12 12:05
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt:

Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks:
CALL DON LANCE (W) VERBAL ANALYTICAL RESULTS ASAP. ANALYZE ON RUSH TURNAROUND (SAME DAY)

TAT: 24HR 48HR 5-DAY

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a court of law.*

Distribution: White - Lab, Yellow - File, Pink - Originator

December 2012 – Second Phase Excavation Performance and Confirmational Soil Sampling Laboratory Reports

OnSite Environmental Inc.

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

December 26, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1212-125

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on December 19, 2012.

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

Case Narrative

Samples were collected on December 18, 2012 and received by the laboratory on December 19, 2012. 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.

PCE by EPA 8260C 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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SW-121812**					
Laboratory ID:	12-125-01					
Tetrachloroethene	0.030	0.0012	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*117*	*63-127*				
Toluene-d8	*110*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SW-TP-121812**					
Laboratory ID:	12-125-02					
Tetrachloroethene	0.0016	0.0011	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*63-127*				
Toluene-d8	*109*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WS-121812**					
Laboratory ID:	12-125-03					
Tetrachloroethene	0.0073	0.0011	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*104*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W-121812**					
Laboratory ID:	12-125-04					
Tetrachloroethene	0.0099	0.0012	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*63-127*				
Toluene-d8	*103*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WN-121812**					
Laboratory ID:	12-125-05					
Tetrachloroethene	0.0020	0.0014	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*104*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NW-121812**					
Laboratory ID:	12-125-06					
Tetrachloroethene	0.0023	0.0013	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*102*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1220S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	12-20-12	12-20-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

PCE by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1220S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0452**	**0.0464**	0.0500	0.0500	90	93	65-141	3	15	
Benzene	**0.0477**	**0.0492**	0.0500	0.0500	95	98	69-121	3	15	
Trichloroethene	**0.0450**	**0.0438**	0.0500	0.0500	90	88	75-120	3	15	
Toluene	**0.0485**	**0.0481**	0.0500	0.0500	97	96	75-120	1	15	
Chlorobenzene	**0.0507**	**0.0515**	0.0500	0.0500	101	103	75-120	2	15	
Surrogate:										
Dibromofluoromethane					*93*	*100*	*63-127*			
Toluene-d8					*94*	*96*	*65-129*			
4-Bromofluorobenzene					*86*	*91*	*52-125*			

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: December 26, 2012
Samples Submitted: December 19, 2012
Laboratory Reference: 1212-125
Project: 663-010

% MOISTURE

Date Analyzed: 12-19-12

Client ID	Lab ID	% Moisture
SW-121812	12-125-01	17
SW-TP-121812	12-125-02	22
WS-121812	12-125-03	19
W-121812	12-125-04	21
WN-121812	12-125-05	9
NW-121812	12-125-06	21

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

Z -

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

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

Company: Farallon Consulting
Project Number: 663-010
Project Name: Allison Norge Village
Project Manager: Don Lance
Sampled by: David Johnson

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

Laboratory Number: 12-125

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C PCE ONLY	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	SW-121812	12/18/12	9:30	S	4						X										10
2	SW-TP-121812		9:35	S	4						X										
3	WS-121812		11:40	S	4						X										
4	W-121812		12:20	S	4						X										
5	WN-121812		14:35	S	4						X										
6	NW-121812		14:38	S	4						X										

	Signature	Company	Date	Time
Relinquished		Farallon	12/19/12	10:30
Received		ODE	12/19/12	1030
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
PCE ONLY

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

December 27, 2012

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1212-154

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on December 21, 2012.

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

Case Narrative

Samples were collected on December 21, 2012 and received by the laboratory on December 21, 2012. 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.

PCE by EPA 8260C 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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**E-122112**					
Laboratory ID:	12-154-01					
Tetrachloroethene	0.45	0.079	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*97*	*63-127*				
Toluene-d8	*91*	*65-129*				
4-Bromofluorobenzene	*89*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NE-122112**					
Laboratory ID:	12-154-02					
Tetrachloroethene	0.0081	0.0012	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*113*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**EN-122112**					
Laboratory ID:	12-154-03					
Tetrachloroethene	0.087	0.0011	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*112*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*100*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BW-122112**					
Laboratory ID:	12-154-04					
Tetrachloroethene	0.0061	0.0013	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*106*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BS-122112**					
Laboratory ID:	12-154-05					
Tetrachloroethene	0.0022	0.0013	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SE-122112**					
Laboratory ID:	12-154-06					
Tetrachloroethene	0.0034	0.0012	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*112*	*63-127*				
Toluene-d8	*107*	*65-129*				
4-Bromofluorobenzene	*102*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ES-122112**					
Laboratory ID:	12-154-07					
Tetrachloroethene	0.063	0.0012	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*63-127*				
Toluene-d8	*106*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1222S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	12-22-12	12-22-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*118*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*108*	*52-125*				

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

PCE by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1222S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0673**	**0.0635**	0.0500	0.0500	135	127	65-141	6	15	
Benzene	**0.0597**	**0.0554**	0.0500	0.0500	119	111	69-121	7	15	
Trichloroethene	**0.0512**	**0.0496**	0.0500	0.0500	102	99	75-120	3	15	
Toluene	**0.0547**	**0.0514**	0.0500	0.0500	109	103	75-120	6	15	
Chlorobenzene	**0.0573**	**0.0527**	0.0500	0.0500	115	105	75-120	8	15	
Surrogate:										
Dibromofluoromethane					*109*	*102*	*63-127*			
Toluene-d8					*102*	*95*	*65-129*			
4-Bromofluorobenzene					*97*	*90*	*52-125*			

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: December 27, 2012
Samples Submitted: December 21, 2012
Laboratory Reference: 1212-154
Project: 663-010

% MOISTURE

Date Analyzed: 12-22-12

Client ID	Lab ID	% Moisture
E-122112	12-154-01	21
NE-122112	12-154-02	23
EN-122112	12-154-03	20
BW-122112	12-154-04	20
BS-122112	12-154-05	20
SE-122112	12-154-06	20
ES-122112	12-154-07	19

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

Z -

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

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

Company: Farallon
Project Number: 663-010
Project Name: Allison Norge Village
Project Manager: Don Lance
Sampled by: David Johnson

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 12-154

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C PCE ONLY	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	E-122112	12/21/12	7:28	S	4						X										
2	NE-122112		7:55	S							X										
3	EN-122112		8:15	S							X										
4	BW-122112		9:15	S							X										
5	BS-122112		9:20	S							X										
6	SE-122112		9:25	S							X										
7	ES-122112		9:30	S							X										

	Signature	Company	Date	Time
Relinquished		Farallon	12/21/12	14:09
Received		Onsite	12-21-12	1409
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

PCE ONLY

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

January 2013 – SVE Wells Soil Sample
Laboratory Report

OnSite Environmental Inc.

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

January 22, 2013

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1301-109

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on January 16, 2013.

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

Case Narrative

Samples were collected on January 15, 2013 and received by the laboratory on January 16, 2013. 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.

PCE by EPA 8260C 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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-19S-5.0**					
Laboratory ID:	01-109-01					
Tetrachloroethene	0.96	0.081	EPA 8260C	1-18-13	1-18-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*91*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*101*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-19S-10.0**					
Laboratory ID:	01-109-02					
Tetrachloroethene	0.0046	0.0011	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*95*	*63-127*				
Toluene-d8	*105*	*65-129*				
4-Bromofluorobenzene	*99*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-19S-15.0**					
Laboratory ID:	01-109-03					
Tetrachloroethene	0.0085	0.0011	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*112*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-19S-20.0**					
Laboratory ID:	01-109-04					
Tetrachloroethene	0.028	0.0012	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*107*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-19S-25.0**					
Laboratory ID:	01-109-05					
Tetrachloroethene	0.0050	0.0010	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*107*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-20S-5.0**					
Laboratory ID:	01-109-06					
Tetrachloroethene	0.010	0.0011	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*63-127*				
Toluene-d8	*115*	*65-129*				
4-Bromofluorobenzene	*108*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-20S-10.0**					
Laboratory ID:	01-109-07					
Tetrachloroethene	0.0027	0.0013	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*110*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-20S-15.0**					
Laboratory ID:	01-109-08					
Tetrachloroethene	0.019	0.0016	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*63-127*				
Toluene-d8	*113*	*65-129*				
4-Bromofluorobenzene	*105*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-20S-20.0**					
Laboratory ID:	01-109-09					
Tetrachloroethene	0.0083	0.0014	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*63-127*				
Toluene-d8	*114*	*65-129*				
4-Bromofluorobenzene	*108*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SVE-20S-25.0**					
Laboratory ID:	01-109-10					
Tetrachloroethene	0.0070	0.0010	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*63-127*				
Toluene-d8	*112*	*65-129*				
4-Bromofluorobenzene	*107*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0117S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	1-17-13	1-17-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*63-127*				
Toluene-d8	*114*	*65-129*				
4-Bromofluorobenzene	*110*	*52-125*				
Laboratory ID:	MB0118S1					
Tetrachloroethene	ND	0.0010	EPA 8260C	1-18-13	1-18-13	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*63-127*				
Toluene-d8	*115*	*65-129*				
4-Bromofluorobenzene	*111*	*52-125*				

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

PCE by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0117S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0483**	**0.0492**	0.0500	0.0500	97	98	65-141	2	15	
Benzene	**0.0500**	**0.0511**	0.0500	0.0500	100	102	69-121	2	15	
Trichloroethene	**0.0434**	**0.0458**	0.0500	0.0500	87	92	75-120	5	15	
Toluene	**0.0489**	**0.0513**	0.0500	0.0500	98	103	75-120	5	15	
Chlorobenzene	**0.0484**	**0.0495**	0.0500	0.0500	97	99	75-120	2	15	
Surrogate:										
Dibromofluoromethane					*99*	*94*	*63-127*			
Toluene-d8					*108*	*107*	*65-129*			
4-Bromofluorobenzene					*104*	*102*	*52-125*			
Laboratory ID:	SB0118S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0495**	**0.0496**	0.0500	0.0500	99	99	65-141	0	15	
Benzene	**0.0523**	**0.0527**	0.0500	0.0500	105	105	69-121	1	15	
Trichloroethene	**0.0457**	**0.0463**	0.0500	0.0500	91	93	75-120	1	15	
Toluene	**0.0525**	**0.0533**	0.0500	0.0500	105	107	75-120	2	15	
Chlorobenzene	**0.0503**	**0.0503**	0.0500	0.0500	101	101	75-120	0	15	
Surrogate:										
Dibromofluoromethane					*95*	*96*	*63-127*			
Toluene-d8					*104*	*105*	*65-129*			
4-Bromofluorobenzene					*98*	*101*	*52-125*			

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: January 22, 2013
Samples Submitted: January 16, 2013
Laboratory Reference: 1301-109
Project: 663-010

% MOISTURE

Date Analyzed: 1-17-13

Client ID	Lab ID	% Moisture
SVE-19S-5.0	01-109-01	22
SVE-19S-10.0	01-109-02	12
SVE-19S-15.0	01-109-03	13
SVE-19S-20.0	01-109-04	10
SVE-19S-25.0	01-109-05	9
SVE-20S-5.0	01-109-06	13
SVE-20S-10.0	01-109-07	7
SVE-20S-15.0	01-109-08	15
SVE-20S-20.0	01-109-09	24
SVE-20S-25.0	01-109-10	9

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

Z -

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

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.
Analytical Laboratory Testing Services
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: DON LANCE
Sampled by: Ken Scott

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 01-109

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	PCE only				% Moisture
1	SVE-195-5.0	1/15/13	1020	S	4																	X				10
2	SVE-195-10.0		1040	S	4																	X				
3	SVE-195-15.0		1055	S	4																	X				
4	SVE-195-20.0		1120	S	4																	X				
5	SVE-195-25.0		1150	S	4																	X				
6	SVE-205-5.0		1300	S	4																	X				
7	SVE-205-10.0		1310	S	4																	X				
8	SVE-205-15.0		1320	S	4																	X				
9	SVE-205-20.0		1330	S	4																	X				
10	SVE-205-25.0	↓	1345	S	4																	X				↓

	Signature	Company	Date	Time
Relinquished	Ken Scott	FARALLON	1/15/13	1700
Received		ORE	1/16/13	1210
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

December 2012 to February 2017 – Compliance Groundwater Sampling Laboratory Reports

OnSite Environmental Inc.

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

January 2, 2013

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1212-165

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on December 27, 2012.

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

Case Narrative

Samples were collected on December 26 and 27, 2012 and received by the laboratory on December 27, 2012. 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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-122612**					
Laboratory ID:	12-165-01					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-122612**					
Laboratory ID:	12-165-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*93*	*66-120*				
Toluene-d8	*96*	*70-120*				
4-Bromofluorobenzene	*90*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10-122612**					
Laboratory ID:	12-165-02					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10-122612**					
Laboratory ID:	12-165-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*66-120*				
Toluene-d8	*104*	*70-120*				
4-Bromofluorobenzene	*92*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-122612**					
Laboratory ID:	12-165-03					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-122612**					
Laboratory ID:	12-165-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*66-120*				
Toluene-d8	*102*	*70-120*				
4-Bromofluorobenzene	*93*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-122612**					
Laboratory ID:	12-165-04					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-122612**					
Laboratory ID:	12-165-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*66-120*				
Toluene-d8	*98*	*70-120*				
4-Bromofluorobenzene	*97*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-122712**					
Laboratory ID:	12-165-05					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-122712**					
Laboratory ID:	12-165-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	6.1	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*66-120*				
Toluene-d8	*99*	*70-120*				
4-Bromofluorobenzene	*96*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-122712**					
Laboratory ID:	12-165-06					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-122712**					
Laboratory ID:	12-165-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	3.1	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*66-120*				
Toluene-d8	*98*	*70-120*				
4-Bromofluorobenzene	*100*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-122712**					
Laboratory ID:	12-165-07					
Dichlorodifluoromethane	ND	3.0	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	10	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	10	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	10	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	10	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-122712**					
Laboratory ID:	12-165-07					
1,1,2-Trichloroethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	340	2.0	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	10	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	2.6	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	2.0	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	2.5	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	2.0	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	2.7	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*66-120*				
Toluene-d8	*97*	*70-120*				
4-Bromofluorobenzene	*93*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-122712**					
Laboratory ID:	12-165-08					
Dichlorodifluoromethane	ND	1.5	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	5.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	5.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	5.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	5.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-122712**					
Laboratory ID:	12-165-08					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	140	1.0	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	5.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	1.3	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	1.3	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	1.4	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*101*	*66-120*				
Toluene-d8	*98*	*70-120*				
4-Bromofluorobenzene	*88*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1228W1					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1228W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*66-120*				
Toluene-d8	*99*	*70-120*				
4-Bromofluorobenzene	*88*	*63-120*				

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: January 2, 2013
Samples Submitted: December 27, 2012
Laboratory Reference: 1212-165
Project: 663-010

HALOGENATED VOLATILES by EPA 8260C
MS/MSD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-164-04										
	MS	MSD	MS	MSD		MS	MSD				
1,1-Dichloroethene	**11.5**	**11.0**	10.0	10.0	ND	115	110	62-141	4	15	
Benzene	**9.94**	**9.80**	10.0	10.0	ND	99	98	78-118	1	15	
Trichloroethene	**10.5**	**9.63**	10.0	10.0	ND	105	96	80-115	9	15	
Toluene	**10.5**	**10.1**	10.0	10.0	ND	105	101	80-116	4	15	
Chlorobenzene	**10.6**	**10.5**	10.0	10.0	ND	106	105	80-118	1	15	
Surrogate:											
Dibromofluoromethane						*100*	*100*	*66-120*			
Toluene-d8						*101*	*97*	*70-120*			
4-Bromofluorobenzene						*95*	*93*	*63-120*			

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

Z -

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

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.

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

Chain of Custody

Page 1 of 1

Company: Farallon
Project Number: 663-010
Project Name: Allisono Norge Village
Project Manager: Don Lance
Sampled by: Emerald Erickson-Mulanax

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 12-165

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.
1	MW-13-122612	12/26/12	1352	water	3
2	MW-10-122612	"	1439	"	"
3	MW-12-122612	"	1535	"	"
4	MW-9-122612	"	1636	"	"
5	MW-7-122712	12/27/12	0924	"	"
6	MW-11-122712	"	1025	"	"
7	MW-2-122712	"	1119	"	"
8	MW-5-122712	"	1201	"	"

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1						X											
2						X											
3						X											
4						X											
5						X											
6						X											
7						X											
8						X											

	Signature	Company	Date	Time
Relinquished	Emerald Erickson-Mulanax	Farallon	12/27/12	1603
Received		0825	12/27/12	1603
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

February 16, 2016

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1602-033

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on February 4, 2016.

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

Case Narrative

Samples were collected on February 2 and 3, 2016 and received by the laboratory on February 4, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-020216**					
Laboratory ID:	02-033-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-020216**					
Laboratory ID:	02-033-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*71-131*				
Toluene-d8	*103*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-020216**					
Laboratory ID:	02-033-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-020216**					
Laboratory ID:	02-033-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*71-131*				
Toluene-d8	*105*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-020216**					
Laboratory ID:	02-033-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-020216**					
Laboratory ID:	02-033-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*71-131*				
Toluene-d8	*106*	*80-120*				
4-Bromofluorobenzene	*103*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10-020216**					
Laboratory ID:	02-033-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10-020216**					
Laboratory ID:	02-033-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*71-131*				
Toluene-d8	*106*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-020316**					
Laboratory ID:	02-033-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-020316**					
Laboratory ID:	02-033-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	3.0	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*71-131*				
Toluene-d8	*106*	*80-120*				
4-Bromofluorobenzene	*102*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-020316**					
Laboratory ID:	02-033-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-020316**					
Laboratory ID:	02-033-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	0.88	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*71-131*				
Toluene-d8	*105*	*80-120*				
4-Bromofluorobenzene	*99*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-020316**					
Laboratory ID:	02-033-07					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chloromethane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Vinyl Chloride	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromomethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chloroethane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Trichlorofluoromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Iodomethane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Methylene Chloride	ND	5.0	EPA 8260C	2-9-16	2-9-16	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
2,2-Dichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromochloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chloroform	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Carbon Tetrachloride	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloropropene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Trichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Dibromomethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromodichloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260C	2-9-16	2-9-16	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	2-9-16	2-9-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-020316**					
Laboratory ID:	02-033-07					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Tetrachloroethene	130	1.0	EPA 8260C	2-12-16	2-12-16	
1,3-Dichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Dibromochloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dibromoethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromoform	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Bromobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
2-Chlorotoluene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
4-Chlorotoluene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Hexachlorobutadiene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*71-131*				
Toluene-d8	*99*	*80-120*				
4-Bromofluorobenzene	*96*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-020316**					
Laboratory ID:	02-033-08					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chloromethane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Vinyl Chloride	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromomethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chloroethane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Trichlorofluoromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Iodomethane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Methylene Chloride	ND	5.0	EPA 8260C	2-9-16	2-9-16	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
2,2-Dichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromochloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chloroform	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Carbon Tetrachloride	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloropropene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Trichloroethene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Dibromomethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromodichloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260C	2-9-16	2-9-16	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	2-9-16	2-9-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-020316**					
Laboratory ID:	02-033-08					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Tetrachloroethene	140	2.0	EPA 8260C	2-10-16	2-10-16	
1,3-Dichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Dibromochloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dibromoethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Chlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromoform	ND	5.0	EPA 8260C	2-9-16	2-9-16	
Bromobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
2-Chlorotoluene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
4-Chlorotoluene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	2-9-16	2-9-16	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Hexachlorobutadiene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*71-131*				
Toluene-d8	*100*	*80-120*				
4-Bromofluorobenzene	*96*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0208W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloromethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromomethane	ND	0.34	EPA 8260C	2-8-16	2-8-16	
Chloroethane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Iodomethane	ND	2.3	EPA 8260C	2-8-16	2-8-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-8-16	2-8-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chloroform	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Trichloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromomethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-8-16	2-8-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-8-16	2-8-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0208W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Bromoform	ND	1.0	EPA 8260C	2-8-16	2-8-16	
Bromobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-8-16	2-8-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-8-16	2-8-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-8-16	2-8-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*71-131*				
Toluene-d8	*104*	*80-120*				
4-Bromofluorobenzene	*102*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0209W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Chloromethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Bromomethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Chloroethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Iodomethane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-9-16	2-9-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Chloroform	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Trichloroethene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Dibromomethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	2-9-16	2-9-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-9-16	2-9-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0209W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Bromoform	ND	1.0	EPA 8260C	2-9-16	2-9-16	
Bromobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-9-16	2-9-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-9-16	2-9-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-9-16	2-9-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*71-131*				
Toluene-d8	*103*	*80-120*				
4-Bromofluorobenzene	*98*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0210W1					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	2-10-16	2-10-16	
Chloromethane	ND	1.0	EPA 8260C	2-10-16	2-10-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Bromomethane	ND	0.36	EPA 8260C	2-10-16	2-10-16	
Chloroethane	ND	1.0	EPA 8260C	2-10-16	2-10-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Iodomethane	ND	2.7	EPA 8260C	2-10-16	2-10-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-10-16	2-10-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Chloroform	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Trichloroethene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Dibromomethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	2-10-16	2-10-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-10-16	2-10-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0210W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Bromoform	ND	1.0	EPA 8260C	2-10-16	2-10-16	
Bromobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-10-16	2-10-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-10-16	2-10-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-10-16	2-10-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*71-131*				
Toluene-d8	*104*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0212W2					
Dichlorodifluoromethane	ND	0.29	EPA 8260C	2-12-16	2-12-16	
Chloromethane	ND	1.3	EPA 8260C	2-12-16	2-12-16	
Vinyl Chloride	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Bromomethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Chloroethane	ND	1.0	EPA 8260C	2-12-16	2-12-16	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Iodomethane	ND	1.0	EPA 8260C	2-12-16	2-12-16	
Methylene Chloride	ND	1.0	EPA 8260C	2-12-16	2-12-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Bromochloromethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Chloroform	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Trichloroethene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Dibromomethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Bromodichloromethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	2-12-16	2-12-16	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-12-16	2-12-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0212W2					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Tetrachloroethene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Dibromochloromethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Chlorobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Bromoform	ND	1.0	EPA 8260C	2-12-16	2-12-16	
Bromobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	2-12-16	2-12-16	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-12-16	2-12-16	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-12-16	2-12-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*94*	*71-131*				
Toluene-d8	*97*	*80-120*				
4-Bromofluorobenzene	*96*	*80-120*				

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0209W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.41**	**9.54**	10.0	10.0	94	95	62-132	1	20	
Benzene	**10.6**	**10.5**	10.0	10.0	106	105	75-121	1	15	
Trichloroethene	**8.97**	**8.84**	10.0	10.0	90	88	65-115	1	15	
Toluene	**10.9**	**10.7**	10.0	10.0	109	107	78-120	2	15	
Chlorobenzene	**10.7**	**10.5**	10.0	10.0	107	105	77-118	2	15	
Surrogate:										
Dibromofluoromethane					*101*	*101*	*71-131*			
Toluene-d8					*98*	*97*	*80-120*			
4-Bromofluorobenzene					*98*	*98*	*80-120*			

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0210W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**7.72**	**7.68**	10.0	10.0	77	77	62-132	1	20	
Benzene	**9.14**	**9.13**	10.0	10.0	91	91	75-121	0	15	
Trichloroethene	**8.64**	**8.50**	10.0	10.0	86	85	65-115	2	15	
Toluene	**9.44**	**9.51**	10.0	10.0	94	95	78-120	1	15	
Chlorobenzene	**8.67**	**8.64**	10.0	10.0	87	86	77-118	0	15	
Surrogate:										
Dibromofluoromethane					*106*	*102*	*71-131*			
Toluene-d8					*104*	*99*	*80-120*			
4-Bromofluorobenzene					*100*	*93*	*80-120*			

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0212W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**10.7**	**11.0**	10.0	10.0	107	110	62-132	3	20	
Benzene	**10.7**	**10.5**	10.0	10.0	107	105	75-121	2	15	
Trichloroethene	**10.8**	**11.3**	10.0	10.0	108	113	65-115	5	15	
Toluene	**11.0**	**11.3**	10.0	10.0	110	113	78-120	3	15	
Chlorobenzene	**10.9**	**11.6**	10.0	10.0	109	116	77-118	6	15	
Surrogate:										
Dibromofluoromethane					*96*	*87*	*71-131*			
Toluene-d8					*98*	*95*	*80-120*			
4-Bromofluorobenzene					*95*	*96*	*80-120*			

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

HALOGENATED VOLATILES EPA 8260C
MS/MSD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	02-034-01										
	MS	MSD	MS	MSD		MS	MSD				
1,1-Dichloroethene	**7.98**	**7.97**	10.0	10.0	ND	80	80	67-122	0	15	
Benzene	**9.09**	**9.17**	10.0	10.0	ND	91	92	76-118	1	15	
Trichloroethene	**8.73**	**8.48**	10.0	10.0	ND	87	85	66-111	3	15	
Toluene	**9.57**	**9.40**	10.0	10.0	ND	96	94	75-116	2	15	
Chlorobenzene	**8.91**	**8.79**	10.0	10.0	ND	89	88	76-117	1	15	
Surrogate:											
Dibromofluoromethane						*108*	*111*	*71-131*			
Toluene-d8						*104*	*103*	*80-120*			
4-Bromofluorobenzene						*102*	*103*	*80-120*			

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

TOTAL METALS
EPA 6010C

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	02-033-02					
Client ID:	**MW-12-020216**					
Iron	**8400**	50	6010C	2-5-16	2-5-16	
Manganese	**450**	10	6010C	2-5-16	2-5-16	
Lab ID:	02-033-03					
Client ID:	**MW-9-020216**					
Iron	**25000**	50	6010C	2-5-16	2-5-16	
Manganese	**530**	10	6010C	2-5-16	2-5-16	
Lab ID:	02-033-04					
Client ID:	**MW-10-020216**					
Iron	**7600**	50	6010C	2-5-16	2-5-16	
Manganese	**110**	10	6010C	2-5-16	2-5-16	
Lab ID:	02-033-06					
Client ID:	**MW-11-020316**					
Iron	**8900**	50	6010C	2-5-16	2-5-16	
Manganese	**270**	10	6010C	2-5-16	2-5-16	
Lab ID:	02-033-07					
Client ID:	**MW-5-020316**					
Iron	**31000**	250	6010C	2-5-16	2-5-16	
Manganese	**790**	10	6010C	2-5-16	2-5-16	
Lab ID:	02-033-08					
Client ID:	**MW-2-020316**					
Iron	**7800**	50	6010C	2-5-16	2-5-16	
Manganese	**180**	10	6010C	2-5-16	2-5-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	2-5-16
Date Analyzed:	2-5-16
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB0205WH1

Analyte	Method	Result	PQL
Iron	6010C	**ND**	50
Manganese	6010C	**ND**	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.

Date of Report: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

TOTAL METALS
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 2-5-16
Date Analyzed: 2-5-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 02-020-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Iron	**2410**	**2640**	9	50	
Manganese	**40.4**	**44.8**	10	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.

Date of Report: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

TOTAL METALS
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 2-5-16
Date Analyzed: 2-5-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 02-020-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Iron	20000	**21600**	96	**23100**	103	7	
Manganese	1000	**1020**	98	**1080**	104	6	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

TOTAL ORGANIC CARBON
SM 5310B

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-020216**					
Laboratory ID:	02-033-02					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	
Client ID:	**MW-9-020216**					
Laboratory ID:	02-033-03					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	
Client ID:	**MW-10-020216**					
Laboratory ID:	02-033-04					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	
Client ID:	**MW-11-020316**					
Laboratory ID:	02-033-06					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	
Client ID:	**MW-5-020316**					
Laboratory ID:	02-033-07					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	
Client ID:	**MW-2-020316**					
Laboratory ID:	02-033-08					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	

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: February 16, 2016
Samples Submitted: February 4, 2016
Laboratory Reference: 1602-033
Project: 663-010

TOTAL ORGANIC CARBON
SM 5310B
QUALITY CONTROL

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0210W1					
Total Organic Carbon	**ND**	1.0	SM 5310B	2-10-16	2-10-16	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	02-033-02								
	ORIG	DUP							
Total Organic Carbon	**ND**	**ND**	NA	NA	NA	NA	NA	15	
MATRIX SPIKE									
Laboratory ID:	02-033-02								
	MS		MS		MS				
Total Organic Carbon	**10.7**		10.0	ND	107	85-119	NA	NA	
SPIKE BLANK									
Laboratory ID:	SB0210W1								
	SB		SB		SB				
Total Organic Carbon	**10.5**		10.0	NA	105	86-115	NA	NA	

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.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

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

Z -

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

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

Company: FARALLON
Project Number: 663-010
Project Name: ALLISONS NORGE VILLAGE
Project Manager: DON LANCE
Sampled by: ANDREW T.

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

Laboratory Number: 02-033

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	TOTAL IRON	TOTAL MANGANESE	TOTAL ORGANIC CARBON			% Moisture
1	MW-13-020216	2/2/16	10:55	H_2O	5						X																
2	MW-12-020216		12:40		5						X											X	X	X			
3	MW-9-020216		13:40		5						X											X	X	X			
4	MW-10-020216		15:15		5						X											X	X	X			
5	MW-7-020316	2/3/16	9:05		3						X																
6	MW-11-020316		10:45		5						X											X	X	X			
7	MW-5-020316		11:46		5						X											X	X	X			
8	MW-2-020316		15:15		5						X											X	X	X			

	Signature	Company	Date	Time
Relinquished	[signature]	FARALLON	2-3-16	17:15
Received	[signature]	SPL	2/4/16	925
Relinquished	[signature]	"	"	1225
Received	[signature]	QSE	2/4/16	1225
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
PLEASE DISREGARD POLY BOTTLES ASSOCIATED W/ MW-13-020216

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

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

September 2, 2016

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1608-290

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on August 23, 2016.

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

Case Narrative

Samples were collected on August 23, 2016 and received by the laboratory on August 23, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-082216**					
Laboratory ID:	08-290-01					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*117*	*71-131*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*97*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-082216**					
Laboratory ID:	08-290-02					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	4.7	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*119*	*71-131*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*98*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10-082216**					
Laboratory ID:	08-290-03					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*71-131*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*98*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-082216**					
Laboratory ID:	08-290-04					
Vinyl Chloride	ND	1.0	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	1.0	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	190	1.0	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*71-131*				
Toluene-d8	*103*	*80-127*				
4-Bromofluorobenzene	*98*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-082216**					
Laboratory ID:	08-290-05					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*114*	*71-131*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*93*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-082216**					
Laboratory ID:	08-290-06					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*119*	*71-131*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*96*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-082216**					
Laboratory ID:	08-290-07					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	2.0	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	0.30	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	1.3	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*121*	*71-131*				
Toluene-d8	*102*	*80-127*				
4-Bromofluorobenzene	*94*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-082216**					
Laboratory ID:	08-290-08					
Vinyl Chloride	ND	0.40	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.40	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.40	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	73	0.40	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*115*	*71-131*				
Toluene-d8	*105*	*80-127*				
4-Bromofluorobenzene	*95*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0825W1					
Vinyl Chloride	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Trichloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Tetrachloroethene	ND	0.20	EPA 8260C	8-25-16	8-25-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*71-131*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*94*	*80-125*				

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: September 2, 2016
Samples Submitted: August 23, 2016
Laboratory Reference: 1608-290
Project: 663-010

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0825W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**10.1**	**9.76**	10.0	10.0	101	98	62-132	3	20	
Benzene	**10.1**	**10.1**	10.0	10.0	101	101	75-121	0	15	
Trichloroethene	**8.73**	**8.77**	10.0	10.0	87	88	65-115	0	15	
Toluene	**10.0**	**10.0**	10.0	10.0	100	100	78-120	0	15	
Chlorobenzene	**9.27**	**9.07**	10.0	10.0	93	91	77-118	2	15	
Surrogate:										
Dibromofluoromethane					*104*	*108*	*71-131*			
Toluene-d8					*99*	*97*	*80-127*			
4-Bromofluorobenzene					*94*	*94*	*80-125*			

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.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

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

Z -

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

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

Company: Farallon
Project Number: 663-010
Project Name: Allisons Norge Village
Project Manager: Don Lance
Sampled by: Jared Kerr & Valerie LeCompte

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 08-290

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	MW-9-082216	8/22/16	1110	water	3					X												
2	MW-7-082216	"	1118	"	"					"												
3	MW-10-082216	"	1224	"	"					"												
4	MW-2-082216	"	1255	"	"					"												
5	MW-13-082216	"	1337	"	"					"												
6	MW-12-082216	"	1450	"	"					"												
7	MW-11-082216	"	1525	"	"					"												
8	MW-5-082216	"	1615	"	"					"												

	Signature	Company	Date	Time
Relinquished		Farallon	8/22/16	2035 ~~0835~~
Received		ORC	8/23/16	1326
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Only analyze for PCE & its degradation products.

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

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

March 9, 2017

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1703-038

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on March 6, 2017.

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

Case Narrative

Samples were collected on March 2, 2017 and received by the laboratory on March 6, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12-030217**					
Laboratory ID:	03-038-01					
Vinyl Chloride	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*97*	*77-129*				
Toluene-d8	*101*	*80-127*				
4-Bromofluorobenzene	*98*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13-030217**					
Laboratory ID:	03-038-02					
Vinyl Chloride	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*95*	*77-129*				
Toluene-d8	*98*	*80-127*				
4-Bromofluorobenzene	*95*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2-030217**					
Laboratory ID:	03-038-03					
Vinyl Chloride	ND	1.0	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	1.0	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	230	1.0	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*96*	*77-129*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*96*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7-030217**					
Laboratory ID:	03-038-04					
Vinyl Chloride	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	5.1	0.20	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*77-129*				
Toluene-d8	*95*	*80-127*				
4-Bromofluorobenzene	*95*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10-030217**					
Laboratory ID:	03-038-05					
Vinyl Chloride	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*96*	*77-129*				
Toluene-d8	*95*	*80-127*				
4-Bromofluorobenzene	*97*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11-030217**					
Laboratory ID:	03-038-06					
Vinyl Chloride	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	1.5	0.20	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*98*	*77-129*				
Toluene-d8	*97*	*80-127*				
4-Bromofluorobenzene	*97*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5-030217**					
Laboratory ID:	03-038-07					
Vinyl Chloride	ND	1.0	EPA 8260C	3-8-17	3-8-17	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	3-8-17	3-8-17	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	3-8-17	3-8-17	
Trichloroethene	ND	1.0	EPA 8260C	3-8-17	3-8-17	
Tetrachloroethene	63	1.0	EPA 8260C	3-8-17	3-8-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*77-129*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*95*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0307W1					
Vinyl Chloride	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Trichloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Tetrachloroethene	ND	0.20	EPA 8260C	3-7-17	3-7-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*94*	*77-129*				
Toluene-d8	*95*	*80-127*				
4-Bromofluorobenzene	*98*	*80-125*				
Laboratory ID:	MB0308W1					
Vinyl Chloride	ND	0.20	EPA 8260C	3-8-17	3-8-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-8-17	3-8-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	3-8-17	3-8-17	
Trichloroethene	ND	0.20	EPA 8260C	3-8-17	3-8-17	
Tetrachloroethene	ND	0.20	EPA 8260C	3-8-17	3-8-17	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*77-129*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*98*	*80-125*				

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 9, 2017
Samples Submitted: March 6, 2017
Laboratory Reference: 1703-038
Project: 663-010

VOLATILES EPA 8260C
MS/MSD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0307W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**8.92**	**9.21**	10.0	10.0	89	92	63-127	3	17	
Benzene	**9.62**	**9.91**	10.0	10.0	96	99	76-121	3	12	
Trichloroethene	**9.25**	**9.55**	10.0	10.0	93	96	64-114	3	15	
Toluene	**10.6**	**11.0**	10.0	10.0	106	110	82-115	4	13	
Chlorobenzene	**10.4**	**10.9**	10.0	10.0	104	109	80-115	5	14	
Surrogate:										
Dibromofluoromethane					*99*	*94*	*77-129*			
Toluene-d8					*96*	*95*	*80-127*			
4-Bromofluorobenzene					*99*	*98*	*80-125*			
Laboratory ID:	SB0308W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**9.22**	**9.16**	10.0	10.0	92	92	63-127	1	17	
Benzene	**9.10**	**9.50**	10.0	10.0	91	95	76-121	4	12	
Trichloroethene	**9.11**	**8.85**	10.0	10.0	91	89	64-114	3	15	
Toluene	**9.60**	**9.39**	10.0	10.0	96	94	82-115	2	13	
Chlorobenzene	**9.52**	**9.40**	10.0	10.0	95	94	80-115	1	14	
Surrogate:										
Dibromofluoromethane					*98*	*103*	*77-129*			
Toluene-d8					*101*	*99*	*80-127*			
4-Bromofluorobenzene					*95*	*97*	*80-125*			

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.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

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

Z -

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

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.
Analytical Laboratory Testing Services
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: Don Lance
Sampled by: Ryan Ostrom

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

Laboratory Number: 03-038

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C *	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A						% Moisture
1	MW-12-030217	3/2/17	1000	W	3						X																	
2	MW-13-030217		1105								X																	
3	MW-2-030217		1139								X																	
4	MW-7-030217		1215								X																	
5	MW-10-030217		1345								X																	
6	MW-11-030217		1455								X																	
7	MW-5-030217	↓	1530	↓	↓						X																	
	RO																											

	Signature	Company	Date	Time
Relinquished	Ryan Ostrom	Farallon	~~3/2/17~~ 3/3/17	1745
Received	Rm	alpha	3/6/17	10:20
Relinquished	Rm	alpha	3/6/17	11:45
Received		CDE	3/6/17	1145
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* Only Analyze for: PCE, TCE, Cis-1,2-DCE, Trans-1,2-DCE, & VC.

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

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

July 20, 2017

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1707-073

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on July 10, 2017.

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 20, 2017
Samples Submitted: July 10, 2017
Laboratory Reference: 1707-073
Project: 663-010

Case Narrative

Samples were collected on July 7, 2017 and received by the laboratory on July 10, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

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 20, 2017
Samples Submitted: July 10, 2017
Laboratory Reference: 1707-073
Project: 663-010

TOTAL MANGANESE
EPA 6010C

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	07-073-01					
Client ID:	**MW-10-070717**					
Manganese	**84**	10	6010C	7-13-17	7-13-17	
Lab ID:	07-073-02					
Client ID:	**MW-9-070717**					
Manganese	**750**	10	6010C	7-13-17	7-13-17	
Lab ID:	07-073-03					
Client ID:	**MW-12-070717**					
Manganese	**250**	10	6010C	7-13-17	7-13-17	
Lab ID:	07-073-04					
Client ID:	**MW-13-070717**					
Manganese	**170**	10	6010C	7-13-17	7-13-17	
Lab ID:	07-073-05					
Client ID:	**MW-11-070717**					
Manganese	**120**	10	6010C	7-13-17	7-13-17	

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 20, 2017
Samples Submitted: July 10, 2017
Laboratory Reference: 1707-073
Project: 663-010

TOTAL MANGANESE
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	7-13-17
Date Analyzed:	7-13-17
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB0713WH1

Analyte	Method	Result	PQL
Manganese	6010C	**ND**	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.

Date of Report: July 20, 2017
Samples Submitted: July 10, 2017
Laboratory Reference: 1707-073
Project: 663-010

TOTAL MANGANESE
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 7-13-17
Date Analyzed: 7-13-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-103-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Manganese	**556**	**499**	11	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.

Date of Report: July 20, 2017
Samples Submitted: July 10, 2017
Laboratory Reference: 1707-073
Project: 663-010

TOTAL MANGANESE
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 7-13-17
Date Analyzed: 7-13-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-103-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Manganese	500	**1010**	91	**956**	80	6	

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.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

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

Z -

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

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

Page 1 of 1

Company: FARALLON
Project Number: 663-010
Project Name: ALLISON'S Norge Village
Project Manager: DON LANCE
Sampled by: K. Smith, C. BANEfield

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 07-073

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	EPA Method 6010C Manganese - TOTAL				% Moisture
1	MW-10-070717	7/7/17	1140	W	1																	X					
2	MW-9-070717		1250	W																		X					
3	MW-12-070717		1331	W																		X					
4	MW-13-070717		1403	W																		X					
5	MW-11-070717	↓	1440	W	↓																	X					

	Signature	Company	Date	Time
Relinquished		FARALLON	7/10/17	945
Received			7/10/17	1205
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

August 14, 2017

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1708-070

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on August 3, 2017.

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: August 14, 2017
Samples Submitted: August 3, 2017
Laboratory Reference: 1708-070
Project: 663-010

Case Narrative

Samples were collected on August 3, 2017 and received by the laboratory on August 3, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

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: August 14, 2017
Samples Submitted: August 3, 2017
Laboratory Reference: 1708-070
Project: 663-010

TOTAL MANGANESE
EPA 6010C

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	08-070-01					
Client ID:	**MW-13-080317**					
Manganese	**33**	10	6010C	8-8-17	8-8-17	
Lab ID:	08-070-02					
Client ID:	**MW-12-080317**					
Manganese	**970**	10	6010C	8-8-17	8-8-17	
Lab ID:	08-070-03					
Client ID:	**MW-11-080317**					
Manganese	**310**	10	6010C	8-8-17	8-8-17	
Lab ID:	08-070-04					
Client ID:	**MW-9-080317**					
Manganese	**380**	10	6010C	8-8-17	8-8-17	
Lab ID:	08-070-05					
Client ID:	**MW-10-080317**					
Manganese	**170**	10	6010C	8-8-17	8-8-17	

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: August 14, 2017
Samples Submitted: August 3, 2017
Laboratory Reference: 1708-070
Project: 663-010

TOTAL MANGANESE
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	8-8-17
Date Analyzed:	8-8-17
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB0808WH1

Analyte	Method	Result	PQL
Manganese	6010C	**ND**	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.

Date of Report: August 14, 2017
Samples Submitted: August 3, 2017
Laboratory Reference: 1708-070
Project: 663-010

TOTAL MANGANESE
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 8-8-17
Date Analyzed: 8-8-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 08-040-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Manganese	**ND**	**ND**	NA	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.

Date of Report: August 14, 2017
Samples Submitted: August 3, 2017
Laboratory Reference: 1708-070
Project: 663-010

TOTAL MANGANESE
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 8-8-17
Date Analyzed: 8-8-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 08-040-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Manganese	500	**491**	98	**469**	94	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 diesel range are impacting lube oil range results.

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

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

Q - Surrogate recovery is outside of the control limits.

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

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

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

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

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

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

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

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

Z -

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

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

Company: Farallon Consulting LLC
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Don Lance
Sampled by: Emily and Chantal

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

Laboratory Number: 08-070

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Manganese, 6010C by method				% Moisture
1	MW-13-080317	8/3/17	1001	W	1																		X				
2	MW-12-080317	8/3/17	1045	W	1																		X				
3	MW-11-080317	8/3/17	1230	W	1																		X				
4	MW-9-080317	8/3/17	1331	W	1																		X				
5	MW-10-080317	8/3/17	1438	W	1																		X				

	Signature	Company	Date	Time
Relinquished	Emily Stranfield	Farallon	8/3/17	1630
Received		OSE	8/3/17	1300
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

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

September 8, 2017

Don Lance
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 663-010
Laboratory Reference No. 1709-033

Dear Don:

Enclosed are the analytical results and associated quality control data for samples submitted on September 5, 2017.

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: September 8, 2017
Samples Submitted: September 5, 2017
Laboratory Reference: 1709-033
Project: 663-010

Case Narrative

Samples were collected on September 5, 2017 and received by the laboratory on September 5, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

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: September 8, 2017
Samples Submitted: September 5, 2017
Laboratory Reference: 1709-033
Project: 663-010

TOTAL MANGANESE
EPA 6010C

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-033-01					
Client ID:	**MW-13-090117**					
Manganese	**22**	10	6010C	9-6-17	9-6-17	
Lab ID:	09-033-02					
Client ID:	**MW-12-090117**					
Manganese	**330**	10	6010C	9-6-17	9-6-17	
Lab ID:	09-033-03					
Client ID:	**MW-9-090117**					
Manganese	**1200**	10	6010C	9-6-17	9-6-17	
Lab ID:	09-033-04					
Client ID:	**MW-10-090117**					
Manganese	**14**	10	6010C	9-6-17	9-6-17	
Lab ID:	09-033-05					
Client ID:	**MW-11-090117**					
Manganese	**220**	10	6010C	9-6-17	9-6-17	

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: September 8, 2017
Samples Submitted: September 5, 2017
Laboratory Reference: 1709-033
Project: 663-010

TOTAL MANGANESE
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-6-17
Date Analyzed:	9-6-17
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB0906WH1

Analyte	Method	Result	PQL
Manganese	6010C	**ND**	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.

Date of Report: September 8, 2017
Samples Submitted: September 5, 2017
Laboratory Reference: 1709-033
Project: 663-010

TOTAL MANGANESE
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 9-6-17
Date Analyzed: 9-6-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 09-371-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Manganese	**821**	**806**	2	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.

Date of Report: September 8, 2017
Samples Submitted: September 5, 2017
Laboratory Reference: 1709-033
Project: 663-010

TOTAL MANGANESE
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 9-6-17
Date Analyzed: 9-6-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 09-371-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Manganese	500	**1260**	88	**1240**	84	1	

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.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

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

Z -

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

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

Company: Farallon Consulting LLC
Project Number: 663-010
Project Name: Allison's Norge Village
Project Manager: Don Lance
Sampled by: Emily Sturnfield + Chantal Bamfield

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

Laboratory Number: 09-033

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MW-13-090117	9/5/17	0907	water	1
2	MW-12-090117	9/5/17	1007	water	1
3	MW-9-090117	9/5/17	1104	water	1
4	MW-10-090117	9/5/17	1137	water	1
5	MW-11-090117	9/5/17	1234	water	1

ELS

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Manganese (EPA Method 6020)				% Moisture
1																		X				
2																		X				
3																		X				
4																		X				
5																		X				

	Signature	Company	Date	Time
Relinquished	Emily Sturnfield	Farallon	9/5/17	1420
Received	Emily Sturnfield	OnSite Env.	9/5/17	1420
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

APPENDIX C
UNDERGROUND INJECTION CONTROL PROGRAM REGISTRATION LETTER

CLEANUP ACTION PROGRESS REPORT
JUNE 2012 TO DECEMBER 2017
Allison's Norge Village (aka Eastside Laundry)
120 Northeast Turner Street
Olympia, Washington

Farallon PN: 663-010

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

April 12, 2017

Mr. Kevin Stormans
Stormans Inc.
1932 E. 4th Avenue
Olympia, WA 98506

RE: Registration with the Underground Injection Control (UIC) Program, Allisons, 120 NE Turner St., Olympia, WA

Dear Mr. Stormans:

This letter is to acknowledge receipt of your registration form received April 5, 2017 to register with the UIC Program the UIC wells at the above-mentioned site. The project will include:

- A one-time injection of 7,200 pounds of sodium permanganate mixed with 5,000 gallons of tap water, into wells MW-2 and MW-5. Onsite groundwater is not approved for use to mix with the remediation products for injection.
- A start date in May 2017.
- Down-gradient groundwater monitoring for manganese. Manganese sampling results should not exceed the Water Quality Criteria for Ground Water of the State of Washington, chapter 173-200 WAC (GWQS) criterion of 0.05 mg/l at monitoring wells located close to the property or plume boundary.

Clean up actions/sites that are not approved by WA State Department of Ecology under the Model Toxics Control Act (MTCA), chapter 70.105D RCW or approved by the United States Environmental Protection Agency under the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 et seq are required to meet the GWQS. The injected compounds are intended to improve groundwater quality. There are inherent environmental risks associated with injecting compounds into groundwater. Carefully characterize, manage, and monitor the site to minimize risk and prevent unforeseen degradation of groundwater quality. Mobilized metals or other substances, injected chemicals or hazardous bi-products, are not allowed to migrate beyond the site property boundary.

The two UIC Program requirements for rule authorization are, registration of UIC wells (prior to use) and the discharge from the well must meet the nonendangerment standard, of WAC 173-218-080. The UIC site is number 33500. Listed below are the minimum requirements to meet the nonendangerment standard. Your site is conditionally rule authorized when the following have been met:

- Meet the GWQS, chapter 173-200-WAC;

- Complete a thorough site characterization including: geologic investigation, concentration and extent of contaminant plume, aquifer characteristics, and location of preferential migration pathways (natural and manmade);
- A groundwater monitoring program that includes: well location and sampling sufficient to characterize the background groundwater quality, the water quality at the point of compliance, and identify any changes in groundwater quality resulting from the injected compounds;
- Develop a conceptual site model that balances the injection rate, concentration, and total mass of injected compound with that of the subsurface oxidizable material. The model should predict the expected changes in groundwater chemistry over time, final groundwater quality at the point of compliance, and predicted restoration timeframe;
- Hydrologically contain within the site property boundaries, the injected compounds and any regulated substances mobilized by the injected products;
- Prepare a written contingency plan that describes, in detail, the actions to be taken in case of spills, failures, equipment breakdowns and/or unforeseen environmental degradation caused by the cleanup activities; and,
- Retain all plans, modeling, monitoring results, interim and final reports. Upon request, provide these documents to the Department of Ecology.

If ground water quality does not meet the GWQS at the point of compliance, you must notify the Department of Ecology within 24 hours of discovery.

At any time, the Department of Ecology may require you to apply for and obtain a Waste Discharge Permit for the continued use of these compounds.

A formal approval for this project may be obtained through the departments' State Waste Discharge Permit Program or the MTCA Program.

Please call me at (360) 407-6143 if you have any questions. Additional information on the UIC Program can also be found at our website http://www.ecy.wa.gov/programs/wq/grndwtr/uic/index.html

Sincerely,

Mary Shaleen-Hansen
UIC Coordinator
Water Quality Program

Cc: Russ Luiten, Farallon Consulting LLC